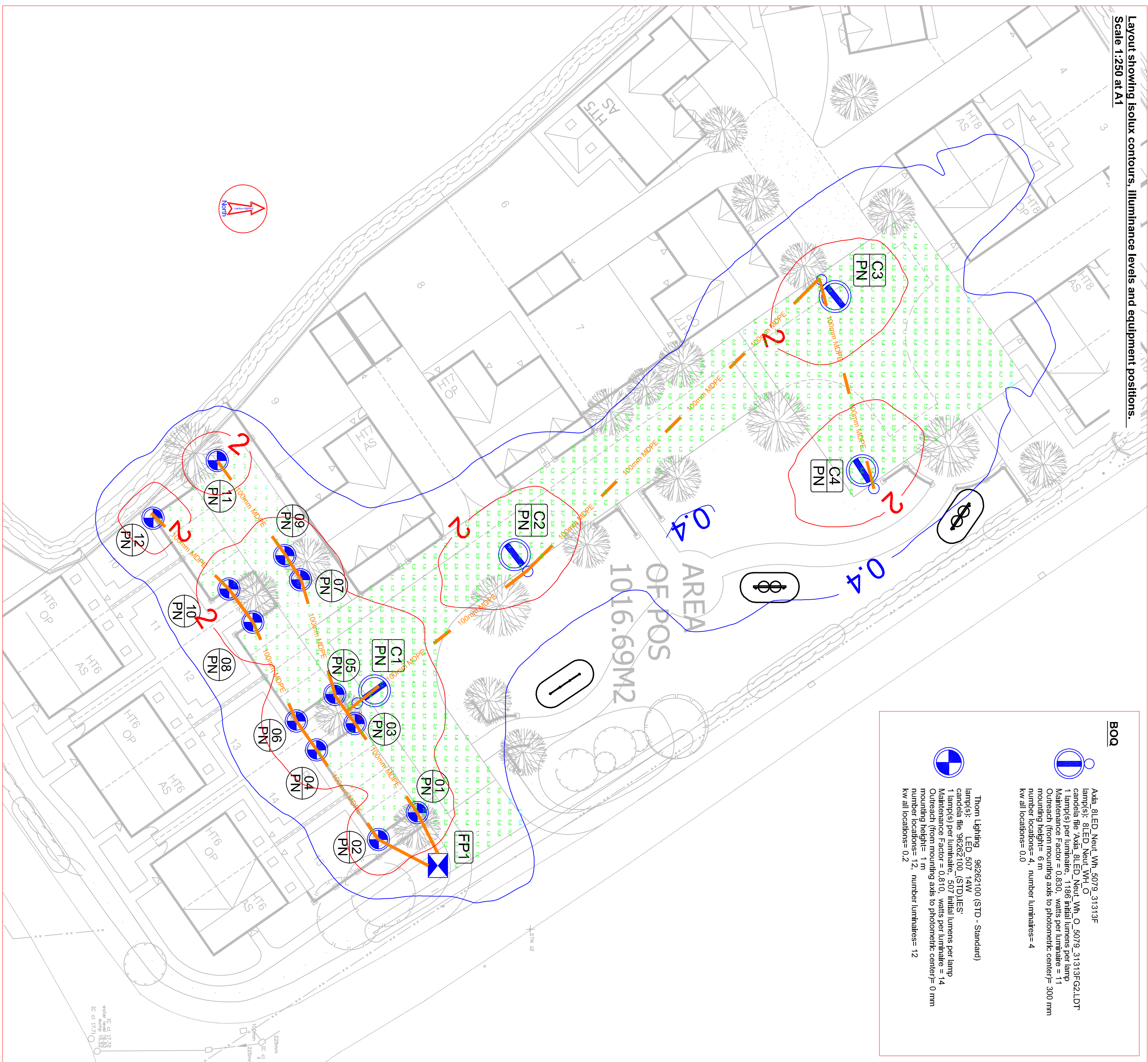




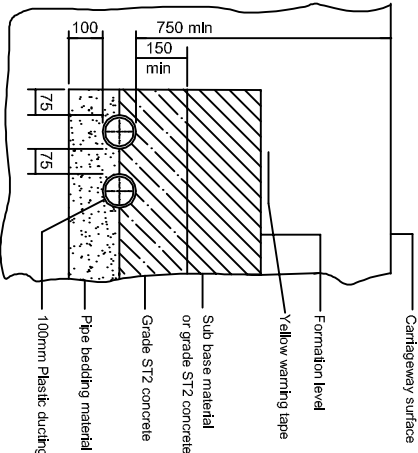



Main lighting: 962620 (STD - Standard)
 Lamp(s): LED, 507 mm (LED)S
 Lamp(s) wattage: 30 W
 1 lamp(s) per luminaire, 507 luminaire units per lamp
 Maintenance Factor: 0.810, waste per luminaire = 14
 mounting height: 3 m
 mounting height: 2 m
 number luminaires: 12
 number luminaires: 12
 kW allloadcase: 0.2
 kW allloadcase: 0.0

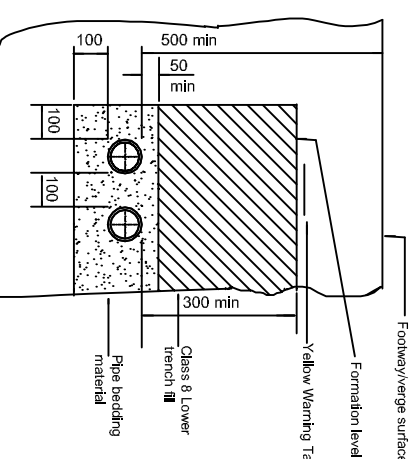
Main lighting: 962620 (STD - Standard)
 Lamp(s): LED, 507 mm (LED)S
 Lamp(s) wattage: 30 W
 1 lamp(s) per luminaire, 1166 luminaire units per lamp
 Maintenance Factor: 0.810, waste per luminaire = 14
 mounting height: 3 m
 mounting height: 2 m
 number luminaires: 4
 number luminaires: 4
 kW allloadcase: 0.0

NTS

N13	
Type A	Type B
Ducts Laid Under	Ducts Laid Under
Carriageway	Footway and Verges



