

Report of the Strategic Director, Regeneration to the meeting of Bradford West Area Committee on 20 July 2016

K

Subject: Street Lighting Column Replacement Programme

Summary statement: This report seeks to advise the Area Committee regarding the replacement of street lighting columns determined as non compliant and the subsequent recommendations as to how the West Yorkshire Local Transport Plan Funding allocation is most effectively utilised.

Mike Cowlam
Strategic Director
Regeneration

**Portfolio:
Environment and Sustainability**

Report Contact: Allun Preece
Phone: 01274 434019
E-mail: allun.preece@bradford.gov.uk

**Overview and Scrutiny Area:
Environment and Waste Management**



1.0 SUMMARY

- 1.1 This report seeks to inform the Area Committee of the requirement to replace street lighting columns that have been identified as non-compliant. That is, they are in need of urgent replacement due their age and condition based upon the findings of inspections carried out during reactive maintenance visits.

2.0 BACKGROUND

- 2.1 An essential part of the maintenance of the street lighting assets is to carry out visual inspection of each column, which provides valuable information as to the condition of the unit, specifically the structural integrity of the column.
- 2.2 Many of the steel columns were installed over 30 years ago and although a programme of external painting has prevented the columns from corroding on the outside the inside remains unprotected, and is therefore vulnerable.
- 2.3 There are also a significant number of concrete columns that are in excess of 30 years old which are prone to cracking as a result of corrosion to the steel reinforcing bars inside the columns which also require replacement when identified as non compliant.

3.0 OTHER CONSIDERATIONS

- 3.1 When replacing life expired columns the most effective means is to replace on a scheme basis therefore not only replacing the columns but also improving the lighting to modern standards.
- 3.2 All new lighting installed as part of the column replacement programme is now energy efficient LED lighting saving around 50% of the energy used based on the energy consumption of the previous equipment, the new units can also be pre-programmed to reduce the lighting levels outside peak periods

4.0 FINANCIAL AND RESOURCE APPRAISAL

- 4.1 The funding required for the Priority 1 schemes in Appendix 1 is estimated as £67,804 which is allocated to the Bradford West Area Committee.
- 4.2 The total West Yorkshire Local Transport Plan budget allocated to the Council by the Department for Transport is £388,000. This has been split between the Area Committees to deal with the Priority 1 column replacement schemes based upon the value of the estimates.

5.0 RISK MANAGEMENT AND GOVERNANCE ISSUES

5.1 There are no risk management and governance issues

6.0 LEGAL APPRAISAL

6.1 The Council has a power under Section 97 of the Highways Act 1980 to provide and maintain street lighting columns.

7.0 OTHER IMPLICATIONS

When lighting is replaced as a whole street or scheme there may be some columns that have been previously replaced as a result of accident damage or maintenance replacements, these columns are either designed around wherever possible for retaining in situ or carefully removed for re-use for reactive maintenance.

7.1 EQUAL AND DIVERSITY

7.1.1 There are no equal rights implications at this time

7.2 SUSTAINABILITY IMPLICATIONS

7.2.1 Galvanised steel street lighting columns are recyclable when replaced on reaching the end of their design life which is likely to be in excess of 50 years, modern lanterns are constructed so that over 90% of the materials can also be recycled.

7.2.2 LED lanterns have an anticipated life in excess of 100,00 hours, which equates to around 25 years dramatically reducing the maintenance requirements when compared to traditional light sources.

7.3 GREENHOUSE GAS EMISSIONS IMPACTS

Modern street lighting equipment is considerably more energy efficient than older apparatus, and when using variable lighting levels along with white light can significantly reduce the energy consumption and CO² emissions.

7.4 COMMUNITY SAFETY IMPLCATIONS

7.4.1 Street lighting is a highly visible front line service. Good street lighting provides a vital function during the hours of darkness, protecting people and property and enhancing the night-time environment. Effective street lighting deters criminal activity and reduces road accidents.

7.5 HUMAN RIGHTS ACT

7.5.1 There are no direct Human Rights implications arising from the recommendations below.

7.6 TRADE UNION

7.6.1 There are no Trade Union implications in this item

7.7 WARD IMPLICATIONS

7.7.1 Priority 1 Schemes in Appendix 1 are within City, Thornton and Allerton and Manningham Wards

8 NOT FOR PUBLICATION DOCUMENTS

8.1 There is no restriction on the publication of this report.

9.0 OPTIONS

9.1 Members are asked to consider implementing the schemes listed in Table A of Appendix 1 which are prioritised with Priority 1 (being the schemes requiring the most urgent replacement as identified by site surveys). Designs and detailed estimates have been prepared for these schemes, a copy of these design is in Appendix 2.

