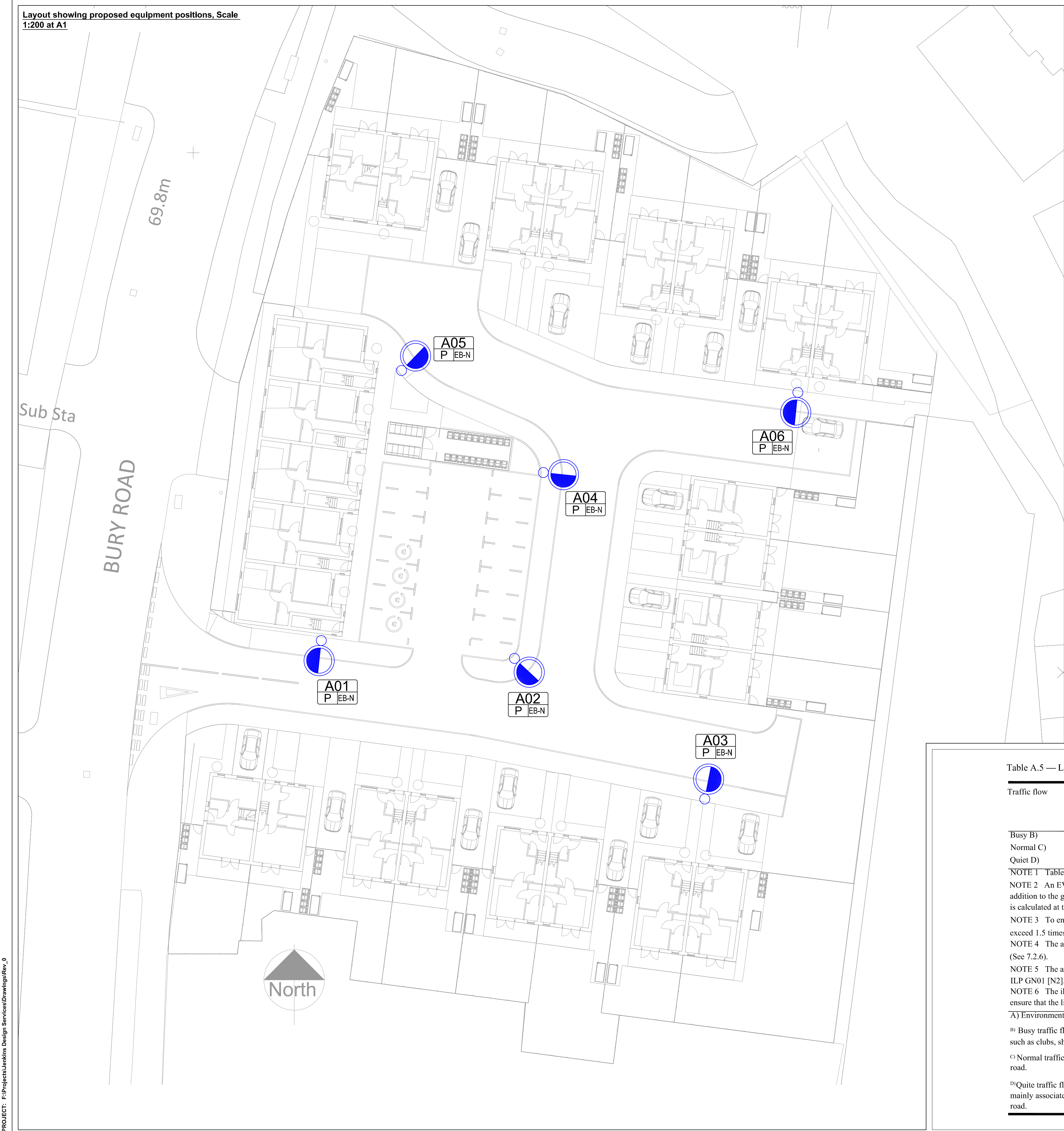
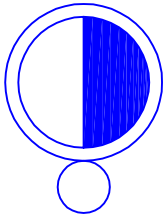