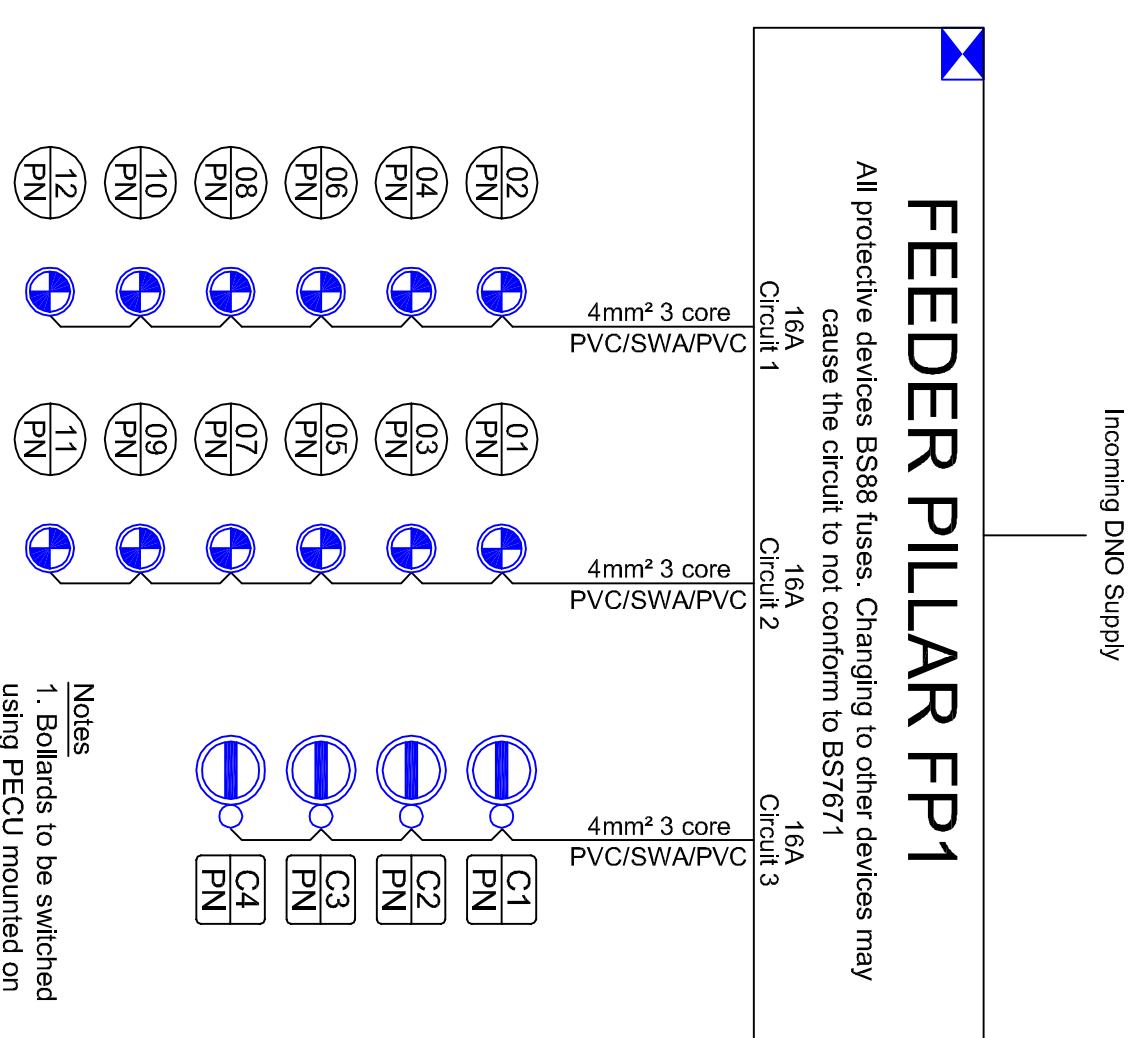
Type B
Ducts Laid Under
Footway and Verges



