

DO NOT SCALE

GENERAL NOTES:

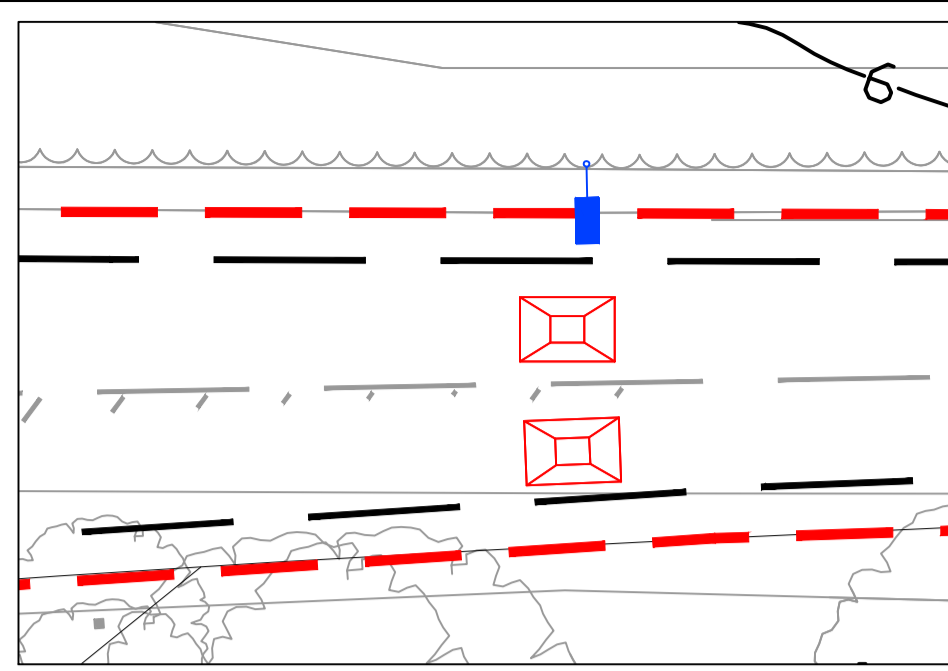
1. This Drawing proposal must be read in conjunction with all other relevant project drawings and specifications
2. Do not scale from this drawing. If in doubt please request further information
3. Drawing proposal shows lighting information and is not meant to be used for installation purposes. Information from it should be transferred to the contractors working drawings along with other information such as electrical connections and other illuminated equipment
4. Proposal based upon customer drawing provided and no survey on site has been carried out. Utility information such as underground and over ground cables and gas pipes etc. will need to be checked on site by installation contractor before excavation or installation of lighting equipment.
5. Symbols indicate proposed locations of lighting equipment. For further information please refer to the luminaire schedules and details shown.
6. Locations and orientation of all equipment must be confirmed with the lighting consultant prior to installation. Exact orientation of luminaires to be finalized during final focusing. Please refer to the Philips lighting solutions drawings and specifications for details of electrical engineering associated with lighting works.
7. All lighting throughout this site must be suitable for use within the local ambient temperature and within a saline environment.
8. All lighting equipment must be supplied with adequate means for protection during transport to site and any subsequent storage prior to installation.
9. For lighting to bridges, canopies, furniture or water features please refer to the relevant drawings and details
10. For details of all luminaires please refer to the Philips lighting solutions luminaire schedule
11. For cable routes, driver locations and any electrical works associated with the lighting installation please refer to the contractors installation drawings and documentation

MAINTENANCE AND CDM NOTES:

