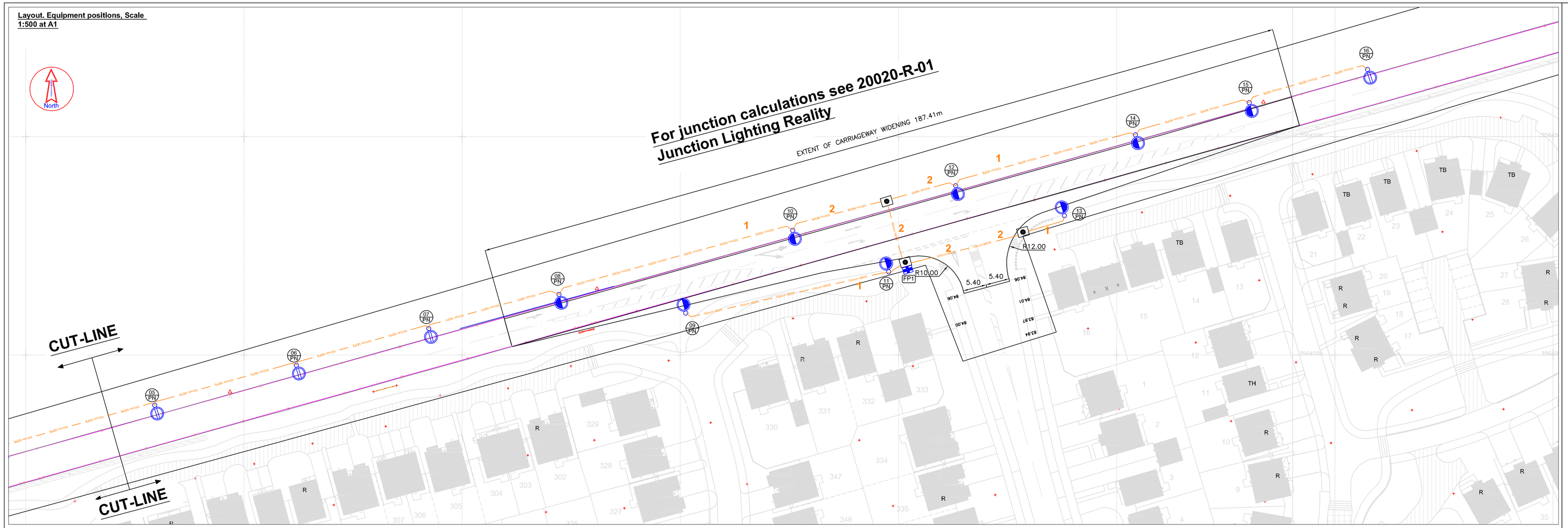
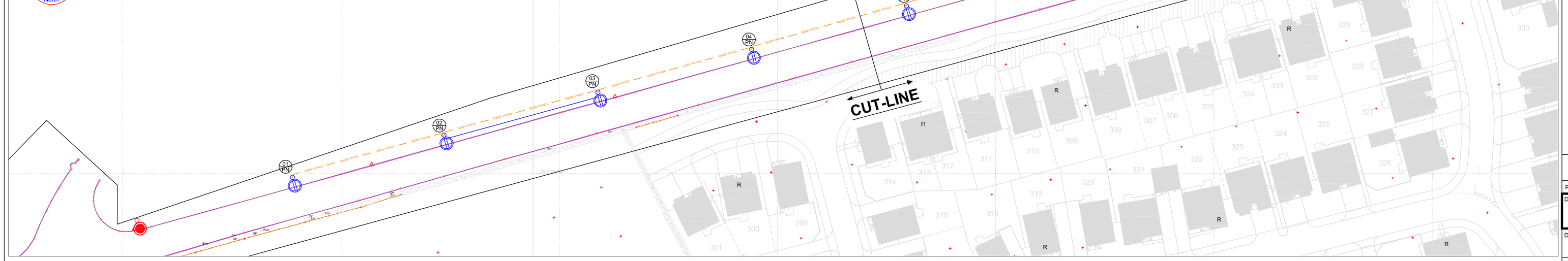
Layout. Equipment positions, Scale 1:500 at A1