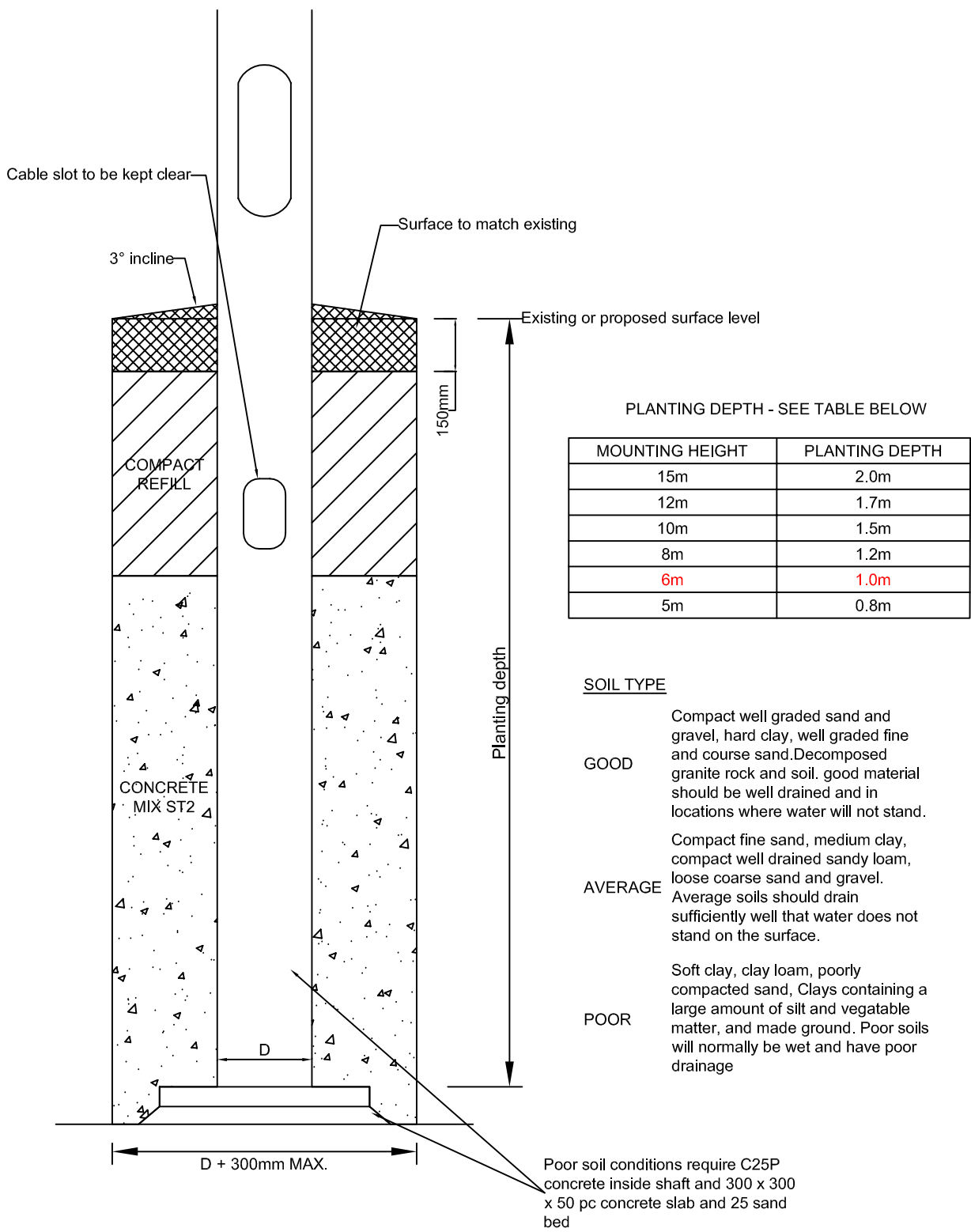


BoQ



PHILIPS BGP702 DM33
lamp(s): LED-HB 5.2S 730
candela file 'Luma Gen2 Micro_BGP702_DM33_2000_10LED_5.2S_CLO_L90_730.ies'
1 lamp(s) per luminaire, 2000 initial lumens per lamp
Maintenance Factor = 0.760, watts per luminaire = 13
Outreach (from mounting axis to photometric center)= 300 mm
mounting height= 6 m
number locations= 6, number luminaires= 6
kw all locations= 0.1

Column installation details, NTS



PLANTING DEPTH - SEE TABLE BELOW	
MOUNTING HEIGHT	PLANTING DEPTH
15m	2.0m
12m	1.7m
10m	1.5m
8m	1.2m
6m	1.0m
5m	0.8m

SOIL TYPE

GOOD Compact well graded sand and gravel, hard clay, well graded fine and coarse sand. Decomposed granite rock and soil, good material should be well drained and in locations where water will not stand.