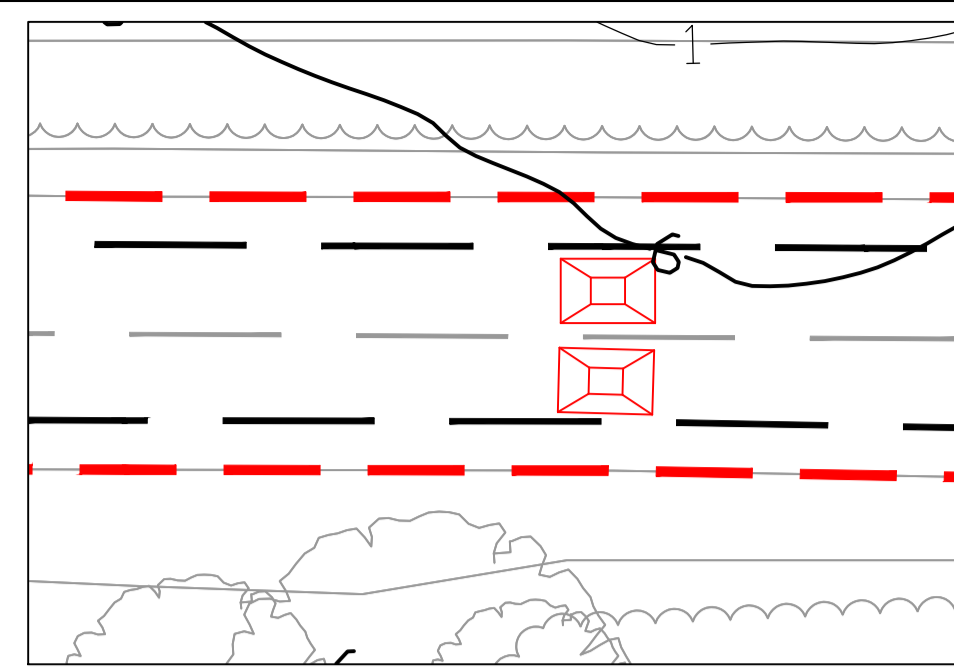
1. The lighting installation requires a variety of luminaire types to achieve the desired effects. Information has been provided on this drawing as general guidance and outline of good practice. For more specific recommendations please refer to manufacturers details for application, operation, handling, cleaning and disposal instructions.
2. Installation and maintenance of lighting equipment installed at any height above ground requires precautions to be taken. Access arrangements should be in strict accordance with the projects access report, method statement and health and safety guidelines.
3. All fixtures must be electrically isolated prior to any testing or maintenance.
4. All luminaires must be powered up for focusing during the hours of darkness, all are specified to be fully enclosed and earthed or operated at extra low voltage.
5. All fixtures must be protected from damage by over-temperature by means of thermal cut-out or similar device.

KEY:

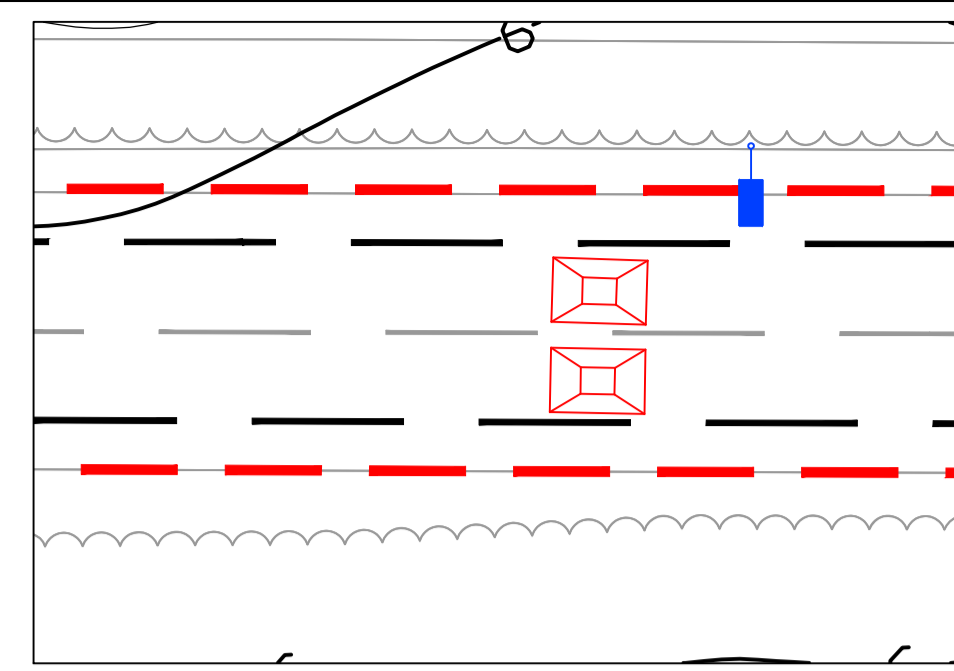
- Speedstar BGP322 ECO156 DW  
BGP322 135 DW ECO156 - No  
lamp(s): ECO156-25/740  
candela file BGP322 135 1xECO156-25\_740 DW.klt  
1 lamp(s) per luminaire, 15076 initial lumens per lamp  
Maintenance Factor = 0.750, watts per luminaire = 141  
Outreach (from mounting axis to photometric center) = 750 mm  
tilt angle = 5 deg  
mounting height = 8 m  
number locations = 32, number luminaires = 32  
kw all locations = 4.5
- Existing Street lighting