9.2 Members may choose to implement column replacement schemes from Table B in Appendix 1, budget estimates have been prepared for these schemes. However, it may be necessary to remove any non compliant columns for safety reasons should they not be replaced in this financial year

10.0 RECOMMENDATIONS

10.1 That the Priority 1 street lighting column replacement schemes listed in Table A of Appendix 1 of the report be implemented..

11.0 APPENDICES

11.1 Appendix 1 – Column Replacement Schemes for Area Committee consideration

11.2 Appendix 2 – Designed schemes for consideration.

12.0 BACKGROUND DOCUMENTS

None.

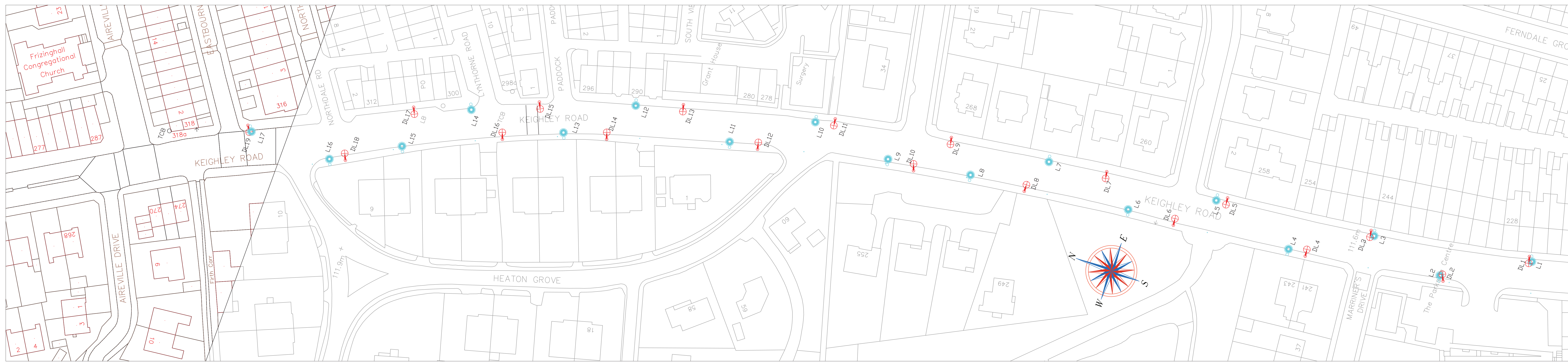
Appendix 1 Column Replacement Schemes for Area Committee consideration**Table A - Priority 1 Schemes**

Ward	Priority	Road	Estimate
City	1	Summerville Road	£16,729
Thornton and Allerton	1	Allerton Road – LPs 139-142	£11,575
Manningham	1	Keighley Road	£39,500
Total			£67,804

Table B - Other Schemes

Ward	Priority	Road	Estimate
Toller	2	Toller Lane	£92,104
Manningham	2	Back Carlisle Place West	£9,979
Manningham	3	St Mary's Road	£24,676
Total			£126,759

