

Volt drop calculation for the most onerous circuit

ESB SUPPLY	SOURCE PILLAR	CIRCUIT	DESIGN CURRENT (Amps per Phase)	CABLE SIZE (sq.mm.)	CABLE LENGTH (m)	RUSE (Amps)	VOLT DROP (Volts)
S1	MPI	MAIN	1.69	2x63c	200	10	1.81
S1	MPI	1.1	1.69	2x63c	200	10	1.81

- TYPE A COLUMN DETAILS**
  - HEIGHT : 6m
  - BRACKET LENGTH : Post-top
  - INCLINATION : 0 Degrees
  - COLUMN QUANTITY : 54
- LANTERN DETAILS**
  - AVERAGE WATTAGE (CLO) : 17w LED
  - MAKE & MODEL : C.U.Phosco P852-12-P4-NW-CB0400
- TYPE B COLUMN DETAILS**
  - HEIGHT : 6m ABACUS Raise & lower type
  - BRACKET LENGTH : Post-top
  - INCLINATION : 0 Degrees
  - COLUMN QUANTITY : 11
- LANTERN DETAILS**
  - AVERAGE WATTAGE (CLO) : 9w LED
  - MAKE & MODEL : C.U.Phosco P852-12-R3B-NW-CB0200
- TYPE C COLUMN DETAILS**
  - HEIGHT : 6m
  - BRACKET LENGTH : Post-top
  - INCLINATION : 0 Degrees
  - COLUMN QUANTITY : 1
- LANTERN DETAILS**
  - AVERAGE WATTAGE (CLO) : 25w LED
  - MAKE & MODEL : C.U.Phosco P852-12-F2-NW-CB0650
- TYPE D COLUMN DETAILS**
  - HEIGHT : 10m
  - BRACKET LENGTH : Post-top
  - INCLINATION : 0 Degrees
  - COLUMN QUANTITY : 24
- LANTERN DETAILS**
  - AVERAGE WATTAGE (CLO) : 64w LED

**Notes:**  
 All LED lanterns must have Constant Light Output (CLO).  
 Automatically dimmed to 75% each night from 12 midnight to 6am. (1/4 Power)  
 All lanterns to have 7pin NEMA sockets fitted.  
 Electronic Photocells switched at 30%lux  
 All columns, luminaires, cable and poles, shall comply with Local Authority General Specification for Public Lighting.  
 No trees to be located within falling distance of P.L. columns.  
 Minimum setback of columns is 800mm from face of kerb.  
 Public lighting cable chamber as per Local Authority P.L. Dept. specification.

200sq NYCY cable used in ducting to I.S. 10101:2020.  
 Single reel ducting, colour red to be used.  
 Manufactured from high density polyethylene (H.D.P.E.).  
 107mm external diameter, having a wall thickness of 6mm.  
 This ducting to have the words "Street Lighting" stamped on, letter size 5mm at 1m intervals. The lettering to face upstream in the trench. All works to Local Authority specification.  
 This is a circuit layout and not indicative of where ducts are to be laid.  
 Public Lighting Pole (located at least 2m from ESB pillar)

**NOTES**  
 THIS DRAWING IS THE INTELLECTUAL PROPERTY OF Sabre LIGHTING DESIGN DEPT. AND IS COPYRIGHT © AND CAN NOT BE USED WITHOUT PRIOR CONSENT.  
 NO ACCOUNT IS TAKEN FOR THE BLOCKING EFFECT CAUSED BY BUILDINGS, TREES ETC. THE CALCULATION SHOWN BY THIS DRAWING ASSUMES THAT THE WHOLE AREA BEING CONSIDERED IS IN THE SAME PLANE, I.E. THERE ARE NO CHANGES IN GRADE/DIRT ELEVATION.  
 This drawing layout is based on calculated lighting levels, produced by Sabre Electrical Services Ltd., using Lighting Reably software. Any alterations to the layout or luminaire type used for the lighting design calculations, will require a revised lighting design to be carried out. A redesign may require approval from the Local Authority Public Lighting Dept. prior to any alterations/modifications being implemented on site.

**Sabre**  
 ELECTRICAL SERVICES LTD.  
 Specialist Contractors  
 PUBLIC LIGHTING - FLOOD LIGHTING - SPORTS LIGHTING

UNIT 11,  
 BELLVUE INDUSTRIAL ESTATE,  
 FINGLAS,  
 DUBLIN 11.  
 E-MAIL: graham@sabrelighting.ie PH: 01-811 0875

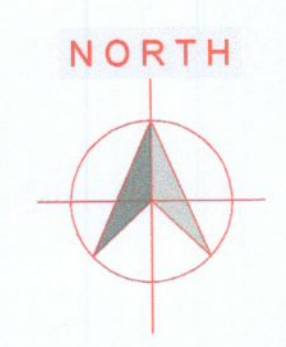
-	?	GS	CHK	-----
-	?	GS	CHK	-----
-	?	GS	CHK	-----
-	?	GS	CHK	-----
-	?	GS	CHK	-----
-	?	GS	CHK	-----
-	?	GS	CHK	-----
-	?	GS	CHK	-----
REV	DESCRIPTION	INITS	CHKD	DATE

CLIENT/CUSTOMER  
**Quintain Ireland**

PROJECT  
**Aderrig Phase 3**

TITLE  
**Public Lighting ISOLUX**

DRAWN G.S	SCALE 1:1000@A1	DATE 30-09-22
DRAWING NUMBER SES 14322	ISSUE 1	
BASE DRAWING NUMBER edit	DRAWING ORIGIN edit	
DO NOT SCALE FROM THIS DRAWING		



OWN BOULEVARD