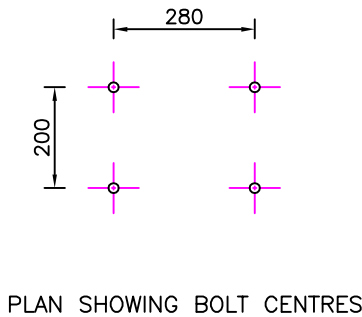
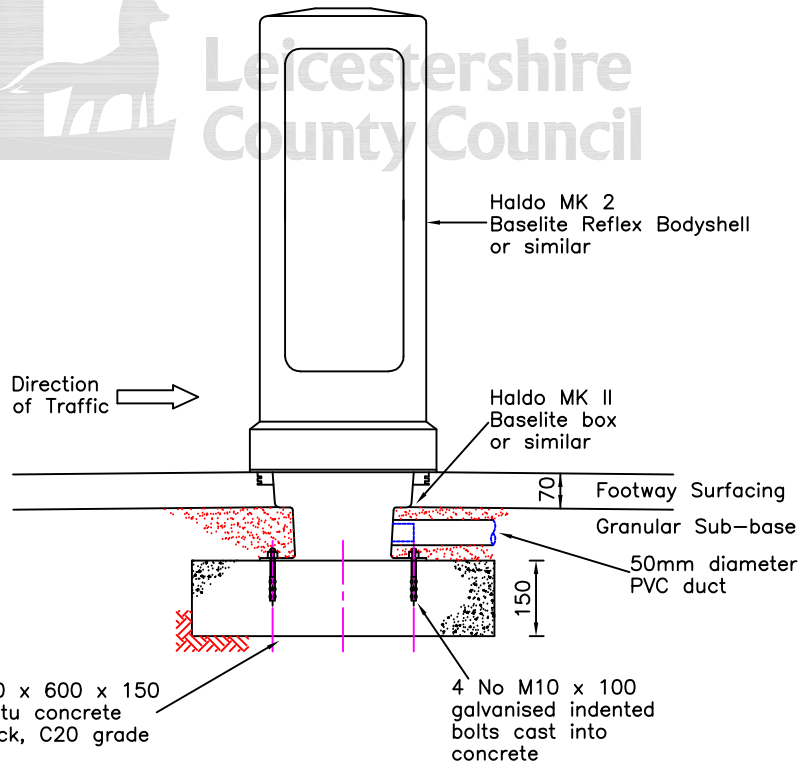




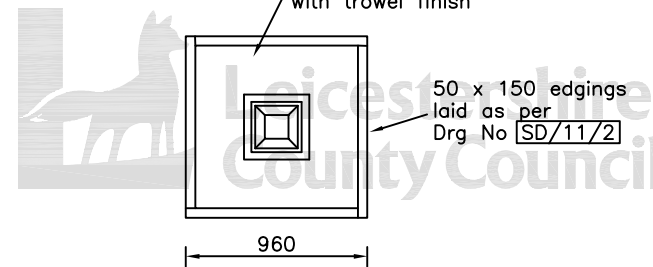
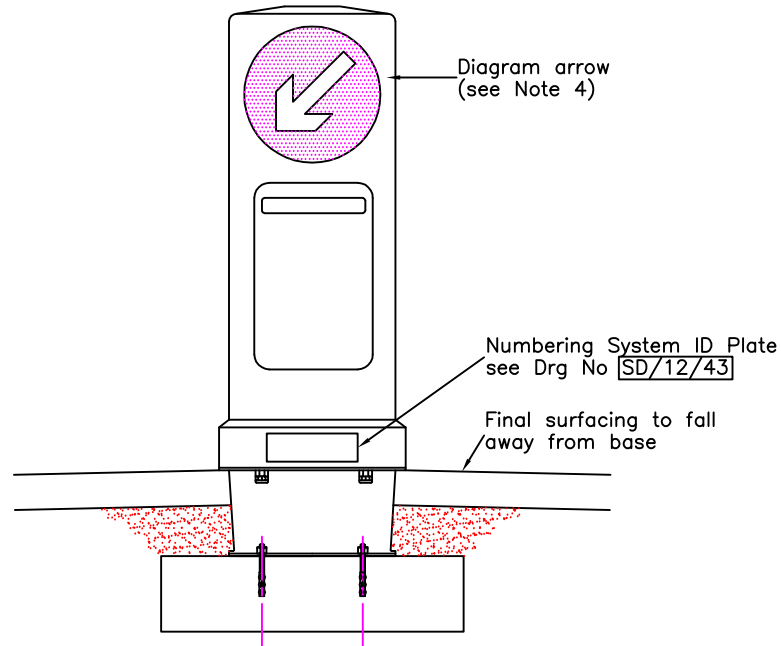
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SECTIONAL ELEVATION



