



VOLT DROP calculation for the most onerous circuit

ESS SUPPLY	SOURCE PHASE	CIRCUIT	DESIGN CURRENT (amps per phase)	CABLE SIZE (sq. mm)	CABLE LENGTH (m)	FUSE (amps)	VOLT DROP (V)
S1	MP7	MAIN	1.1	0.33	2496	170	10
S1	MP7						0.27

TYPE G COLUMN DETAILS

HEIGHT	6m
BRACKET LENGTH	Post-top
INCLINATION	0 Degrees
COLUMN QUANTITY	31
LANTERN DETAILS	
WATTAGE (CLO)	16
MAKE & MODEL	C.U Phosco E950-28LP-F2AB-740-C600 Rear shield fitted.

TYPE H COLUMN DETAILS

HEIGHT	6m
BRACKET LENGTH	Post-top
INCLINATION	0 Degrees
COLUMN QUANTITY	54
LANTERN DETAILS	
WATTAGE (CLO)	16
MAKE & MODEL	C.U Phosco E950-28LP-F4AB-740-C600 Rear shield fitted.

TYPE D DETAILS - LED Handrail

HEIGHT	1m
BRACKET LENGTH	N/A
INCLINATION	0 Degrees
MODULE QUANTITY	4
LANTERN DETAILS	
WATTAGE (CLO)	4
MAKE & MODEL	Schreder-Alinea - 3 LED@350mA 5121-NW

TYPE F DETAILS - LED Bollard

HEIGHT	1m
BRACKET LENGTH	N/A
INCLINATION	0 Degrees
MODULE QUANTITY	6
LANTERN DETAILS	
WATTAGE (CLO)	5
MAKE & MODEL	Thorlux VIA ASY 160mA 4000K

TYPE B COLUMN DETAILS

HEIGHT	6m
BRACKET LENGTH	Post-top
INCLINATION	0 Degrees
COLUMN QUANTITY	21
LANTERN DETAILS	
WATTAGE (CLO)	16
MAKE & MODEL	C.U Phosco E950-28LP-F4A-740-C600

TYPE C COLUMN DETAILS

HEIGHT	6m Raise & Lower as required.
BRACKET LENGTH	Post-top
INCLINATION	0 Degrees
COLUMN QUANTITY	13
LANTERN DETAILS	
WATTAGE (CLO)	16
MAKE & MODEL	C.U Phosco E950-28LP-F4A-740-C350

TYPE A COLUMN DETAILS

HEIGHT	6m
BRACKET LENGTH	Post-top
INCLINATION	0 Degrees
COLUMN QUANTITY	13
LANTERN DETAILS	
WATTAGE (CLO)	16
MAKE & MODEL	C.U Phosco E950-28LP-F2A-740-C600

TYPE A/C COLUMN DETAILS

HEIGHT	6m Raise & Lower as required.
BRACKET LENGTH	Post-top
INCLINATION	0 Degrees
COLUMN QUANTITY	3 (Twin mounted 6 luminaires)
LANTERN DETAILS	
WATTAGE (CLO)	16
MAKE & MODEL	C.U Phosco E950-28LP-F2A-740-C600 C.U Phosco E950-28LP-F4A-740-C350

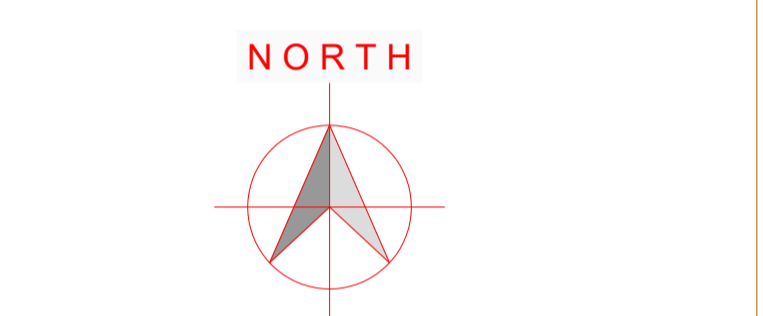
Notes:
 All LED lanterns must have Constant Light Output (CLO).
 Automatically dimmed to 75% each night from 12 midnight to 6am. (L14 Profile)
 All lanterns to have Twin NEMA sockets fitted.
 Electronic Protocols switched at 351Hz.
 All columns, luminaires, cable and pillars, shall comply with Local Authority General Specification for Public Lighting.
 All works to Local Authority specification.
 No trees to be located within falling distance of PL column.
 Minimum set-back of columns is 800mm from face of kerb.

20kg NYCC cable laid in ducting to I.S.10101:2020.
 Single wall ducting, colour red to be used.
 Manufactured from high density polyethylene (H.D.P.E.).
 107mm external diameter, having a wall thickness of 5mm.
 This ducting to have the words "Street Lighting" stamped on, letter size 9mm 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 Pillar (located at least 2m from ESS pillar)

Public lighting cable chamber as per Local Authority PL Dept. specification.

5m Radius Clearance Indicator

SUDS Drainage areas.



Sabre LIGHTING DESIGN DEPT.
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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 GRADIENT OR ELEVATION.

This drawing layout is based on calculated lighting levels, produced by Sabre Electrical Services Ltd., using lighting Really 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 design 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	-----
E	Circuit Layout added	GS	CHK	27-03-24
D	Updated as per comments.	AN	CHK	02-11-23
C	Updated site layout.	AN	CHK	18-10-23
B	Updated layout & updated as per comments	AN	CHK	27-01-23
A	Updated Site Layout	AN	CHK	03-01-23
REV	DESCRIPTION	INTS	CHK'D	DATE

CLIENT/CUSTOMER
Clear Real Estate Holdings Limited

PROJECT
Clonburris – Adamstown Extension

TITLE
Public Lighting Layout

DRAWN	SCALE	DATE
A.N	1:500@A1	22-11-22
DRAWING NUMBER	ISSUE	
SES 17022 Sheet 2	6	

BASE DRAWING NUMBER
 DRAWING ORIGIN

DO NOT SCALE FROM THIS DRAWING