



GT50/66/0011

**ROAD TRAFFIC REGULATION ACT 1984 – SECTIONS 64 AND 65  
AUTHORISATION OF TRAFFIC SIGNS AND SPECIAL DIRECTIONS**

The Secretary of State for Transport, in exercise of his powers under Sections 64 and 65 of the Road Traffic Regulation Act 1984, and of all other powers enabling him in that behalf, for the purpose of indicating the side or sides on which vehicles should or may pass refuges on roads for which Leicester City Council is the traffic authority, hereby:-

1. authorises the erection, at appropriate sites on the said roads, of a traffic sign (hereinafter referred to as “the authorised sign A”) conforming as to size, colour and character with a sign shown in the attached set of drawings numbered GT50/66/0011; and
2. authorises the erection, at appropriate sites on the said roads, of a traffic sign (hereinafter referred to as “the authorised sign B”) conforming as to size, colour and character with a sign shown in the said set of drawings, save that the arrow shall point to the right; and
3. directs that the authorised sign A shall only be used:-
  - a) in conjunction with the appropriately sized sign shown in diagram 610 or 611 in Schedule 2 to the Traffic Signs Regulations 2002 (Part I of SI 3113/2002, “the 2002 Regulations”), in accordance with the attached table numbered GT50/66/0011-2 and which shall be illuminated in accordance with item 1 of Schedule 17 to those Regulations; or
  - b) when mounted on a traffic island and facing in the same direction as the light signal shown in diagram 3000, 3000.7, 3000.8, 3000.9 or 3000.10 in Schedule 8 to the 2002 Regulations; or



GT50/66/0011

- c) when mounted on a central traffic island or central reservation that forms part of a zebra pedestrian crossing and in conjunction with two belisha beacon globes mounted on the central island or reservation in accordance with paragraph 1 of Part I in Schedule 1 to The Zebra, Pelican and Puffin Pedestrian Crossings Regulations 1997 (SI 2400/1997); and
4. directs that the authorised sign B shall only be used:-
    - a) when mounted facing approaching traffic on a priority working build-out in combination with the appropriately sized sign to diagram 615 in combination with diagram 615.1 in Schedule 2, or diagram 811 in combination with diagram 811.1 in Schedule 4 to the 2002 Regulations, in accordance with the said table and which shall be illuminated in accordance with item 1 of Schedule 17 to those Regulations; and
  5. directs, without prejudice to any statutory provision to the like effect, that it is a condition of this authorisation that the erection of the authorised signs A and B at or near the said sites shall continue to have effect only until such day as may be appointed by one month's notice given by the Secretary of State in writing to the traffic authority for the removal or alteration of the authorised signs A and B and on that day the said authorisation shall, without prejudice to the giving of any further authorisation or direction, cease to have effect.

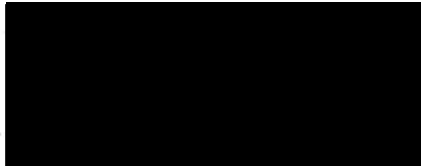


GT50/66/0011

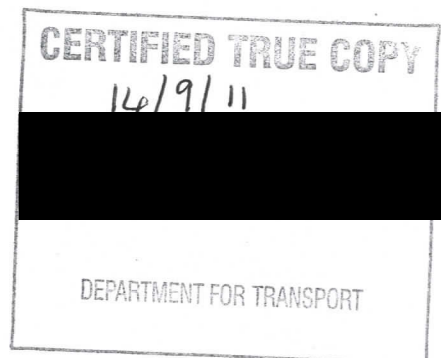
The provisions of Regulation 12 of the 2002 Regulations shall apply to the authorised signs A and B in the same manner as they apply to the sign shown in diagram 610 in Schedule 2 to those Regulations.

Dated 17 August ..... 2011

Signed by authority of the Secretary of State

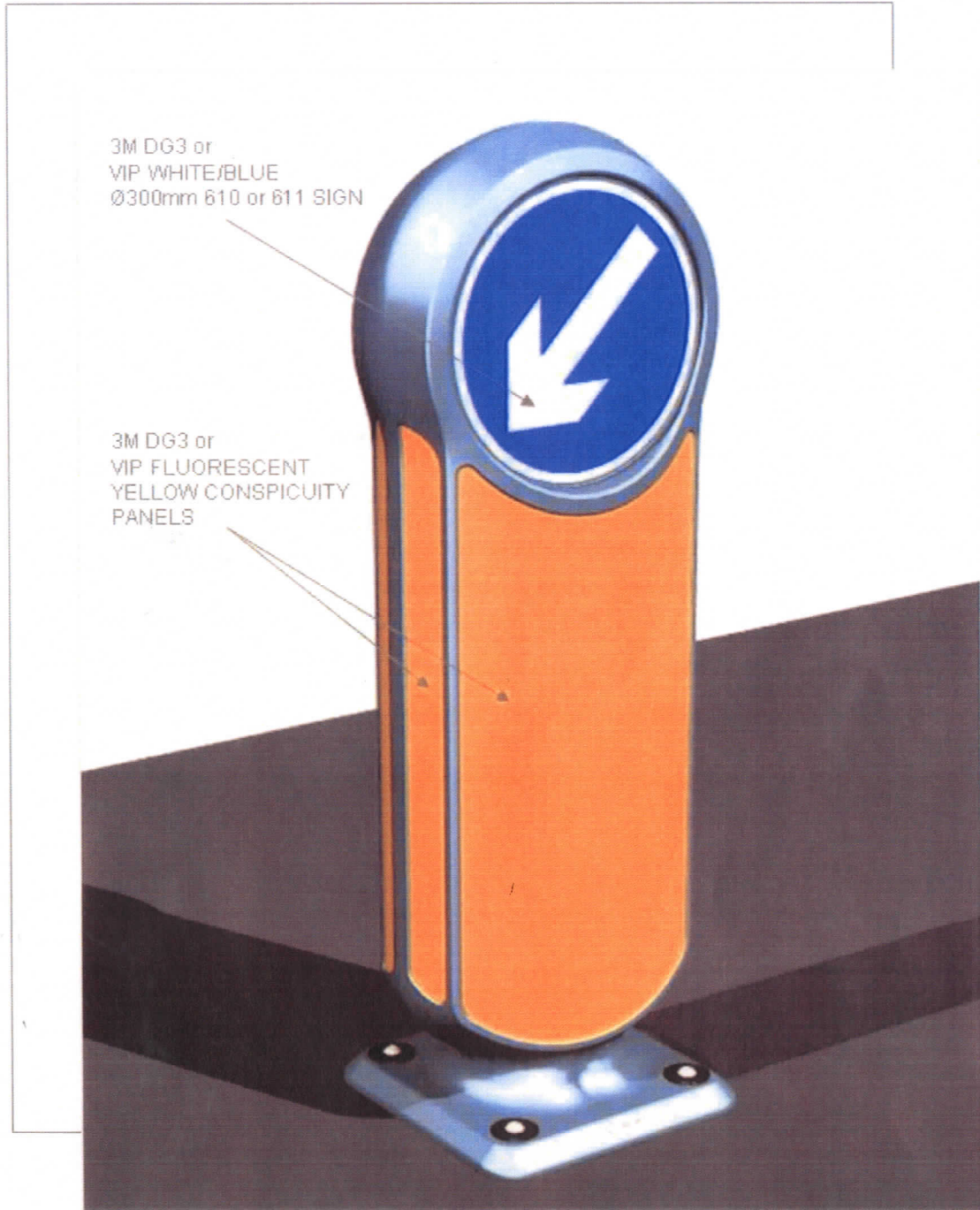


.....  
A Delegated Official of the Department for Transport



# Rebound Sign Carrying Bollard (Bolt-Down)

Shown: Aircraft Grey Body (Other Options: Black or White)