Appendix 2 Designs for consideration



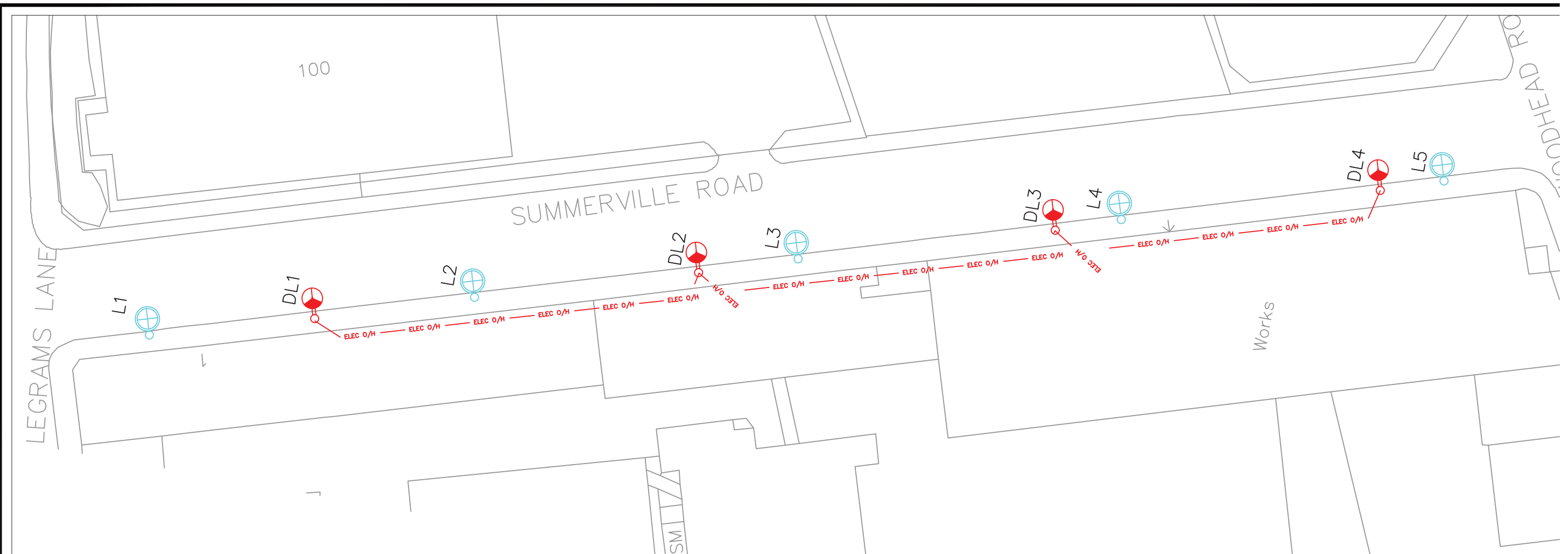
Quantity Symbol Type of Lighting Unit

- | | | |
|----|--|--|
| 17 | | Proposed 10 metre Steel column with, Spigot mounted lantern and 88 NeutWht LED lamp and pre-wired cable at suitable length Urbis Teceo2, FG, 5103-322761-88 LED NeutWh 500mA, dimmed @ configuration 1 |
| 19 | | Existing 10 metre Steel column with 1.25 metre projection bracket, Side Entry lantern and 150w SON/T lamp To be taken down and removed to tip for recycle |

Notes:

- 1.Existing services detailed on this drawing are not to be treated as accurate. The contractor is responsible for proving all services on site prior to the commencement of works.
- 2.Proposed cabling is shown schematically and final routes are to be agreed on site with the engineer.
- 3.Unless shown otherwise, all proposed equipment is to have an independent 25A DNO supply.
- 4.Siting of lighting columns and signs to be carried out by Council's engineer.
5. All lighting columns to be painted Cobalt Blue RAL5013.

E						
C						
B						
A	Original		MK			
	Revision		Inits			Date
City of Bradford MDC						
www.bradford.gov.uk						
Department of Regeneration Strategic Director: Barra Mac Ruairi RIBA FRSA						
Design Office Transportation and Highways Service Street Lighting Unit Wakefield Road Depot Foundry Lane Bradford BD4 7NW						
Project Keighley Road Shipley						
Client Capital Replacement						
Engineer to Contract C.P Leach BSc C.Eng MICE DMS						
Design	MK	Drawn	MK	Checked	KAO	Released MK
Scale(s) @ AD	1:500	Approved	A Preece	Date	June 2016	
Drawing Title STREET LIGHTING PROPOSALS						
Drawing No. R/TH/SL/100146/15221-1A						




Quantity	Symbol	Type of Lighting Unit
5		Proposed 10 metre Steel column with Spigot Mounted lantern and 150w SON/T lamp
4		Existing 8 metre Steel column with 1.25 metre projection bracket, Side Entry lantern and 90w SOX lamp

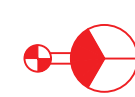
City of Bradford MDC www.bradford.gov.uk Department of Regeneration Strategic Director: Bama Mac Ruairi RIBA FRSA	Design Office Transportation and Highways Service Street Lighting Unit Wakefield Road Depot Foundry Lane Bradford BD4 7NW	Project	Summerville Road Bradford				Design	Drawn DS	Checked	Released DS	Drawing Title	STREET LIGHTING PROPOSALS	
		Client	A Original				Scale(s) @ A3	1:500	Approved	A Preece	Date		Drawing No.
			Revision		Init	Date	Engineer to Contract			C P Leach BSc C.Eng MICE DMS			



Quant. Symbol Type of Lighting Unit

6  Proposed 8 metre tubular steel column with spigot mounted bottom entry Urbis Ampera 48LED Neutral white 5139-500mA 337342 lantern unit. Factory set driver: dimming regime 1(22:00-5:30 50%). Fitted with Nema socket SS6 20:20lux photocell. Finished in grey.