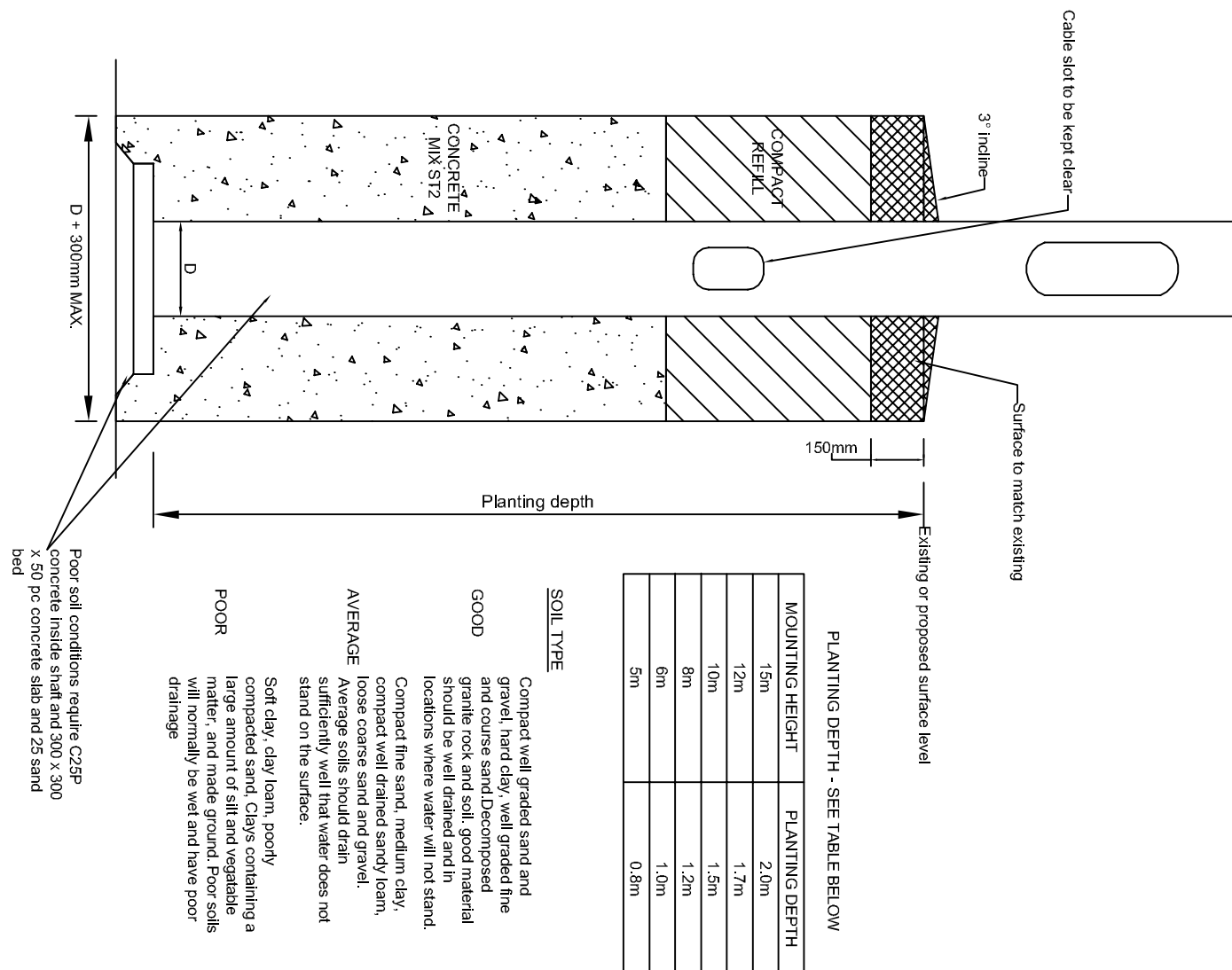
Notes

1. All dimensions are in millimeters unless otherwise stated.
2. All private street lighting ducts to be orange coloured polyethylene.
3. Pipe bedding material maximum aggregate size 2mm; egg washed sand.