Department for Transport

Date 15/8/11

No. 9T50/66/0011-1

J Prowse 29/11/06

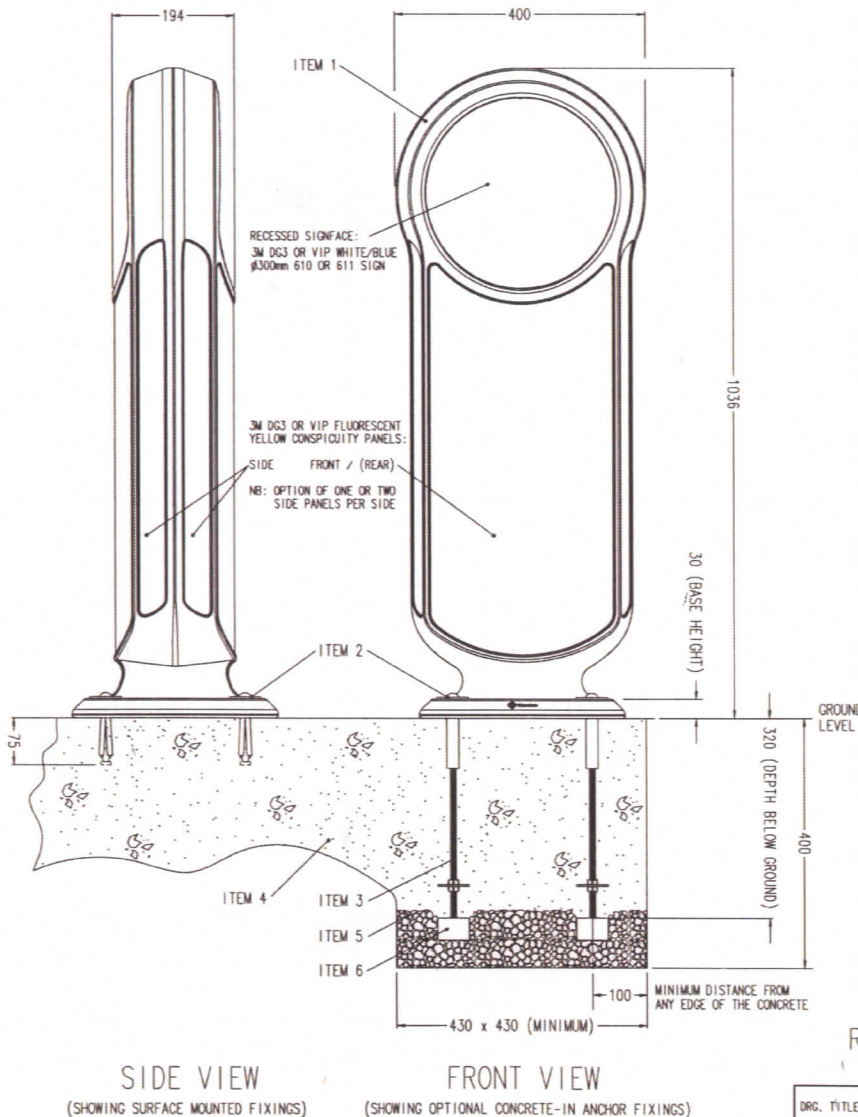
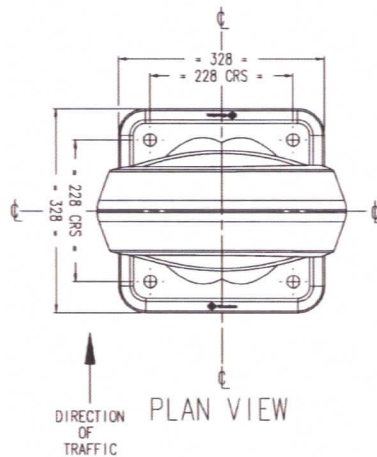
Page 1 of 11





# MODEL SPECIFICATION REBOUND SIGNMASTER™ BOLLARD

(BOLT-DOWN SURFACE MOUNTED & OPTIONAL CONCRETE-IN GROUND ANCHOR)



**PRODUCT INFORMATION:**

- **WEIGHT** - BOLLARD - 6.0 Kg  
 - FIXINGS - 0.6 Kg (SURFACE MOUNTED) OR 1.3 Kg (OPTIONAL C.I.A.F.)  
 TOTAL - 6.6 Kg / 7.3Kg
- **MATERIAL** - BOLLARD - IMPACTAPOL®  
 - FIXINGS - SCREWS - STAINLESS STEEL  
 - WASHERS - STAINLESS STEEL  
 - SPACERS - RIGID PVC  
 - ANCHORS - MS BZP  
 - OPTIONAL C.I.A.F. - MS BZP
- **BODY COLOURS** - BLACK / WHITE / AIRCRAFT GREY
- **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 60mm ANCHOR
  - M10 x Ø19 x 28mm SPACER
- **ITEM 3 - OPTIONAL CONCRETE-IN ANCHOR FIXING (C.I.A.F.)**
- **ITEM 4 - SOLID CONCRETE FOUNDATION OR QUICK SETTING CONCRETE (eg. GRADE QC10)**
- **ITEM 5 - GRAVEL**
- **ITEM 6 - SUPPORT BLOCK:**  
 CAN BE ANYTHING SOLID TO ENSURE BOLLARD IS SUPPORTED AT THE CORRECT HEIGHT UNTIL THE CONCRETE HAS SET.

● ENSURE THAT ANY SIGNFACE FACES TOWARDS ONCOMING TRAFFIC.

● **FOR SURFACE MOUNTED FIXING:**

4 HOLES TO BE DRILLED FOR GROUND FIXING ANCHORS AND SCREWS Ø16mm x 75mm (MIN DEPTH). ENSURE THE HOLES ARE LOCATED AT LEAST 100mm FROM ANY EDGE OF THE CONCRETE FOUNDATION.

WE RECOMMEND INSTALLING THE BOLLARD ON AN EXISTING SOUND CONCRETE FOUNDATION, OR FOR SPEED, PREPARING THE SITE WITH QUICK SETTING CONCRETE (eg. GRADE QC10), BUT EXACT INSTALLATION REQUIREMENTS SHOULD BE ASSESSED FROM A SITE SURVEY.

● **FOR OPTIONAL CONCRETE-IN ANCHOR FIXING (C.I.A.F.):**

FIX THE FOUR 'CONCRETE-IN FIXINGS' TO THE BOLLARD BEFORE INSTALLATION, AS THIS WILL ENSURE FIXING CENTRES ARE CORRECT AND PREVENT THE NEED TO REVISIT THE SITE ONCE CONCRETE HAS SET.

RECOMMENDED MINIMUM HOLE SIZE: 430x430x400mm DEEP.

IF DEPTH IS RESTRICTED TO LESS THAN 400mm THEN THE 'CONCRETE-IN ANCHOR 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.

FOR SPEED WE RECOMMEND INSTALLING WITH QUICK SETTING CONCRETE (eg. GRADE QC10) BUT EXACT INSTALLATION REQUIREMENTS SHOULD BE ASSESSED FROM A SITE SURVEY.

● AVOID CONTACT WITH HOT TARMACADAM AS THIS WILL SERIOUSLY IMPAIR THE PERFORMANCE OF THE BOLLARD.

**OPTIONAL PARTS:**

- **OPTIONS AVAILABLE FOR THE PRODUCT:**
  - BODY C/W FRONT, 1xLH & 1xRH CONSPICUITY PANELS
  - BODY C/W FRONT, 2xLH & 2xRH CONSPICUITY PANELS
  - BODY C/W FRONT, REAR, 2xLH & 2xRH CONSPICUITY PANELS
  - + A RANGE OF AUTHORISED SIGNFACES &/OR WHITE DISC

● **SPARES ARE AVAILABLE, WHICH INCLUDE:**

- BOLLARD C/W FIXINGS & RETROREFLECTIVE PATCHES
- BOLLARD ONLY
- RANGE OF SIGNFACES
- FIXINGS

**TECHNICAL DATA:**

- **SURFACE AREA OF CONSPICUITY PANELS:**
  - FRONT = 161.701mm² (PROJECTED)
  - SINGLE SIDE = 24.255mm²
  - OPTIONAL DOUBLE SIDE = 48.510mm²
- **SURFACE AREA OF SIGNFACE = 70,686mm²**

## RETROREFLECTIVE SELF RIGHTING BOLLARD

DRG. TITLE		<b>Glason UK Limited</b> Preston New Road, Blackpool Lancashire, FY4 4UL Telephone: 01253 800400 Facsimile: 01253 792558 E-mail: sales@glason-uk.co.uk Web Site: www.glason.com	
PROJECT			
DRG. No.	PROJECT No.		
SCALE	DATE		
DRAWN BY	CHECKED		
		SPECIFICATION NUMBER - 025066-S03 ISSUE 3 © GLASON UK LTD 06/04/05 SHEET SIZE: A2	