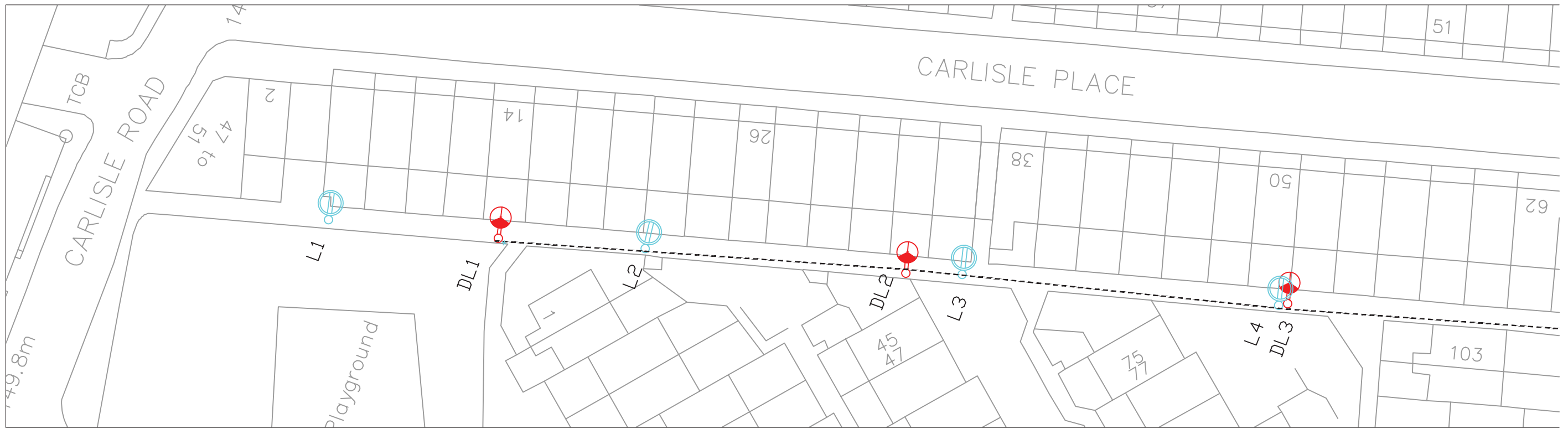
Quant. Symbol Type of Lighting Unit

4  Existing 8 metre traction pole with 1.0m projection bracket and side entry lantern unit incorporating a 90W SOX lamp to take up and remove to tip.

Notes:

1. All new columns to have Osram drivers with factory set dimming regime 1.
2. Existing services detailed on this drawing are not to be treated as accurate. The contractor is responsible for proving all services on site prior to the commencement of works.

A	Original	CBM JUN 16
	Revision	
City of Bradford MDC		
www.bradford.gov.uk		
Department of Regeneration Strategic Director: Barra Mac Ruairi RIBA FRSA		
Design Office Transportation and Highways Service Street Lighting Unit Wakefield Road Depot Foundry Lane Bradford BD4 7NW		
Project ALLERTON ROAD ALLERTON		
Client Capital 15/17		
Engineer to Contract C P Leach BSc C.Eng MICE DMS		
Design	Drawn	Released
CBM	CBM	CBM
Scale/pt @ A2	Approved	Date
1:500	A Preece	JUN 16
Drawing Title STREET LIGHTING PROPOSALS		
Drawing No. R/PTH/SL/100146/15144-1A		



Quantity	Symbol	Type of Lighting Unit
1		Proposed 5 metre Steel column with Spigot Mounted lantern and 16 LED lamp, URBIS AMPERA Mini 16,NW 5102, 500mA dimmed between 22-5.30 hrs
5		Proposed 6 metre Steel column with Spigot Mounted lantern and 16 LED lamp, URBIS AMPERA Mini 16,NW 5102, 500mA dimmed between 22-5.30 hrs
5		Existing 8m Steel Heavy Duty column with 1.25 metre projection bra Side Entry lantern and 90w SOX lamp To be removed off site for recycling
163m		Existing overhead line to be removed off site for recycling

City of Bradford MDC www.bradford.gov.uk Department of Regeneration Strategic Director: Barra Mac Ruairi RIBA FRSA	Design Office: Transportation and Highways Service Street Lighting Unit Wakefield Road Depot Foundry Lane Bradford BD4 7NW	Project Back Carlisle Place West BRADFORD	Design	Drawn	Checked	Released	Drawing Title STREET LIGHTING PROPOSALS
			KAO Scales(s) @ A3 1:500	A Preece	KAO Date NOV 15		
Client			A Original Revision	11/15 Inits Date	Engineer to Contract C P Leach BSc C.Eng MICE DMS		Drawing No. R/PTH/SL/100146/15153-1A