Layout. Equipment positions, Scale 1:500 at A1



Key

Proposed S278 Column
Column:
8m CU Phosco tubular galvanised steel with planted base
Lantern:
Urbis Axia 48LED NVSL219CT 530mA,
LEDs: Neutral White (4000K)
Photometric file: "AXIA 2.2 5221 48 Nichia NVSL219CT 730mA NW 397662"
Output: 13.85 klm
Side entry mounted with 5° tilt
DALI enabled driver
Colour: RAL7035B
PECU: miniature (35lux, 1:0 SR)

Proposed S278 Column
Column:
10m CU Phosco tubular galvanised steel with planted base
Lantern: Urbis Axia 48LED NVSL219CT 730mA,
LEDs: Neutral White (4000K)
Photometric file: "AXIA 2.2 5221 48 Nichia NVSL219CT 530mA NW 397662"
Output: 10.554lm
Side entry mounted with 5° tilt
DALI enabled driver
Colour: RAL7035B
PECU: miniature (35lux, 1:0 SR)



Urbis Axia
(for illustrative purposes only)

Existing column to remain
6m Steel Column with Tm bracket

01 EB — Proposed column scheme number
EB = Proposed DNO connection
EX = Existing Column with DNO connection
PN = Proposed private cable network connection
PT = Proposed DNO transfer
PD = Proposed DNO disconnection

All numbering to be finalised with the authoritative engineer.

10mm² 3 core PVC/SWA/PVC in 100mm orange MDPE duct including draw cord at 750mm cover across highway and car park and 450mm cover in footway and service strip.

1 — Number of ducts required*

An indication of how many ducts must be installed is given on this drawing however it is the responsibility of the installation contractor to ensure that there are a sufficient number of ducts layed for 1No cable per 1No duct.

** Number of ducts shown may be reiterated along a longer run.*

Proposed feeder pillar - to Wrexham CBC specifications.

FP1 — Proposed feeder pillar reference number.

450mm x 450mm ducting chamber

Note

Until technical approval has been obtained from the relevant adopting authority, it should be understood that all drawings issued are preliminary and NOT for construction. Should the contractor commence site work prior to approval being given, it is entirely at his own risk.

Additional Notes

Double pole isolation device with a 6A BS88 fuse to be utilised above the DNO cut out. Tofco model to be used.

- 1.5mm Flex for the downleads.
- BS 951 'safety electrical connection' label in base.
- Copper grease on door hinge & door retaining bolt
- 6A discrimination DNO to private cut out.
- Conductors doubled over in the terminals

REV	DESCRIPTION	DATE	DRN	APP
A	Amend to client's comments.	11/02/19	MP	PDL

DRAWING NO: 20020-D-01
REV: A

DRAWING STATUS: DESIGN FOR APPROVAL

CLIENT: Anwyl thoughtful homes

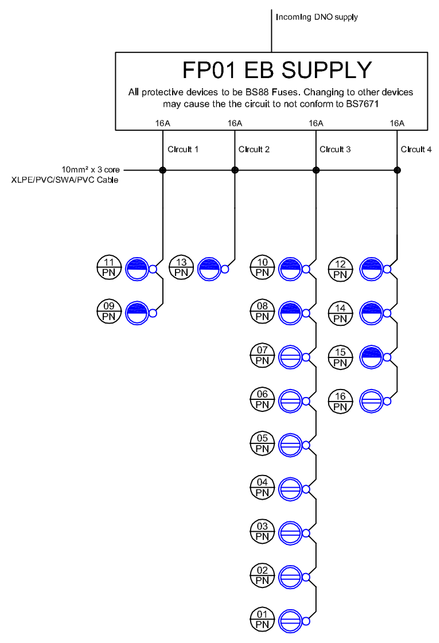
PROJECT: Straight Mile / Gresford Rd
Llay, Wrexham - Section 278

TITLE: Proposed Lighting and Installation Design Layout

SCALE: AS SHOWN
DESIGNED BY: JH 18/01/19
SHEET NO: Sheet 1 of 1
APPROVED BY: PDL 18/01/19

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Electrical Schematic, NTS



Notes

1. Column foundations to be as per Local Authority Standard Detail drawing.

2. All columns to be provided with Distribution Network Operator Services to Local Authority Standard Detail drawing, unless otherwise stated.