APPROVED  
*Quack*

USED ON USED\_ON  
DIMS IN MILLIMETRES

DRAWN FROM DRAWN\_FROM

THIRD ANGLE PROJECTION

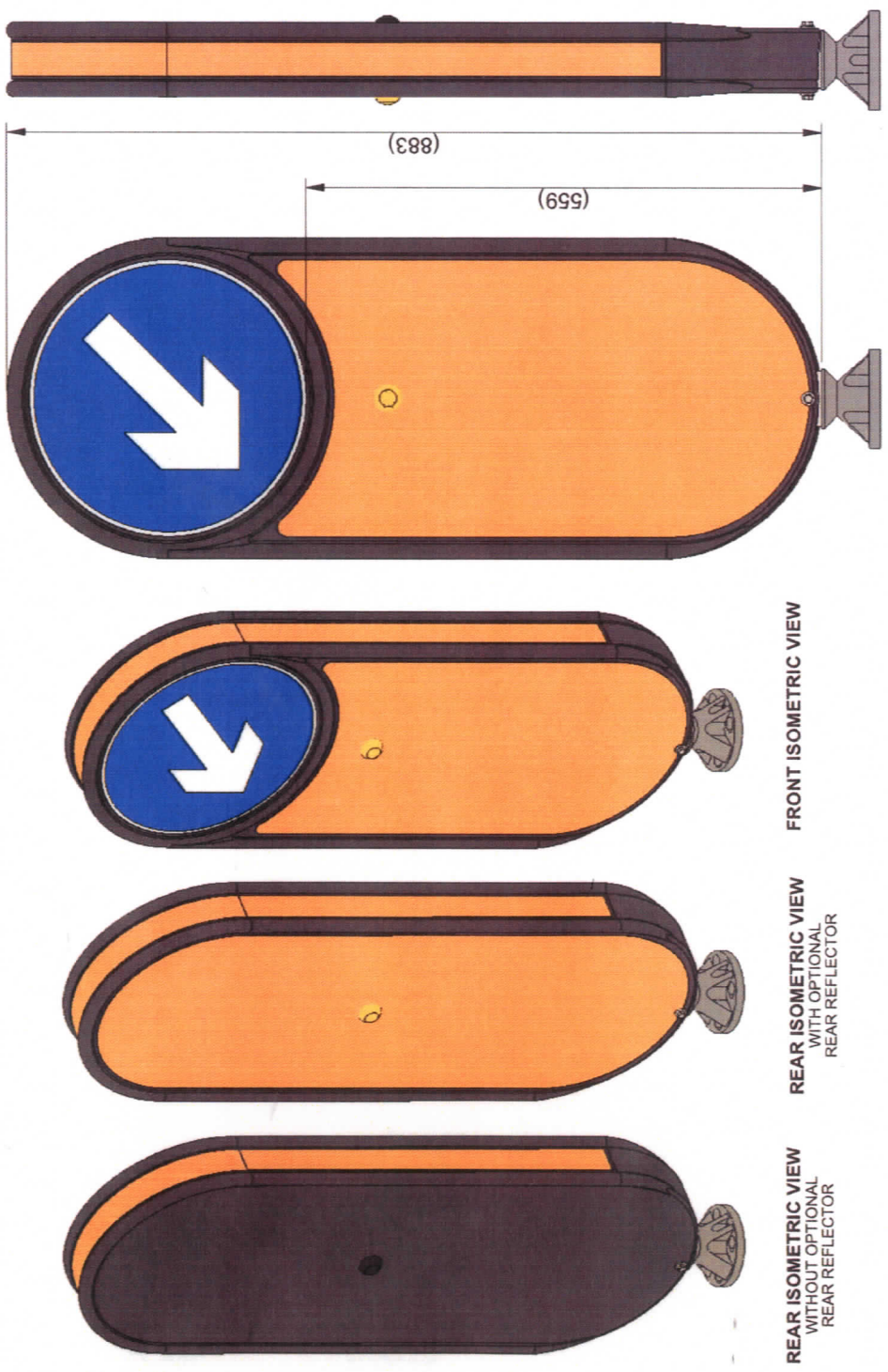
MODS  
ISSUE

A  
FIRST ISSUE

B  
NOTES  
REGARDING  
PRODUCTION  
DELETED.  
REAR FLECTA  
OPTION  
ADDED.  
TABLE  
ADDED.  
DM 31/01/07

C  
PICTORIAL  
CHANGES  
DM 02/02/07

D  
TITLE  
SHORTENED  
COLOURS  
ALTERED  
BS308 REFS  
DELETED  
DM 08/02/07



**SIGN FACE D610:**  
BORDER WHITE 4090  
BACKGROUND BLUE 4095  
ARROW WHITE 4090  
DIAMETER 300mm  
DG3.

**APPROX FACING DIMENSIONS:**  
WIDTH: 300mm  
HEIGHT: 515mm  
AREA: 151,558 sq.mm  
DG3 (BS8408:2005)  
FLUORESCENT YELLOW  
4081

**SIDE STRIP:**  
WIDTH: 40mm  
HEIGHT: SIDE FLAT PLUS TOP  
DG3 (BS8408:2005)  
FLUORESCENT YELLOW  
4081

**MATERIAL:**  
POLYPROPYLENE BODY  
VACUUM FORMED IN  
BLACK, GREY OR WHITE.

FRONT ELEVATION

FRONT ELEVATION

FRONT ISOMETRIC VIEW

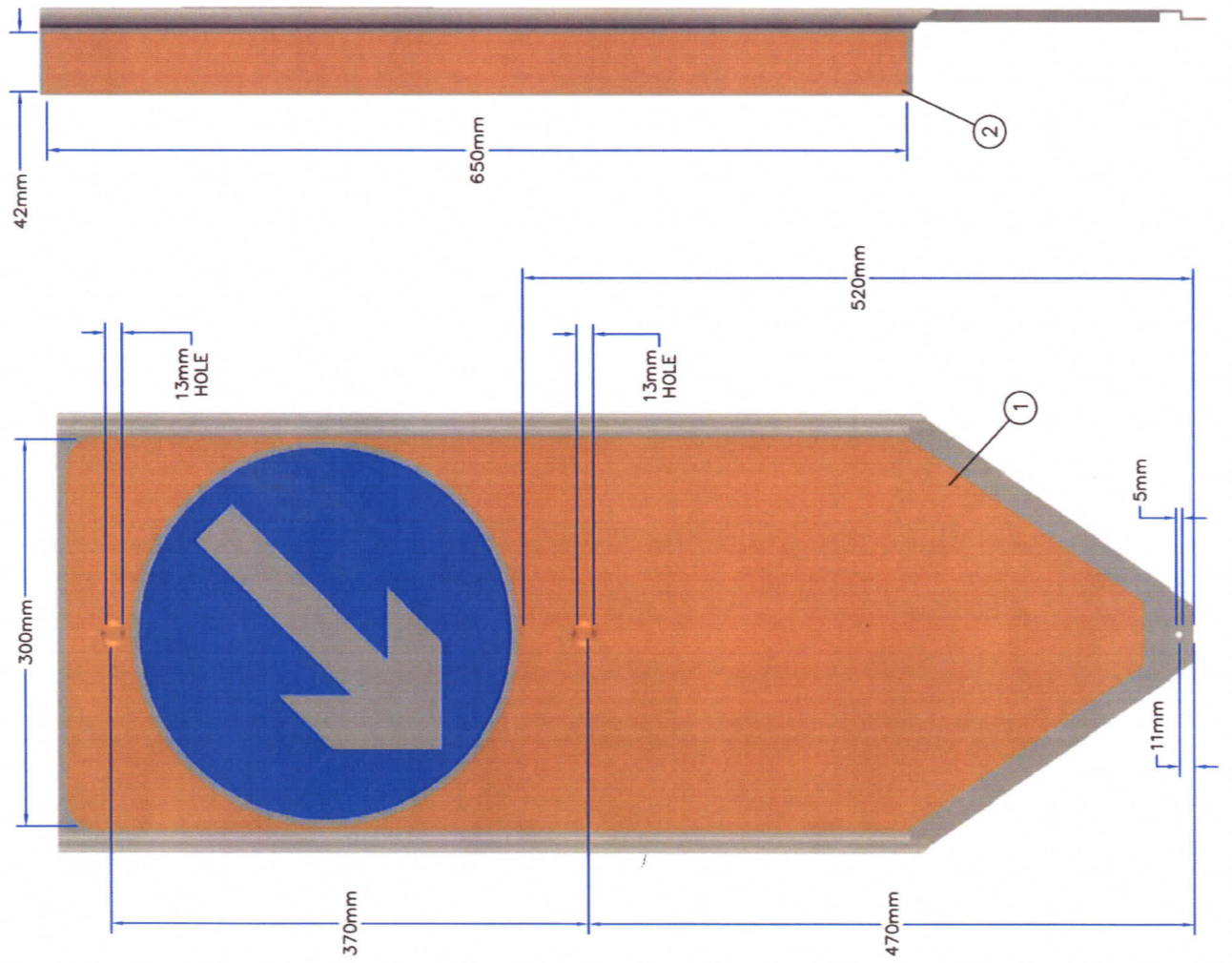
REAR ISOMETRIC VIEW  
WITH OPTIONAL  
REAR REFLECTOR

REAR ISOMETRIC VIEW  
WITHOUT OPTIONAL  
REAR REFLECTOR



<p>GENERAL DIM TOLERANCES ANG DIMS: ± 1/2" IMP FRACTIONAL DIMS: ± 1/64" METRIC: 5.0 ± 0.5mm 5.00 ± 0.1mm</p>		DRG SIZE	A3
<p>TITLE METRO BOLLARD)</p>		DRG No	558022-000005001
MATL	SCALE	DRN	D.MEEK
FINISH	NTS	CHKD	SEE TOP LEFT OF SHEET 1 FOR APPROVED SIGNATURE
		DATE	22/01/07
<p>TMP Limited (Part of the Dewhurst group) TELEPHONE +44 (0)1342 844437 UK +44 (0)1342 844437 Ireland +353 87 23 634</p>		<p>TRAFFIC MANAGEMENT PRODUCTS</p>	





SYMBOL P610:  
 ARROW WHITE 4090  
 BACKGROUND BLUE 4095  
 BORDER WHITE 4090  
 DIAMETER 300mm  
 DG3 (BS8408:2005)

① FACING DIMENSIONS:  
 WIDTH: 300mm  
 HEIGHT: 825mm  
 AREA: 0.22sq.m  
 DG3 (BS8408:2005)  
 FLUORESCENT YELLOW  
 4081

② SIDE STRIPS:  
 WIDTH: 40mm  
 HEIGHT: 650mm  
 DG3 (BS8408:2005)  
 FLUORESCENT YELLOW  
 4081

MATERIAL:  
 VACUUM FORMED  
 POLYPROPYLENE  
 GREY, WHITE OR BLACK

Approved by:

Date:

