SHEFFIELD CITY COUNCIL

STREET LIGHTING AND OTHER ELECTRICAL EQUIPMENT

SCC Highways Section 38 Agreements
Information for Street Lighting and other Electrical Equipment

1. All street lighting and associated illuminated equipment that is to be accrued into the highway network is to be designed in accordance with Sheffield City Council's (SCC) specifications and standards.
2. All street lighting designs must adhere to BS 5489-1:2020 - Design of road lighting. Lighting of roads and public amenity areas. Code of practice.
3. Wherever existing lighting is to be removed, a temporary lighting system **MUST** be in place beforehand to ensure the network is illuminated to the current lighting standards until the permanent lighting system is in place.
4. All lanterns must be full LED in accordance with SCC's Streets Ahead contract (Philips Luma range).
5. All lanterns must be CMS (remote monitored) controlled by the Telensa in use by SCC.
6. Luminaires shall have adequate optical control to minimise light pollution and obtrusive light to properties and shall conform to the E3 Environmental Zone Obtrusive Light Limitations.
7. Where S Lighting Class is required, the area to which the S Lighting Class is applied shall be the whole of the relevant area of the Project Network including the Carriageway, Footway and Verge.
8. All streetlight columns, Sign poles and associated feeder pillars must be hot dipped galvanised / painted black (specified mounting height will be determined by design and as shown in Table A1 below)

   Table A1 Mounting Heights

Lighting Class	Height (H) of a Lighting Column (m)
S1 & 2	=<8
S3 to S6	=<6

9. Illuminated bollards should be Glasdon Sublite 5-Watt LED C/W built in Telensa CMS (remote monitoring) or fully reflective non illuminated bounce back bollards can be sought upon supplying a risk assessment The outer colour of illuminated bollards (black or white) is to be agreed with SCC and dependent on the specific location.
10. Illuminated sign units should be Mallatite Exlite 5-Watt LED C/W built in Telensa CMS (remote monitoring). All sign lighting units are to be in black.
11. Solar powered illuminated bollards & sign light units may be accepted if a sub service feed is not available. All sign lighting units are to be in black and the outer colour of illuminated bollards (black or white) is to be agreed with SCC and dependent on the specific location.
12. If the lanterns are to be bridge/parapet mounted we would expect them fixed via a wall box fitting which would house dual pole isolation and earthing to BS7671 (specified mounting height will be determined by design).
13. If wall mounted fittings are to be used, we would expect a hot dipped black painted feeder pillar to house the electricity service and feed the fittings accordingly with SWA cable from that, cabling CSA to be determined via the design.

14. All highway electrical equipment including street lighting columns & highway illuminated signs that are to be adopted by the authority requiring a 230-volt 50 Hz supply **MUST** have a permanent 24 hour live supply via a 25amp cut out in each street lighting unit.
15. This live supply should ideally be supplied by one of the incumbent District Network Operators (DNOs) in Sheffield (the DNOs that operate in Sheffield are Northern Power Grid and Western Power Distribution).
16. If an Independent District Network Operator (IDNO) is proposed they **MUST** be one of the IDNOs approved and regulated by the Office of Gas and Electricity Markets (OFGEM) and will be subject to the same Service Level Agreement (SLA) as the DNOs with Sheffield City Council as the named "*Customer*" (see Appendix A for a copy of the SLA Performance Requirements).
17. Where Private network (authority Services) sub servicing cabling may have to be used to supply 230 volts 50 Hz to items such as traffic signal controllers, illuminated bollards and signs on pilot islands etc. these **MUST** be fed directly from a DNO (or IDNO supply) supply housed in a suitable galvanised steel feeder pillar. A notice indicating ownership and circuit information will be displayed next to the DNO/IDNO cut out to prevent confusion.
18. Where a Private Network (authority Service) is to be used the installation will be carried out using cable with separate phase, neutral and protective conductors (earth) with suitable associated circuit protection.
19. The developer is responsible for the installation of any ducts for street lighting cable.
20. All ducts intended for 230-volt service cables shall be black and manufactured in uPVC or HDPE, with a smooth inner wall. Each duct type shall be as detailed in relevant sections of British Standard Euro Norm BSEN 61386-24:2010 and Energy Networks Association Technical Specification (ENATS) 12-24.
21. Ducts must be indelibly and clearly marked with the legend "**Electricity Cable Duct**" in white on the outside surface of the duct. The markings should be repeated three times per metre and should withstand normal handling, storage, and installation conditions to remain legible.
22. Footway ducts are to be 50mm external (38mm internal) diameter, and carriageway ducts 125mm external (90mm internal) diameter. Ducts are to have a smooth inner wall.
23. A draw cord should be installed through all ducting and secured inside the cabinet and at the remote end of the ducting to allow our cable to be pulled through.
24. All cables and ducts installed by the 'open cut' trench method shall be protected by a tile tape. The tile tape is intended, during any future excavation work, to give a clear visual warning of the presence of underground cable, joints, or cable ducts. The tile tape must be laminated with a suitable identification complying with ENATS standard 12-23 and meet impact requirements of BS-2484. It must contain the legend **'Northern PowerGrid'.** It should be installed 75mm above the service electric duct.
25. All ducts to have a minimum of 450mm cover in footways and 600mm in carriageways and covered with 100mm sand (including the tile tape) prior to the footway/carriageway reinstatement.
26. All works above will be carried out in accordance with BS 7671: 2018+A1:2020 – Requirements for Electrical Installations IET Wiring Regulations, the Electricity at Work Regulations 1989 and ILP Electrical Safety – Code of Practice in Highway Electrical Operations general publication (6th Edition GP03).