AVERAGE Compact fine sand, medium clay, compact well drained sandy loam, loose coarse sand and gravel. Average soils should drain sufficiently well that water does not stand on the surface.

POOR Soft clay, clay loam, poorly compacted sand, Clays containing a large amount of silt and vegetable matter, and made ground. Poor soils will normally be wet and have poor drainage

Table A.5 — Lighting classes for subsidiary roads

Traffic flow	Lighting class		
	E1 to E4A)	E1 to E2A)	E3 to E4A)
Pedestrian and cyclists only	Speed limit v only	≤ 30 mph	Speed limit v ≤ 30 mph
Busy B)	P5	P4	P3
Normal C)	P5	P5	P4
Quiet D)	P6	P5	P4

NOTE 1 Table A.5 assumes no parked vehicles; see risk assessment in A.3.3.2.

NOTE 2 An EV lighting clas using vertical illuminance, from BS EN 13201-2:2015, Table 6, can be specified in addition to the general lighting class when there are particular concerns about crime and personal safety. EV is calculated at the typical height of a human face (1.5m) and in relevant viewing orientations.

NOTE 3 To ensure adequate uniformity, the actual value of the maintained average illuminance is not to exceed 1.5 times the value indicated for the class.

NOTE 4 The actual overall uniformity of illuminance, U_o , needs to be as high as reasonably practicable (See 7.2.6).

NOTE 5 The ambient luminance descriptions E1 to E4 refer to the environmental zone as defined in ILP GN01 [N2].

NOTE 6 The illuminance classes are suggested minimum levels. A risk assessment needs to be carried out to ensure that the light levels are adequate, particularly for pedestrians and cyclists.

A) Environmental zone, as given in ILP GN01 [N2].

B) Busy traffic flow refers to areas where the traffic usage is high and can be associated with local amenities such as clubs, shopping facilities, public houses, etc.

C) Normal traffic flow refers to areas where the traffic usage is of a level equivalent to a housing estate access road.

D) Quite traffic flow refers to areas where the traffic usage is of a level equivalent to a residential road, and is mainly associated with the adjacent properties or properties on other equivalent roads accessed from this road.

Key

Proposed Column (To Be Installed):
Manufacturer: Malsite
Material: Steel
Height: 6m
Root protection: Galvanised
Proposed Lantern (To Be Installed):
Manufacturer: Philips
Model: Micro Luma
Title: 0'
Photometry file: 'Luma Gen2 Micro_BGP702_DM33_2000_10LED_5.2S_CLO_L90_730.ies'
KLK: 2.04m
Wattage: 13W
Driver: DALI enabled driver, Philips CityTouch CMS node

(All of the above to Manchester County Council specification)

Proposed column scheme number

A01 = Column Number
P = Proposed
EB-N = Proposed New DNO/DNO connection

NOTES

- All equipment to be as per MCC / Arney document 'Development Standard Specification for Street Lighting Works'.
- 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.
- The installation contractor must be aware of any overhead obstructions. Advice should be sought from the developer's engineering representative.
- For column installation details refer to the 'Development Standard Specification for Street Lighting Works' document. Provided by Manchester City Council.
- All columns proposed for adoption by Manchester City Council shall be supplied by the DNO.
- 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.
- Design maintenance factor utilised is 0.76 as provided by Manchester CC for the Philips WRTL Luma lantern.
- S/P ratio of 1.61 provided by Manchester CC for the Philips Luma lantern.

REV	DESCRIPTION	DATE	DRN	APP
DRAWING NO:	23950-D-01	REV:	-	

DRAWING STATUS:

DESIGN

CLIENT:

Jenkins Design

PROJECT:

Station Works, Manchester
Section 38

TITLE:

Proposed Lighting
and Installation
Design Layout

SCALE:

As indicated

DESIGNED BY:

TL 26/09/22

SHEET NO:

Sheet 1 of 1

APPROVED BY:

PDL 04/10/22



CONSULTATION, DESIGN & INSTALLATION

E. info@harttron.com

T. 01625 850855 F. 01625 850856