Design by DJN

Drawn by AC

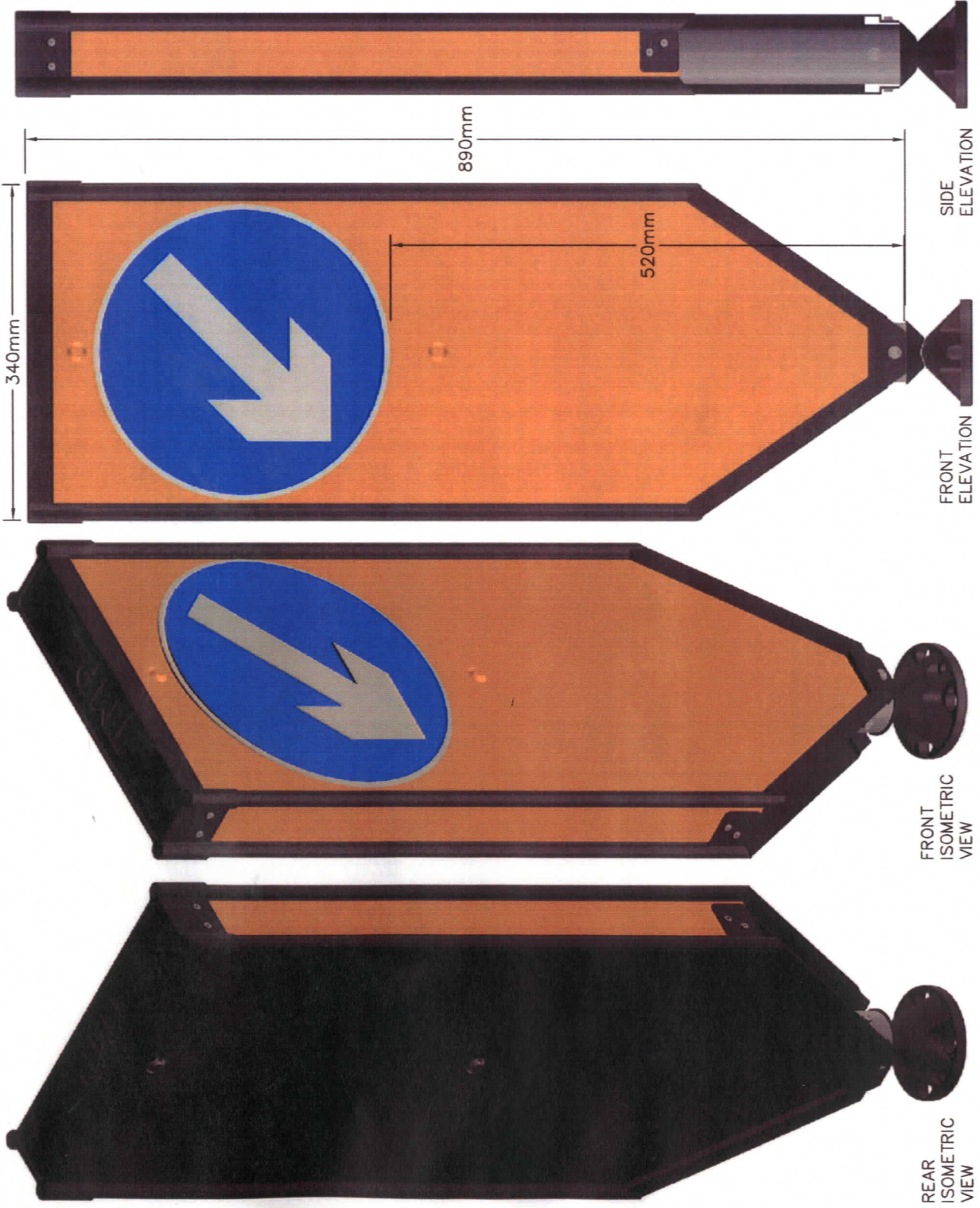
Tolerance ± 1.0mm

Revision # 2

Date 8/9/2006

Reference 4200040





SIGN FACE P610:  
 BORDER WHITE 4090  
 BACKGROUND BLUE 4095  
 ARROW WHITE 4090  
 DIAMETER 300mm  
 DG3 (BS8408:2005)

DRILL HOLES  
 11MM-5MM DIAMETER  
 470MM-13MM DIAMETER  
 840MM-13MM DIAMETER

YELLOW FACINGS FRONT  
 AND SIDES EXTEND  
 UNDER THE TOP CAP

FACING DIMENSIONS:  
 WIDTH: 300mm  
 HEIGHT: 825mm  
 AREA: 0.22sq.m  
 DG3 (BS8408:2005)  
 FLUORESCENT YELLOW  
 4081

SIDE STRIPS:  
 WIDTH: 40mm  
 HEIGHT: 650mm  
 DG3 (BS8408:2005)  
 FLUORESCENT YELLOW  
 4081

MATERIAL:  
 VACUUM FORMED  
 POLYPROPYLENE  
 GREY, WHITE OR BLACK

Approved by:

Date:

Design by DJN

Drawn by AC

Tolerance ± 1.0mm

Revision # 3

Date 22/9/2006

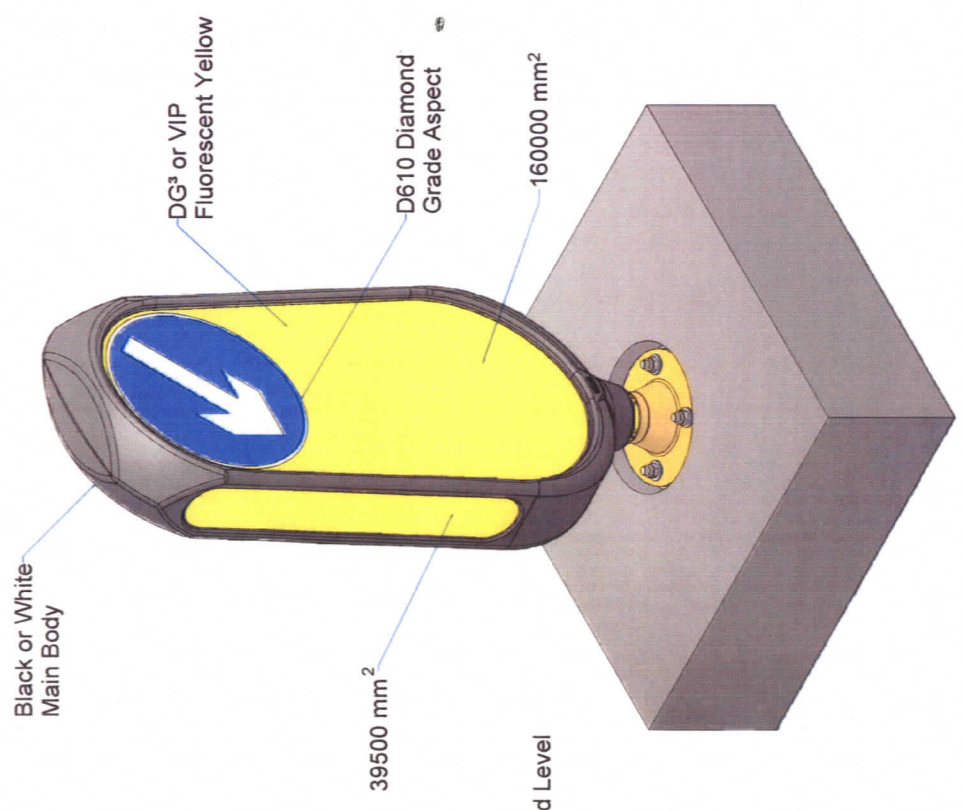
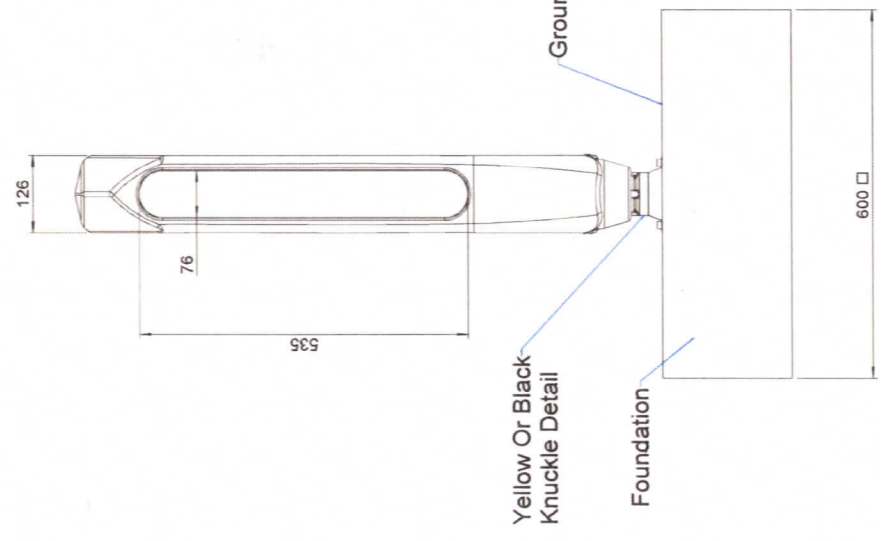
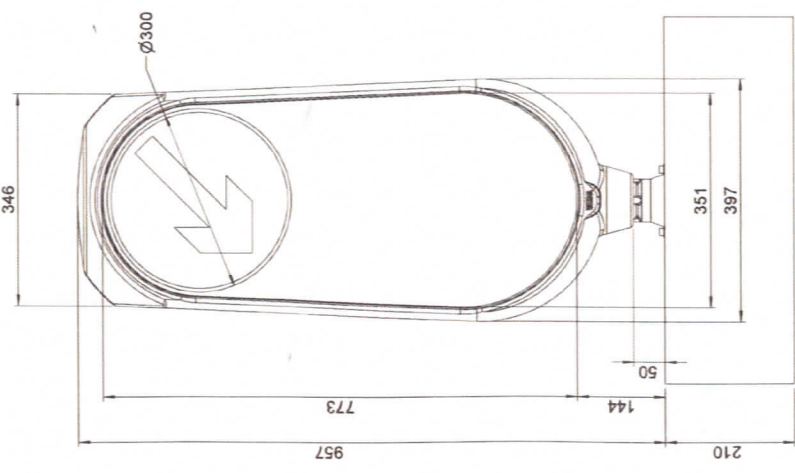
Reference 4200077