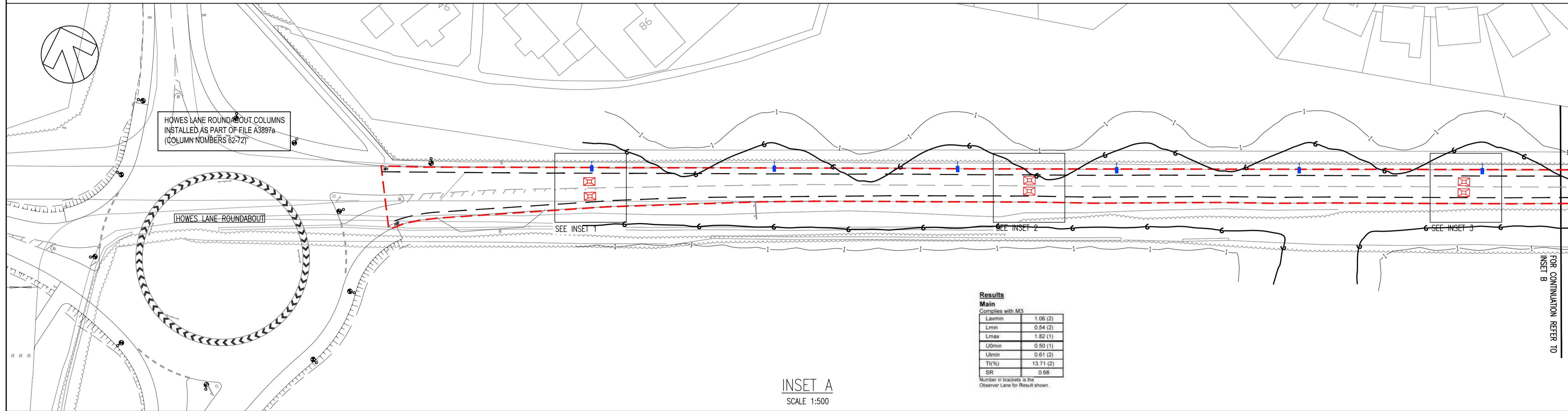
INSET 1  
SCALE 1:200



INSET 2  
SCALE 1:200



INSET 3  
SCALE 1:200



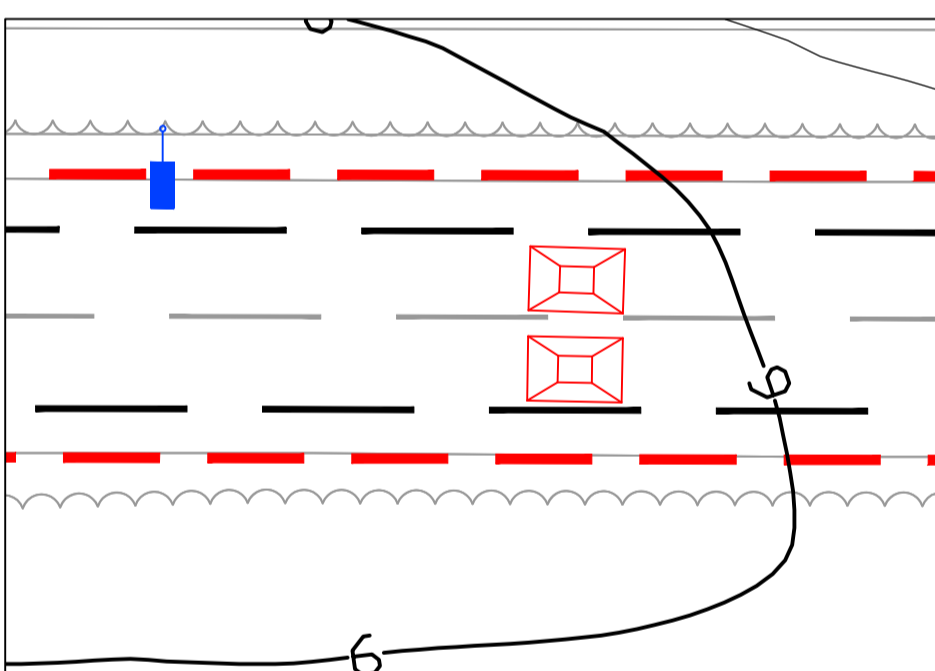
**Results**

Main  
Complies with M3

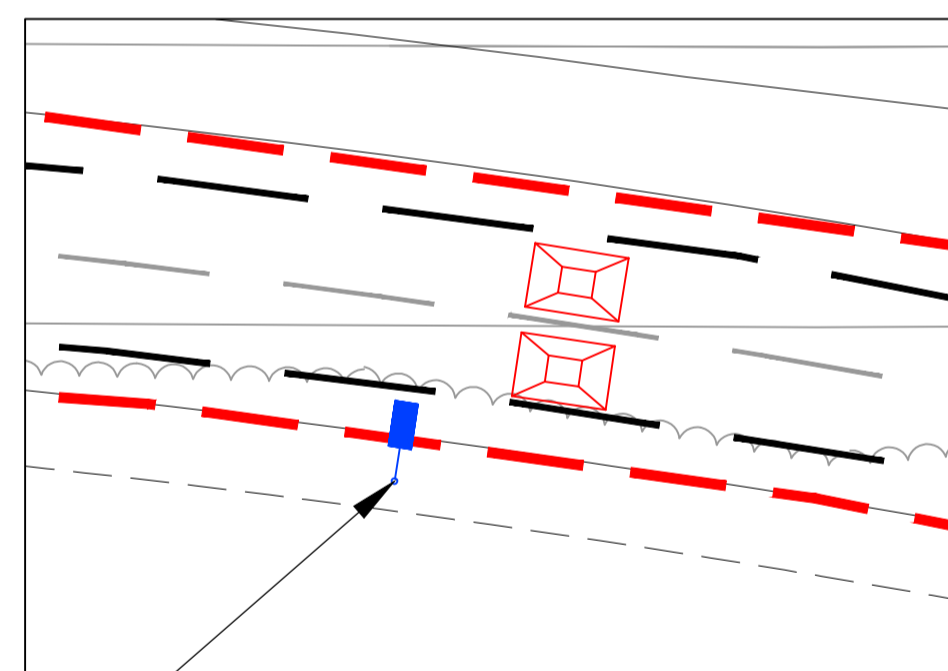
Lumens	1.06 (2)
LumIn	0.54 (2)
Lmax	1.82 (1)
L0/min	0.50 (1)
U/min	0.61 (2)
TI(%)	13.71 (2)
SR	0.68

Number in brackets is the Observer Lane for Result shown.

INSET A  
SCALE 1:500



INSET 4  
SCALE 1:200



INSET 5  
SCALE 1:200

OXFORDSHIRE COUNTY COUNCIL STREET LIGHTING SPECIFICATIONS

**Column** 6m Conical 'Avon' steel column (BS EN 40) BD9407 Stanton Metal Company together with 2m uplift and 0.75m outreach Thames projection bracket. Total mounting height 8 metres. Rationalised wind loading factor (RWF) for Oxfordshire as specified in PD6547:2009 are to be used as a pressure for design of lighting columns. (Style 9 drg HSD/13/021)

**Lantern** Philips Speedstar BGP322 ECO156 DW

**Lamp** ECO156-25/740 - 15576 lumens

**Control** One piece photocell Nema 6 pin type (Zodion Super 6) set at 55 / 28 lux  
Pre-set to dim 75% from 12.00am to 5.30am

**Column finish** EPA Compliant Epoxy / Polyurethane Amended Oxfordshire County Council Specification.

i.e. Requirements for Lighting Columns, Bracket Arms & Doors (See Oxfordshire amended Appendix 193).  
Upper Additional overall coats to be applied in shop to a clean degreased, lightly abraded dry surface.