PLAN SHOWING BOLT CENTRES

SECTIONAL ELEVATION



PLAN SHOWING HARD STANDING AROUND
BOLLARD IN UNSURFACED AREAS
(see Note 5)

- NOTES:
- The one piece moulded bollard shell shall be made from soft, translucent white, UV stabilised, butyl vinyl acetate capable of withstanding hard impacts at temperatures down to -23°C . The bollard shell shall provide good yield characteristics in both face on and diagonal impacts without major damage to shell or base assembly. The bollard shall achieve, when new, a mean average light output of $100\text{cd}/\text{m}^2$ at the diagram arrow. It shall through design provide outstanding levels of lighting at the upper portion of the bollard head regardless of vehicular approach angle. It shall be fixed to the hinged platform of the enclosure by 4 No stainless steel threaded Hex Sets with stainless nuts used on the inside of the shell to prevent bollard theft or loss.
 - The base light enclosure shall be manufactured in cast aluminium LM6 aluminium alloy, base flanges to include holes for ragbolts if required. The base light lid shall retain and seal a 5.0mm thick UV stabilized polycarbonate domed lens to a protection factor of IP67 (BS 5490). Base light units shall contain a removable gear tray with a bonded incoming supply plug which shall engage in the order: earth-neutral-live and disconnect in the reverse order. The gear tray shall be fitted with two independently fused circuits each comprising a Harvard DK13 digital ballast supplying an 11watt 4 pin compact fluorescent lamp, with both circuits controlled by a single Zodion F4200 low-light infra-red photo-electric control unit, complying with BSEN 50081/50082. Each base light unit shall be fitted with an integral fixed plug/socket arrangement that isolates the bollard electrical circuits upon removal of the light/gear tray and shall be fitted with internally accessible cable glands that, when tightened, maintains an IP68 rating for the base unit and an additional cable gland hole plug, for use where a single cable access is required and that, when fitted, also maintains the IP rating.
 - The foundation incorporating the ducting should be as per the manufacturers recommendations.
 - The diagram arrow or sign as specified by the Engineer, to be in accordance with the Traffic Signs Regulations and General Directions 2002.
 - Where the bollard is installed in an unsurfaced verge, island or refuge, the bollard base must be surrounded by an area of hard surfacing as shown.
 - The bollard should be positioned in splitter islands and refuges so that the front face is 0.45m to 1m from the nose of the island and the clearance from the carriageway to the side faces shall be 0.45m to 0.6m or as agreed with the Engineer.

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Leicestershire County Council
DEPARTMENT OF HIGHWAYS
TRANSPORTATION AND
WASTE MANAGEMENT

TITLE:	STANDARD DRAWING	TRAFFIC SIGNS
	BASE ILLUMINATED DEFORMABLE BOLLARD - TYPE B	

DRAWING NUMBER	DATE			
SD/12/20 ^C	OCTOBER 2000	C	AUG 2009	Notes 1 and 2 amended
AUTOCAD REF	SCALE	B	APRIL 2007	Numbering System ID Plate added
K:\GENERAL\ID9997\STDDRG\SD1220B	NOT TO SCALE	A	APRIL 2001	Note 2 amended
Rev	Date			Notes on Revision