If In Doubt Ask Sheet 1 Of 1

Dwg No	WeebolGA.idw
Part No	Weebol03
Project No	



Issue	Date	Modification
04	24/07/06	Body Colour Changed And DG³ Material Added
03	10/11/05	Logo Moved to Back Face
02	19/10/05	Foundation Block Added
01	12/11/04	Original



**Simmons Limited**  
 Stafford Park 5, Telford, Shropshire, TF3 3AS  
 Tel: 01952 293333 Fax: 01952 293555  
 Email: sales@simmons.co.uk

Scale A1	Drawn By
(1 : 4)	Mark Tudor
Gen Tol	Date
± 1.0	15/11/2004
Mass	Checked By
Kg	

Title  
**Weebol 300mm Reflective Bounce Back Bollard**

Material	Finish
----------	--------

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IF IN DOUBT ASK

REVISION

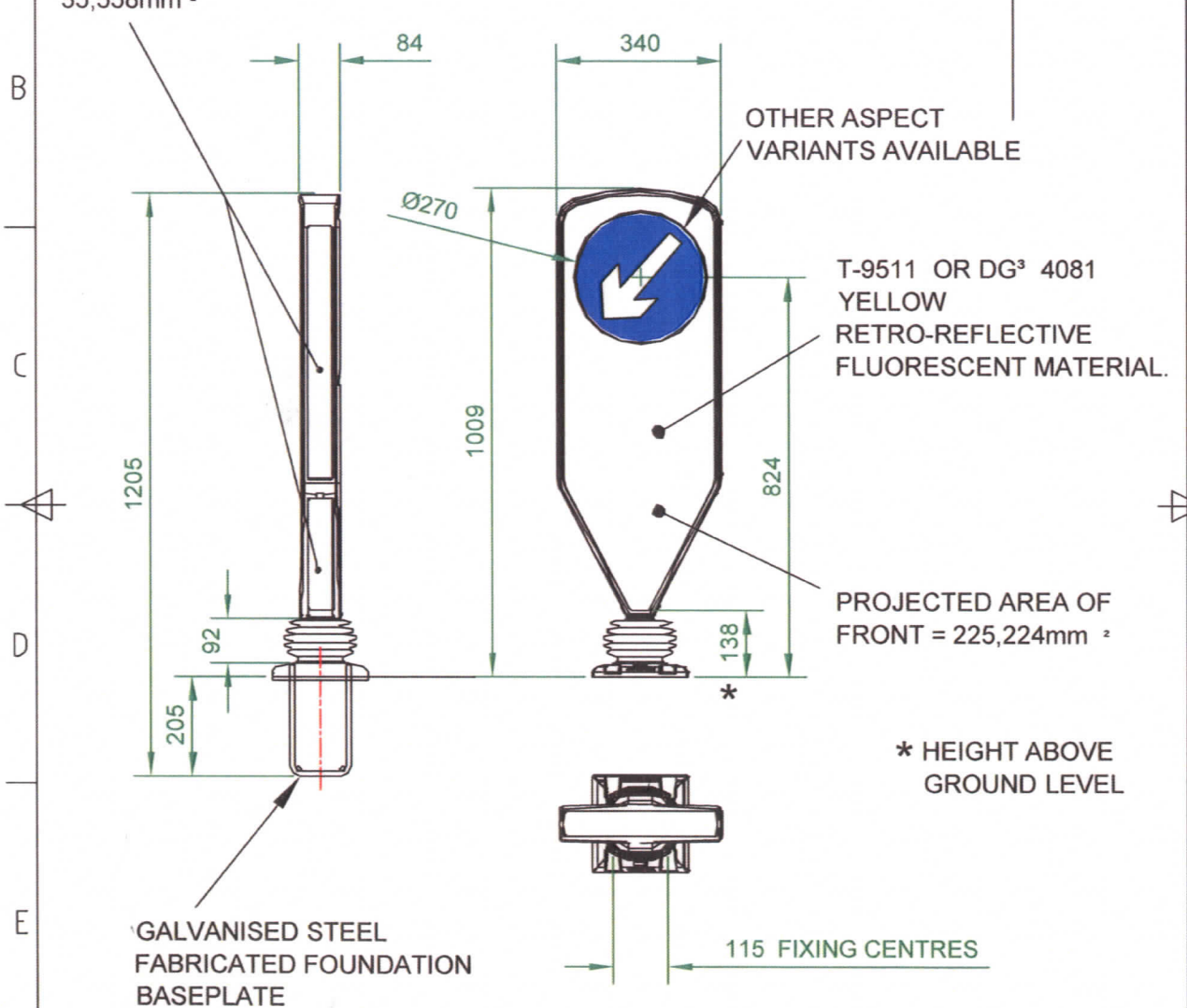
/A FIRST ISSUE KR  
26-12-17

/B GEN. REVISED  
21-13-17

/C REFLECTIVE MATERIAL  
DETAILS ADDED: #271  
DIM ADDED:  
14-14-17

PROJECTED AREA  
OF EACH SIDE =  
35,558mm<sup>2</sup>

SINGLE OR DOUBLE ASPECT; I.E.  
SINGLE OR DOUBLE SIDED.



QA Form No. PG21c Iss. 2

MAT. \_

SPEC. \_

FIN. \_

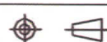
STOCK No. \_

Drn.by

K. RAM

Checked by

Approved by - date



FILENAME

DATE

SCALE

THIRD ANGLE PROJECTION

L6084C

04-04-07

N.T.S.

Owner Signature Ltd

SIGNATURE HOUSE  
HANGE ROAD  
TMDALE, OLDBURY  
B69 2NF  
0121 557 8234

TOLERANCE  
-/- 0.5mm

ANGULAR TOLERANCE

± 1°

ALL DIMENSIONS ARE IN MM  
OTHERWISE STATED.

TITLE LAYOUT OF TRUEFLEX BOLLARD

DWG. No.