3. Column positions to be agreed on site with the Local Authority Street Lighting Engineer. All columns to be sited within the adoptable highway and generally in compliance with the current Local Authority Design Guide for Residential areas. Columns shall not be installed within dropped kerb areas.

4. Column numbering to be agreed with the Local Authority Street Lighting Engineer.

5. The Contractor is to provide Local Authority with as-built drawings, test certificates and column and lantern data sheets.

6. All Street Lighting works to be carried out by Local Authority approved contractors.

7. A list of proposed equipment is to be rendered by the contractor for approval by the Local Authority Street Lighting Engineer prior to the installation.

8. Adoptable ducting to be installed to satisfy the requirements of Distribution Network Operator.

9. The contractor to liaise with Distribution Network Operator with regard to connections and disconnections of columns and illuminated signs.

10. Minimum distance for a column to be erected in a service strip is 1m back from the front face of the column to kerb edge.

11. This lighting scheme comply's with North Wales Authorities Lighting Design Guide and Specification (ref: ENV/PP/DC-1075).

12. All wiring including component labelling to be in accordance with BS7671.

13. 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.

14. The Installation contractor must be aware of any overhead obstructions. Advice should be sought from the developer's engineering representative.

15. These calculation results are based on a 1.5m by 1.5m grid and illustrate perceived lighting levels for columns positioned to suit the local topography.

16. Column door orientation as per current Wrexham County Borough Council's policy is for the operative maintaining the column to be facing the oncoming traffic.

Typical column installation details, NTS

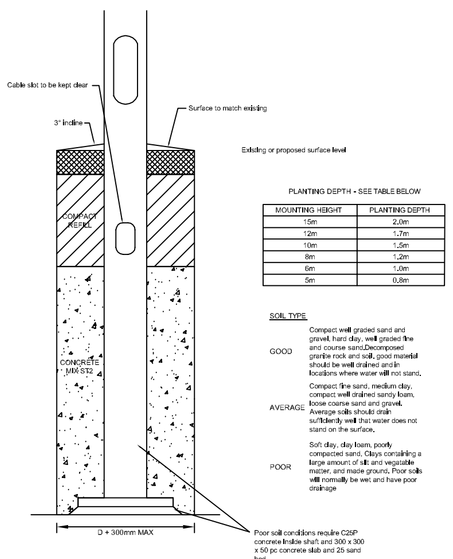


Table 2- CE series of lighting classes BS EN13201

Class	Horizontal illuminance	
	E av in lux (minimum maintained)	Uo (minimum)
CE0	50	0.4
CE1	30	0.4
CE2	20	0.4
CE3	15	0.4
CE4	10	0.4
CE5	7.5	0.4

Scheme design levels required

See LR calculation 20020-R-1 Area Rev A. for conflict area illuminance calculations.

Table 1 - M Classes

Class	Dry conditions			Wet conditions	Disability Glare	Lighting of the surround
	L (cd/m2) [minimum maintained	Uo [minimum]	Ul [minimum]	Uow [minimum]	TI% [maximum]	Rsl [minimum]
M1	2.00	0.40	0.70	0.15	10	0.35
M2	1.50	0.40	0.70	0.15	10	0.35
M3	1.00	0.40	0.60	0.15	15	0.35
M4	0.75	0.40	0.60	0.15	15	0.35
M5	0.50	0.35	0.40	0.15	15	0.30
M6	0.30	0.35	0.40	0.15	20	0.30

See LR calculation 20020-R-01A for luminance calculations.

PROJECT: F:\Projects\Curtins Consulting\Straight Mile, Llay\Drawings\Rev_A

XREF DRAWINGS: XREF-065665-CUR-ZZ-XX-DR-D-9501_General Arrangement

Date Plotted: 12/02/2019 2:20 PM

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