1st Coat: Internal root to 250mm above ground level & External overall Item 121, Dacrylate 2 Pack Extended Cure Epoxy MIO, ref 90-270. Airless Spray, Minimum Dry Film Thickness 100 microns.

2nd Coat: External root to 250mm above ground level  
Dacrylate Epidac 2 Glass Reinforced 2-Pack Epoxy, ref 79-489. Brush/Airless Spray, Minimum Dry Film Thickness 200 microns.

3rd Coat: External overall  
Dacrylate Dacsil 200 2-Pack Polyurethane Finish RAL 6013 (or other specified colour), 200 -line, Conventional Spray, Minimum Dry Film Thickness 75 microns.

Additional notes:-

- 1) Columns to be sited at the rear of footpath and within adoptable area.
- 2) Positions are approximate. The Local Authority Engineer reserves the right to alter positions depending on site conditions.
- 3) All equipment shall comply with the Oxfordshire County Council General Technical Specification.
- 4) The Contractor shall obtain samples of the paint and technical Data Sheets from the Manufacturers prior to commencement of work.
- 5) In order to assist the developer, the design Engineer will mark out all of the column positions.
- 6) All Street Lighting works must be carried out by a Highway Electrical Association Registered Contractor.
- 7) All columns to be numbered two metres from ground level.
- 8) Electrical Supply to Street Lighting Columns and Illuminated Signs are to be serviced/owned by the local Distribution Network Operator (i.e. Regional Electricity Company).
- 9) The 'A' file reference number which is on the drawing, is to be quoted in all correspondence.
- 10) No trees are to be planted within ten metres of a column.

NB: Touch up on site using 2 Pack paints applied by brush will never offer the same appearance as that of a spray applied finish. For this reason every effort should be made to minimize handling / transportation damage.

Street Lighting to be adopted by  
OXFORDSHIRE COUNTY COUNCIL

DISCLAIMER:

The nominal values shown on this drawing are the result of precision calculations, based upon precisely positioned luminaires in a fixed relationship to each other and to the area under examination. In practice the values may vary due to tolerances on luminaires, luminaire positioning, reflection properties and electrical supply.  
This document contains information regarding feasibility for the purpose of a proposal. The information contained on this drawing or our proposal does not constitute a 'design' for the purposes of the Construction, Design and Management regulations 2007, therefore, Philips do not accept or assume the role of 'Designer' when submitting this information for whatever purpose or how-so-ever the information in this document is used by any other person.  
Philips Electronics UK Limited ('Philips') provides the attached lighting proposal (Proposal) for the project stated ('Project') and customer ('Customer') subject to the following limitations:  
Customer has confirmed that the CDM regulations do not apply to this project. Philips has accordingly not undertaken any risk assessment for this proposal.  
Philips may not have had physical access to the site of the project to verify the information which has been provided and the design is therefore based solely on information provided by the customer to Philips. The customer is therefore responsible for ensuring that the designs produced can be safely implemented in compliance with any laws and regulations.  
Philips will not be held liable for any risk associated with the implementation of the design.

REV	DATE	BY	DESCRIPTION	CHK	APP
C	05/08/15	AD	2 NEW COLUMNS ADDED RBT EXIT. SPEC ADDED	AD	AD
B	03/08/15	SMR	AMENDED TO OCC COMMENTS	AD	AD
A	03/11/14	TRK	DETAILED DESIGN - FIRST ISSUE	AD	AD

DRAWING STATUS: ISSUED FOR CONSTRUCTION



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CLIENT: COUNTRYSIDE PROPERTIES (BICESTER) LTD.

ARCHITECT:

PROJECT: BICESTER KINGSMERE

TITLE: MIDDLETON STONEY ROAD TRAFFIC CALMING SCHEME - STREET LIGHTING SHEET 1 OF 3

SCALE @ A1:	CHECKED:	APPROVED:
AS SHOWN	AD	AD
CAD FILE: 1903-MSR-1301 Rev C	DESIGN/DRAWN: TRK	DATE: November 14
PROJECT No: 11011903	DRAWING No: 1903/MSR/1301	REV: C

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S:\Bicester\New Town\DRAWINGS\AUTOCAD\MS-TC\_Middleton Stoney Traffic Calming S278 - Detailed Design\1300 series SL - Street Lighting\1903-MSR-1301 Rev C.dwg

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