L6084

REVISION

C

Sheet

1 OF 1



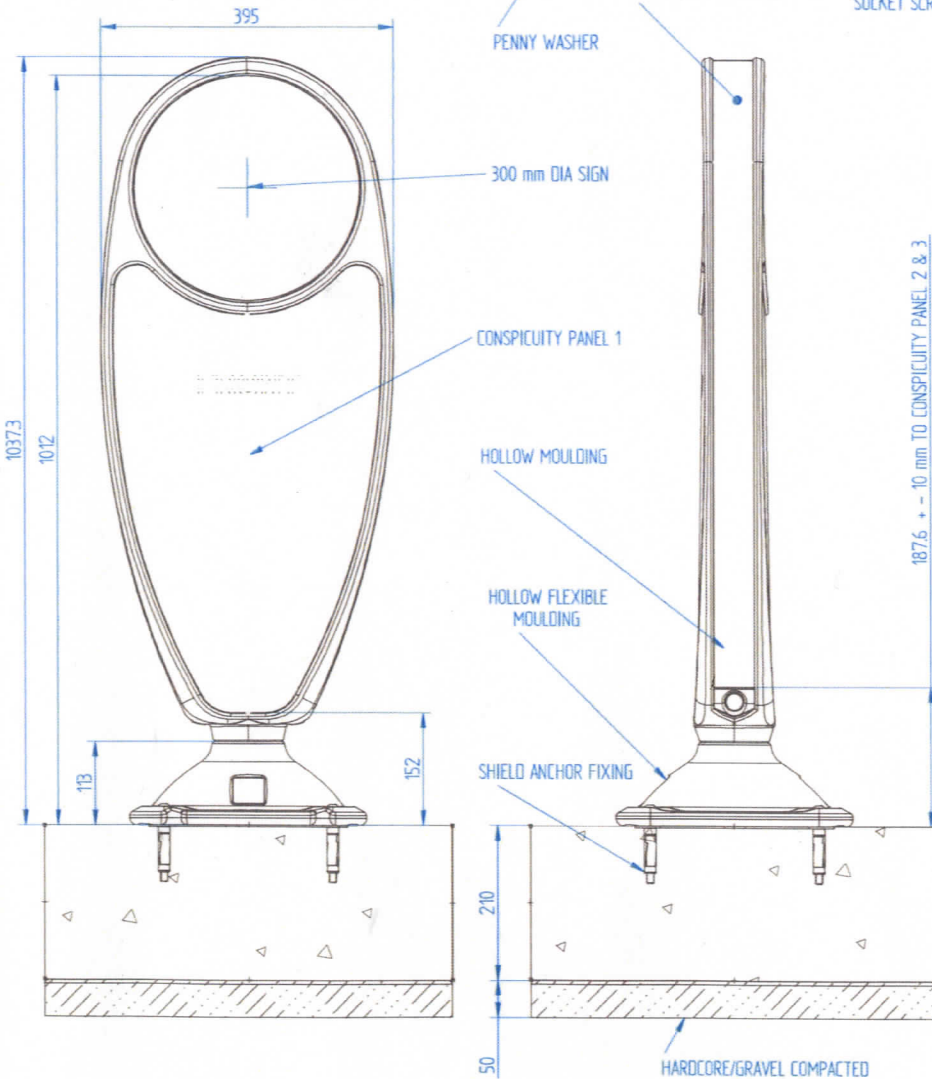
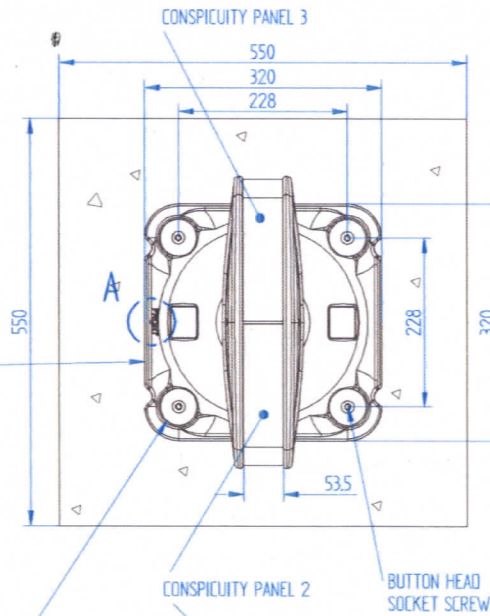
**DO NOT SCALE**  
IF IN DOUBT - ASK

**DETAIL A**

FRONT INDICATOR ON THE BASE MouldING SHOULD ALWAYS BE MOUNTED SO THIS SIDE IS FACING ONCOMING TRAFFIC

DIRECTION OF ONCOMING TRAFFIC →

PRODUCT TO BE SITED 90 DEGREES TO DIRECTION OF TRAFFIC



DESIGN	
ENGINEERING	
QUALITY	
PRODUCTION	

DATE	MODIFICATIONS	DCN No	ISS	CHKD
28/9/09	NEW DRAWING	XX-XX	I	
4/2/10	SPEC UPDATED	05-10	I	

**NIGHTOWL BODY AND BOUNCE BACK BASE MATERIALS:**

- HOLLOW BODY MouldING MDPE
- HOLLOW BASE MouldING FLEXIBLE PE

**300 DIA SIGN FACES**

- 3M DIAMOND GRADE DG3 WHITE REFLECTIVE VINYL OR ALTERNATIVE MATERIAL APPROVED TO BS8408

**CONSPIQUITY PANEL 1 - FRONT PANEL**

- COMPLIES WITH THE REQUIREMENTS OF BS8442:2006, MATERIAL - 3M DIAMOND GRADE DG3 FLUORESCENT YELLOW REFLECTIVE VINYL OR ALTERNATIVE APPROVED TO BS8408
- 160,999 mm<sup>2</sup> METERS PROJECTED AREA

**CONSPIQUITY PANEL 2 & 3 - (SIDE PANELS)**

- COMPLIES WITH THE REQUIREMENTS OF BS8442:2006, MATERIAL - 3M DIAMOND GRADE DG3 FLUORESCENT YELLOW REFLECTIVE VINYL OR ALTERNATIVE APPROVED TO BS8408
- 44,802 mm<sup>2</sup> METERS PROJECTED AREA PER SIDE

**COMPONENTS USED TO ASSEMBLE PRODUCT (EXCLUDING GROUND FIXINGS)**

- 1 (X1) - M8 FORMC WASHER 20mm OD 16mm THICK - STAINLESS STEEL
- 1 (X1) - M8 x 13mm DYNAFIX - ZINC DIECAST
- 1 (X1) - M10 x 120mm SOCKET HEAD CAP SCREW - STAINLESS STEEL
- 1 (X2) BOLT CAP - 25mm Dia X 11.5mm - LDPE

**GROUND FIXING - SURFACE MOUNT FIXING**

- 1 (X4) M10 x 100mm BU TTON HEAD SOCKET SCREW - STAINLESS STEEL
- 1 (X1) - M10 PENNY WASHER 50mm OD 3mm THICK - STAINLESS STEEL
- 1 (X4) M10 SHIELD ANCHOR 16 mm x 60 mm MILD STEEL BZP OR EQUIVALENT OF SAFE WORKING LOAD 6 KN
- 1 (X4) COMPRESSION SPACER - 10MM ID 22mm OD X 20mm - NYLON

TO SURFACE MOUNT BOLLARD, DRILL 4 HOLES OF 16mm x 80mm (MIN DEPTH) INTO SUITABLE GOOD FOUNDATION OR PREPARE SITE TO THE FOLLOWING FOUNDATION SPEC BEFORE INSTALLING.

FOUNDATION TO CONSIST OF STRUCTURAL CONCRETE SPEC (MINIMUM C20/25) OF SIZE 550x550x210 WITH 50 mm OF HARD CORE (SITE SURVEY MUST BE USED TO ASCERTAIN SUITABILITY OF FOUNDATION).

IF THE WIDTH OF THE CONCRETE FOUNDATION IS UNDER THE REQUIRED 550 MM SQUARE FOOTING IT IS RECOMMENDED TO INCREASE DEPTH OF FOUNDATION TO OBTAIN PROPORTIONAL VOLUME IN FOUNDATION.

NOTE. MINIMUM DISTANCE FROM ANCHOR TO EDGE OF CONCRETE SHOULD BE NO LESS THAN 160mm

**PRODUCT VARIANTS**

- 1) NIGHTOWL STANDARD - WITH 300 DIA SIGN FACE WITH CONSPIQUITY PANEL 1 ON FRONT AND CONSPIQUITY PANEL 2 & 3 COVERING THE SIDES.
- 2) NIGHTOWL STANDARD + CONSPIQUITY PANEL 1 ON THE BACK
- 3) NIGHTOWL STANDARD + PANEL 1 ON THE BACK + 300 DIA SIGN ON BACK.

No reproduction or publication of this drawing may be made and no article may be manufactured or assembled or repaired without the consent of the manufacturer. This permission is a term of any contract relating to this drawing.			LINPAC Environmental Limited Lifford Industrial Estate Carrigan Lifford, ONY 8L0 Tel: 01223 818000 Fax: 01223 818001 Web: www.linpac-environmental.com
NOT TO SCALE	Product: NIGHT OWL		
Drawn by: A Edwards	Component: NIGHT OWL - SURFACE MOUNT		
Date: 19/05/09	Spec Type: SPECIFICATION		
PC No: 81707/1	DCN No: 1707A01	Sheet No: 1	SHEET 1 OF 1

# NIGHTOWL SURFACE MOUNT

**NOTE - THIS IS A NON ILLUMINATED PRODUCT - RESTRICTIONS APPLY TO ITS USE. AUTHORIZATION FOR USE MUST BE OBTAINED FROM THE DFT.**