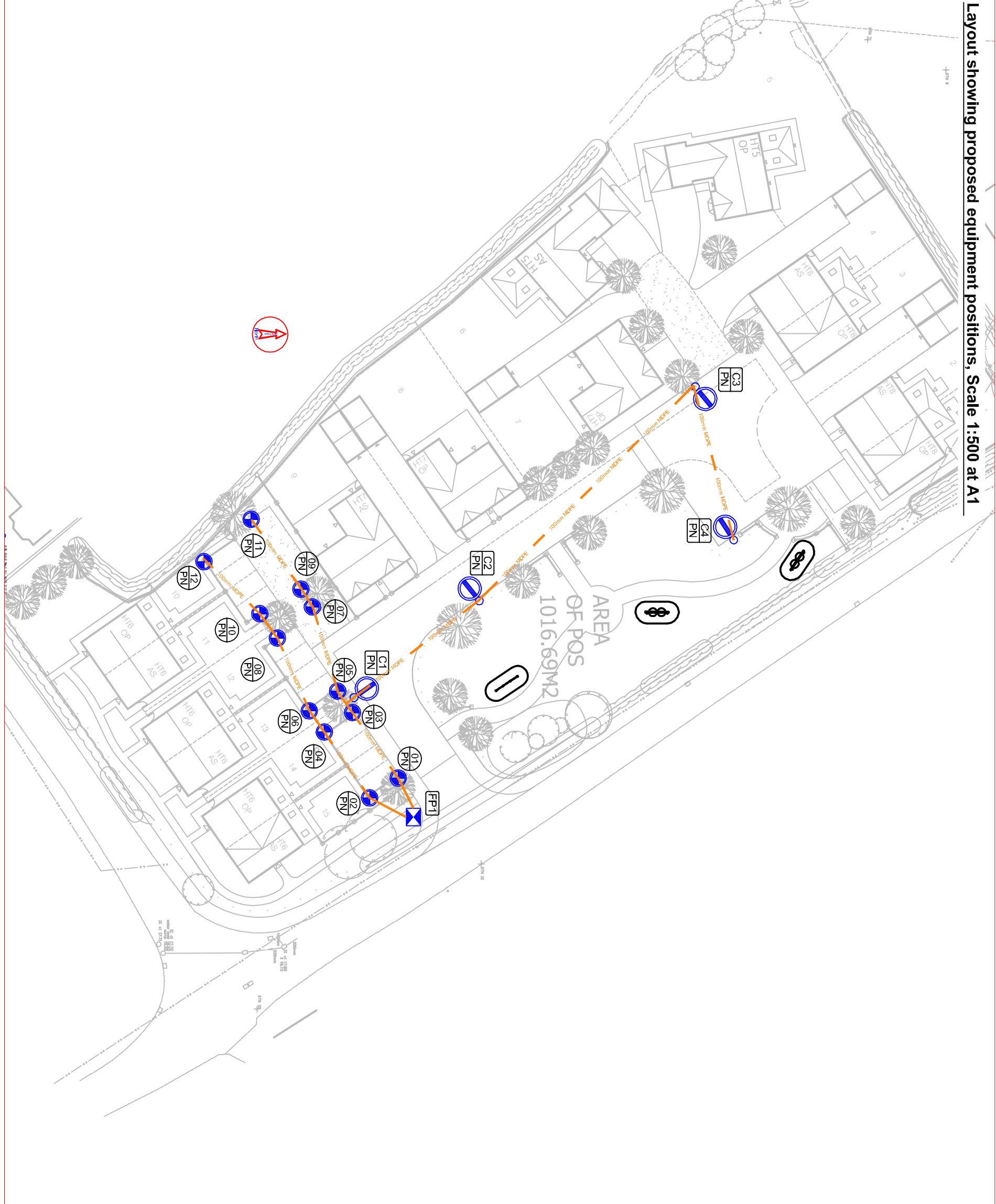
Schematic Diagram, NTS



Typical Column Installation, NTS



Layout showing proposed equipment positions, Scale 1:500 at A1



Maintenance Factor

A maintenance factor of 0.81 has been used in these calculations for the LED bollard lighting.

A maintenance factor of 0.83 has been used in these calculations for the Urbis Axia lanterns as to Urbis recommendations.

NTS

Outdoor Car Parks

Table 5 - Lighting levels for outdoor car parks

Type of area and usage	E	U ₀
Light traffic, e.g. parking areas of shops, terraced and apartment houses, cycle parks.	5	0.25
Medium traffic, e.g. parking areas of department stores, office buildings, plants, sports and multipurpose building complexes.	10	0.25
Heavy traffic, e.g. parking areas of schools, churches, major sports and multipurpose sports and building complexes.	20	0.25

Key

- 12 
- Proposed:** Thion D-CO 1m Aluminium powder
Supplier: Thion Ltd
Latent: IAD/LED
Reference: Thion Lighting 36262100 (STD)
Controlled File: 36262100 (STD).IES
Other: controlled via a ECDI mounted on column C1
- 14 
- Proposed:** Thion D-CO
Supplier: Thion Ltd
Latent: IAD/LED
Reference: Thion Lighting 36262100 (STD)
Controlled File: 36262100 (STD).IES
Other: controlled via a ECDI mounted on column C1
- 
- [For illustration use only.]*

Notes

1. The installation contractor must be aware of any overhead obstructions. Advice should be sought from the developer's engineering representative.
2. Prior to excavation works the installation contractor must be aware of underground services or hazards which may be encountered in the installation of the lighting system. Advice should be sought from the developer's engineering representative.
3. All wiring including component labelling to be in accordance with BS7671.

DESIGN

REV	DESCRIPTION	DATE	MP	POL
A	Amend car park	23/05/14		

DRAWING NO: 14625-D-01

REV: A

**Burton Hall Road,
Rossett, Wrexham**

Proposed Lighting and Installation Design Layout

As Indicated	SJM 19/05/14
SHEET NO: Sheet 1 of 1	APPROVED BY: PDL 19/05/14

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