27. If an IDNO supply has been used the following **MUST** be provided to the authority before the works can be adopted.
    - Fully comprehensive and detailed as-constructed drawings showing:
        - a site polygon drawing clearly outlining the geographic extent of the IDNO network.
        - the duct and/or cable routes for all connections to illuminated equipment.
        - locations and types of all illuminated equipment.
    - Full set of street lighting calculations.
    - General contact details for the IDNO (name, address, e-mail and phone number)
    - Emergency contact details for the IDNO (name, e-mail and 24hr call out phone number).
    - In addition, as a minimum, IDNOs will provide quarterly updates of their asset records to the Local Authority responsible for completing adoption agreements on IDNO sites.
    - Where networks are more dynamic, records will be provided more frequently as the network changes. IDNOs will make records available through a GIS based system, if available.
    - Additionally, IDNOs will provide service drawing information requested by Contractors acting on behalf of / or representing the Authority.
28. Prior to SCC accruing any street lighting and associated equipment the developer **MUST** provide the following information to allow SCC to temporarily add the lighting units onto the CMS. This information will enable us to monitor lighting installs pre-accrual, to raise any defects to the developer, and ensure the right equipment has been installed according to the design.
    - Street name/Development name
    - Unit/col number
    - Location info (*e.g. outside house/plot no, junction of …)*
    - Eastings & Northings
    - Lamp specification (including lamp wattage)
    - Telcel i.d.

APPENDIX A - Service Level Agreement Performance Requirements

IDNOs are subject to the same service level agreement performance requirements as the DNOs. These are:

Service	Performance Level	Payment to Customer
Emergency Fault Repair response: Emergency Response is where an Electricity Distributor is required to attend an unmetered connection location where it is necessary to remove immediate danger to the public or property arising from the electricity distribution network.	Attend site in 2 hours	£65 one off payment
High Priority Fault Repair – Traffic Light Controlled: High Priority Fault Repair is a fault, which is considered to be urgent. For example, at the site of an accident black-spot, major road junction, or an area of public order concerns. These are differentiated as to whether or not traffic lights are affected by the fault.	2 calendar days	£15 for each Working Day after the end of the prescribed period up to and including the day on which the fault rectification works are completed
High Priority Fault Repair – non Traffic Light Controlled (As above but not a traffic light fault).	Within 10 Working Days	£15 for each Working Day after the end of the prescribed period up to and including the day on which the fault rectification works are completed
Multiple unit fault repair - Single Unit and Multiple Unit Fault Repairs are related to a report of a fault on service to one or more units respectively. This may be for example no current, low voltage, loss of neutral etc.	Within 20 Working Days	£15 for each Working Day after the end of the prescribed period up to and including the day on which the fault rectification works are completed
Single unit fault repair - Single Unit and Multiple Unit Fault Repairs are related to a report of a fault on service to one or more units respectively. This may be for example no current, low voltage, loss of neutral etc.	Within 25 Working Days	£15 for each Working Day after the end of the prescribed period up to and including the day on which the fault rectification works are completed