ALL DIMENSIONS IN mm

3rd Angle Projection

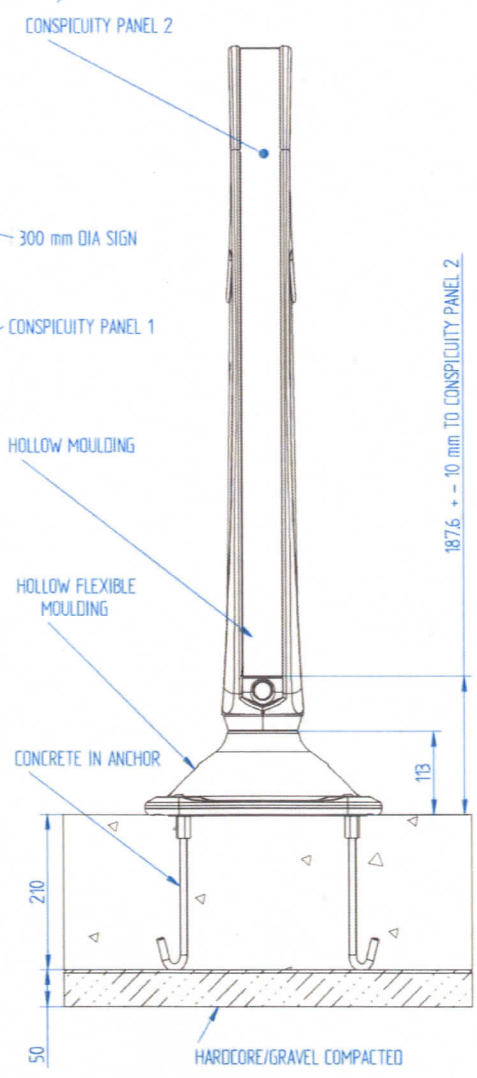
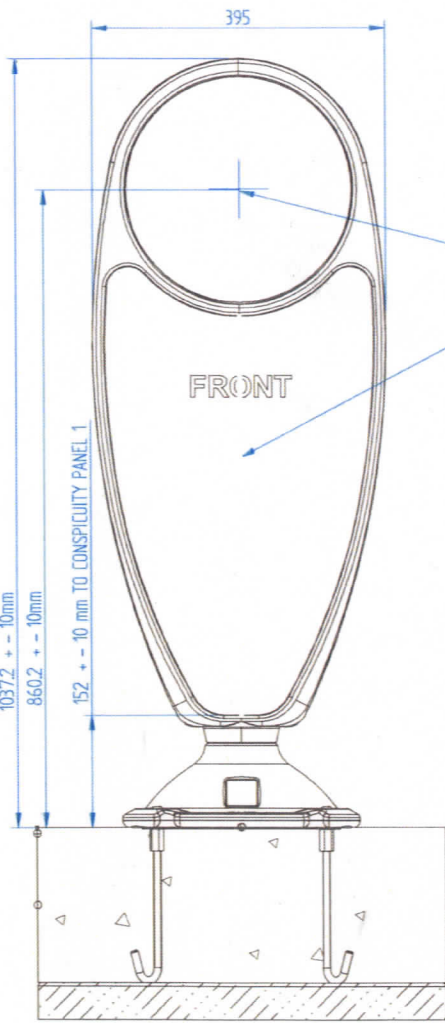
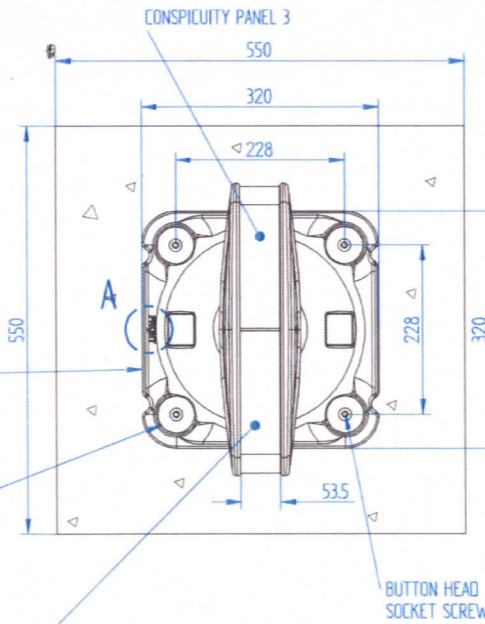
**DO NOT SCALE**  
IF IN DOUBT - ASK

**DETAIL A**

FRONT INDICATOR ON THE BASE MouldING SHOULD ALWAYS BE MOUNTED SO THIS SIDE IS FACING ONCOMING TRAFFIC

DIRECTION OF ONCOMING TRAFFIC

PRODUCT TO BE SITED 90 DEGREES TO DIRECTION OF TRAFFIC



DESIGN	
ENGINEERING	
QUALITY	
PRODUCTION	

DATE	MODIFICATIONS	DCN No	ISS	CHKD
28/9/09	NEW DRAWING	XX-XX	1	
4/2/10	SPECIFICATION UPDATED	06-10	2	

**NIGHTOWL BODY AND BOUNCE BACK BASE MATERIALS:**

- HOLLOW BODY MouldING MDPE
- HOLLOW BASE MouldING FLEXIBLE PE

**300 DIA SIGN FACES:**

- 3M DIAMOND GRADE DG3 WHITE REFLECTIVE VINYL OR ALTERNATIVE APPROVED TO BS8408

**CONSPIQUITY PANEL 1 - (FRONT PANEL)**

- COMPLIES WITH THE REQUIREMENTS OF BS8442:2006. MATERIAL - 3M DIAMOND GRADE DG3 FLUORESCENT YELLOW REFLECTIVE VINYL OR ALTERNATIVE APPROVED TO BS8408
- 160,999 mm<sup>2</sup> METERS PROJECTED AREA

**CONSPIQUITY PANEL 2 & 3 (SIDE PANELS)**

- COMPLIES WITH THE REQUIREMENTS OF BS8442:2006. MATERIAL - 3M DIAMOND GRADE DG3 FLUORESCENT YELLOW REFLECTIVE VINYL OR ALTERNATIVE APPROVED TO BS8408.
- 44,802 mm<sup>2</sup> METERS PROJECTED AREA PER SIDE

**COMPONENTS USED TO ASSEMBLE PRODUCT (EXCLUDING GROUND FIXINGS):**

1. (X1) - M8 FORMC WASHER 20mm OD 1.6mm THICK - STAINLESS STEEL
2. (X1) - M8 x 13mm DYNAFIX - ZINC DIECAST
3. (X1) - M10 x 120mm SOCKET HEAD CAP SCREW - STAINLESS STEEL
4. (X2) BOLT CAP - 25mm Dia X 11.5mm - LDPE

**GROUND FIXING:**

**CONCRETE IN FIXING**

1. (X4) M10 x 40mm BUTTON HEAD SOCKET SCREW - STAINLESS STEEL
2. (X1) - M10 PENNY WASHER 50mm OD 3mm THICK - STAINLESS STEEL
3. (X4) LPE CONCRETE IN SOCKET ANCHOR M10 X 210MM LONG (OR EQUIVALENT HEAVY DUTY CONCRETE IN FIXING INSERT OF MIN AXIAL LOAD RATING 600 kg)
4. (X4) COMPRESSION SPACER - 10MM ID 22mm OD X 20mm - NYLON

FOUNDATION TO CONSIST OF STRUCTURAL CONCRETE SPEC (MINIMUM C20/25) OF SIZE 550x550x210mm WITH 50 mm OF HARD CORE (SITE SURVEY MUST BE USED TO ASCERTAIN SUITABILITY OF FOUNDATION SPEC REQUIRED).

IF THE WIDTH OF THE CONCRETE FOUNDATION IS UNDER THE REQUIRED 550 mm SQUARE FOOTING IT IS RECOMMENDED TO INCREASE DEPTH OF FOUNDATION TO OBTAIN PROPORTIONAL VOLUME IN FOUNDATION.

NOTE: MINIMUM DISTANCE FROM ANCHOR TO EDGE OF CONCRETE SHOULD BE NO LESS THAN 100mm

**PRODUCT VARIANTS**

- 1) NIGHTOWL STANDARD WITH 300 DIA SIGN FACE WITH CONSPIQUITY PANEL 1 ON FRONT AND CONSPIQUITY PANEL 2 & 3 COVERING THE SIDES (SINGLE SIDED)
- 2) NIGHTOWL STANDARD - PANEL 1 ON BACK
- 3) NIGHTOWL STANDARD - PANEL 1 ON THE BACK - 300 DIA SIGN ON BACK (DOUBLE SIDED)

**NIGHTOWL CONCRETE IN**  
(RECOMMENDED FIXING)

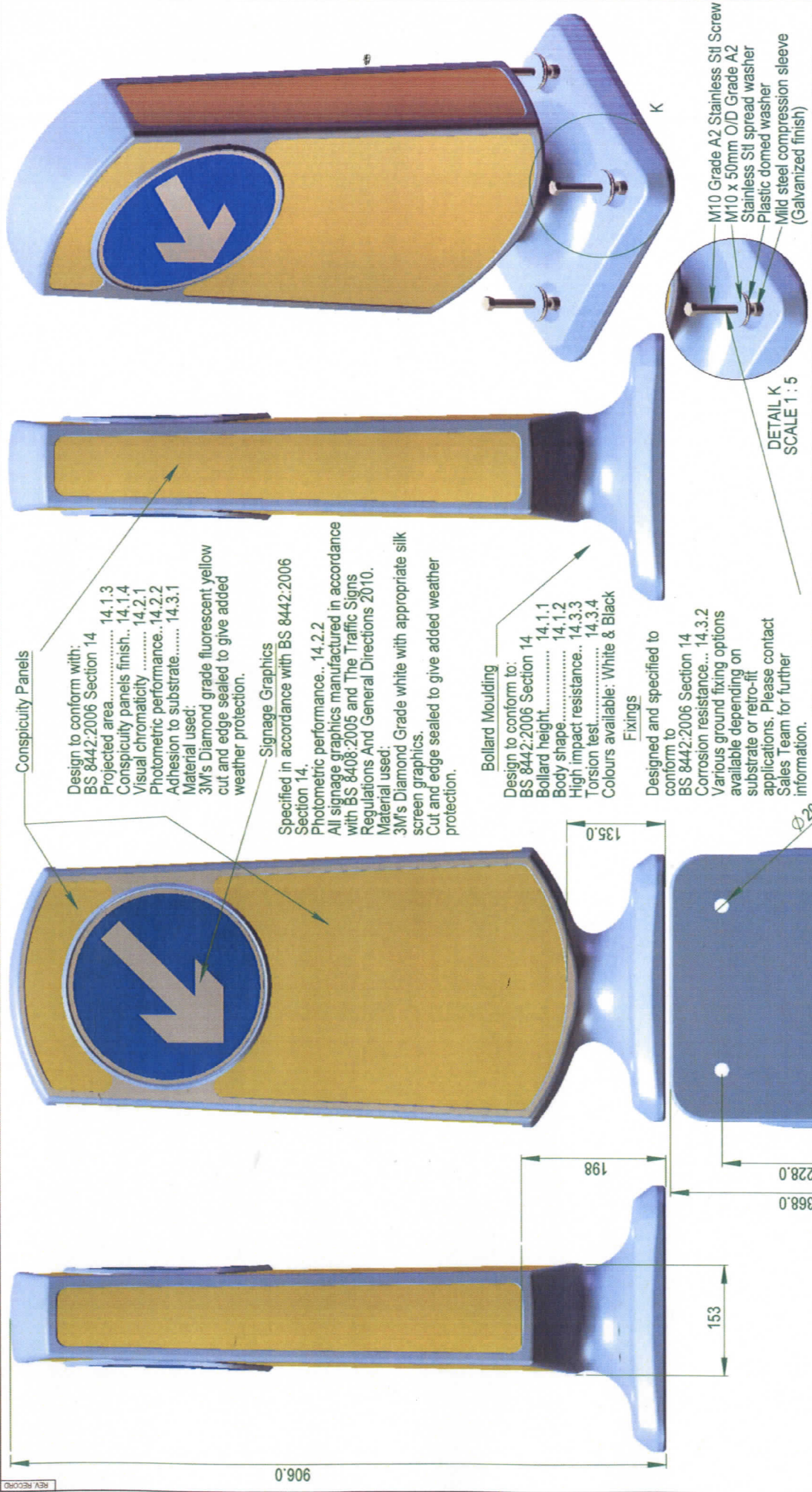
**NOTE** - THIS IS A NON ILLUMINATED PRODUCT - RESTRICTIONS APPLY TO ITS USE. AUTHORIZATION FOR USE MUST BE OBTAINED FROM THE DFT.

ALL DIMENSIONS IN mm

3rd Angle Projection

No reproduction or publication of this drawing may be made and no other may be manufactured or assembled in accordance with this drawing without prior written consent. This prohibition is a term of any contract relating to this drawing.				LINPAC Environmental Limited 1000 Industrial Estate Cambridge CB11 3AQ Tel: 01223 810000 Fax: 01223 810000 Web: www.linpacenvironmental.com
NOT TO SCALE	Product	NIGHT OWL		
DRAWN BY	Author	AEdwards NIGHT OWL - CONCRETE IN		
DATE	DRG Type	19/05/09 SPECIFICATION		
PC No	DRG No	Sheet No	SHEET 1 OF 1	
81707/11	1707A02			





**Conspicuity Panels**  
 Design to conform with:  
 BS 8442:2006 Section 14  
 Projected area..... 14.1.3  
 Conspicuity panels finish.. 14.1.4  
 Visual chromaticity ..... 14.2.1  
 Photometric performance.. 14.2.2  
 Adhesion to substrate..... 14.3.1  
 Material used:  
 3M's Diamond grade fluorescent yellow cut and edge sealed to give added weather protection.

**Signage Graphics**  
 Specified in accordance with BS 8442:2006 Section 14.  
 Photometric performance.. 14.2.2  
 All signage graphics manufactured in accordance with BS 8408:2005 and The Traffic Signs Regulations And General Directions 2010.  
 Material used:  
 3M's Diamond Grade white with appropriate silk screen graphics.  
 Cut and edge sealed to give added weather protection.

**Bollard Moulding**  
 Design to conform to:  
 BS 8442:2006 Section 14  
 Bollard height..... 14.1.1  
 Body shape..... 14.1.2  
 High impact resistance.. 14.3.3  
 Torsion test..... 14.3.4  
 Colours available: White & Black

**Fixings**  
 Designed and specified to conform to  
 BS 8442:2006 Section 14  
 Corrosion resistance... 14.3.2  
 Various ground fixing options available depending on substrate or retro-fit applications. Please contact Sales Team for further information.

**DETAIL K**  
 SCALE 1:5  
 M10 Grade A2 Stainless Stl Screw  
 M10 x 50mm O/D Grade A2  
 Stainless Stl spread washer  
 Plastic domed washer  
 Mild steel compression sleeve (Galvanized finish)

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NOTES: All dimensions in mm Remove all burrs and sharp edges		TOLERANCES UNLESS OTHERWISE STATED 0.00 = +0.15 0.0 = +0.30 Whole No's +0.50	
FINISH:		MATERIAL:	
SPEC:		SPEC:	
Drawn By	Checked By	Date Drawn	Scale
BD	BD	19/04/10	
		THIRD ANGLE PROJECTION	

**Pudsey Diamond Engineering Ltd**  
 Tel :- 01264 336677 Fax:- 01264 336688  
 E-mail :- sales@pudseydiamond.com

# Cusack Dynaflex Retroreflective Self Righting Bollard (Non illuminated)

**Complies to BS 8442 clause 14**

**Conspicuity panel details;**

Fluorescent Yellow Crystal grade microprismatic sheeting,  
BS 8408 performance greater than 9.0 for V1 D3 A1 LB

Sign face;

300mm dia circle Crystal grade microprismatic sheeting

Front conspicuity panel area; 151, 666mm<sup>2</sup>

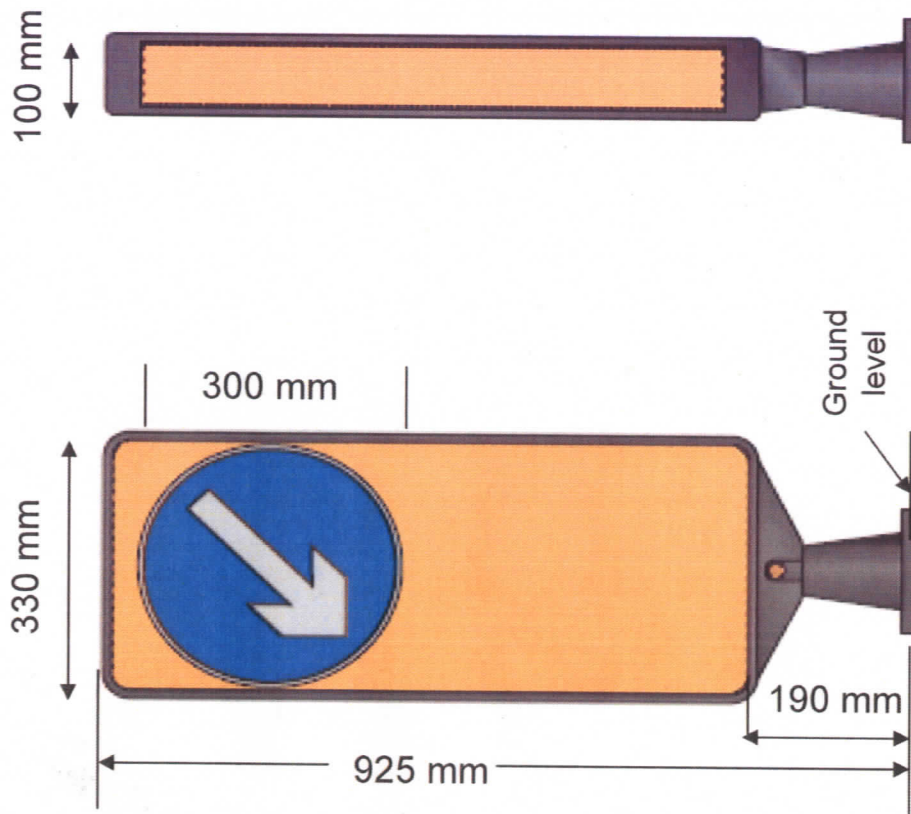
Side conspicuity panels area (each); 51,205mm<sup>2</sup>

Optional rear conspicuity panel area ; 151, 666mm<sup>2</sup>



Cusack (Tools Supplies) Ltd (Wolverhampton)  
The Hydra Building, Mammoth Drive  
Wolverhampton Science Park  
Wolverhampton  
West Midlands  
WV10 9TF

Tel; 01902 371715 Fax; 10902 310977  
Web; [www.cusack.co.uk](http://www.cusack.co.uk)  
Email: [sales@cusack.co.uk](mailto:sales@cusack.co.uk)



Single sided or double sided options.



**SIZE OF POST-MOUNTED SIGNS TO DIAGRAM 610, 611, 615 OR 811 OF TSRGD 2002 TO BE USED IN CONJUNCTION WITH NON-ILLUMINATED BOLLARDS AUTHORISED UNDER SECTION 64 OF THE ROAD TRAFFIC REGULATION ACT 1984**

Speed Limit	Minimum diameter of sign to diagram 610 Or 611	Minimum diameter of sign to diagram 615	Minimum width of sign to diagram 811
On roads where the maximum permitted speed is 20mph or 30mph	600mm	600mm	700mm (525mm when limit is 20mph)
On roads where the maximum permitted speed is 40mph or 50mph	750mm	750mm	875mm
On roads where the maximum permitted speed is 60mph	900mm	900mm	1050mm
On roads where the maximum permitted speed is 70mph	1200mm	Not used	Not used

Department for Transport  
 Date 15/8/11  
 No. 5750/66/00/11-2