

7 July 2021		ITEM: 18 Decision: 110573
Cabinet		
Highways Street Lighting Central Management System		
Wards and communities affected: All	Key Decision: Key	
Report of: Councillor Ben Maney, Cabinet Member for Highway and Transportation		
Accountable Assistant Director: Julie Nelder, Assistant Director – Highways, Fleet & Logistics		
Accountable Director: Julie Rogers – Director – Public Realm		
This report is Public		

Executive Summary

Funding has been secured as part of the Council internal Capital bid programme for 2021/22 for the implementation of a Highways Street lighting Central Management System (CMS). The implementation of a CMS system means the Authority can remotely monitor all its street lighting assets, which will allow us to remotely control lighting, detect faults and improve the efficiency of the whole maintenance approach. This report seeks permission to commence the procurement process to enable implementation of the new system over the next two years and realise savings and efficiencies as set out in the report.

1. Recommendation(s)

1.1 That Cabinet approve the commencement of the Tender process and subsequent award of a contract to install a Central Management System for Highways Street lighting.

2. Introduction and Background

2.1 A Capital bid was awarded for the installation of a Highways Street Lighting Central Management System (CMS). The web based system will allow for approximately 21,000 street lighting assets to be dynamically controlled in real time.

2.2 The bid includes the provision of the installation of seven base stations which will interact with the existing street lighting infrastructure, enabling us to monitor and adapt lighting levels across the borough.

2.3 The project will generate future energy and CO2 savings as the majority of our lighting assets can be remotely controlled and monitored. The project will generate financial savings through a reduction in maintenance costs such as reduced call outs to faults that have been misreported by members of the public. The system will also reduce the number of vehicle journeys that would otherwise be made to attend to some of the reported faults. A CMS will remove the requirement for night time scouting operations which are currently undertaken 3 times a year to identify any street lighting faults before they are reported.

3. Issues, Options and Analysis of Options

3.1 In 2020/21 the street lighting team received over 680 customer enquiries online and attended over 900 maintenance faults. With the CMS system, faults are automatically registered in real time which should reduce fault reports and complaints from being raised by residents.

3.2 The CMS will help the Council to reduce its CO2 emissions by approximately 1,524,000 kg (1,524 tonnes) annually, which is a total reduction over 20 years of 30,469,000 kg (30,469 tonnes). This is the equivalent of taking 1,064 cars off the road. This will be achieved by reduced attendance to faults which can be actioned remotely, reduce attendance by the Contractor to misreports, reduce vehicle movements on night time scouting activities, plus the identification of day burning columns.

3.3 Annual savings are predicted to be around £125,000 once the installation has been fully completed and all associated infrastructure installed. Annual maintenance costs of the CMS system are estimated to be in the region of £25,000 subject to the successful tender submission.

3.4 There are significant benefits to upgrading to a CMS. However, there are clear dis-benefits should the opportunity not be seized;

- Energy costs and CO2 emissions would continue to increase.
- Continued increase in revenue spent on night scouting and maintenance.
- Levels of customer fault reporting and complaints would remain high.
- The Council would fall behind in the technology of street lighting management in comparison with other local authorities.

3.5 Subject to Cabinet approval to proceed, the procurement timetable below is proposed for the CMS contract that will span over two years for the installation and then allow for an annual maintenance charge.

Procurement Timetable

KEY EVENT	DATE
Invitation to Tender	1 st September 2021
Closing date for tender submissions	14 th October 2021
Notification of result of evaluation	30 th October 2021
Standstill period	10 days
Expected date of award of contract	14 th November 2021
New contract start date	1 st January 2022

- 3.6 The installation programme is predicted to take 6 months from the 1 January 2022 with completion expected June 2022 (spanning into 2022/23 fiscal year and to match the split funding allocation). Then annual maintenance charges (3.4) would come into effect for the running and maintenance of the system.

4. Reasons for Recommendation

- 4.1 The procurement of the CMS system and associated infrastructure is essential for the progress of the street lighting network. It increases our ability to provide an efficient, well maintained network of street lighting throughout the borough.
- 4.2 The reduced energy costs and reduction in CO2 emissions as a result of the CMS will help us to create a cleaner local environment that everyone will benefit from.

5. Consultation (including Overview and Scrutiny, if applicable)

- 5.1 Planning, Transport and Regeneration Overview and Scrutiny were consulted on 6 July 2021.

6. Impact on corporate policies, priorities, performance and community impact

- 6.1 The CMS system will have a positive impact on the corporate objectives and priorities as it will provide a more efficient service and reduce the need for public contact and complaints. It will reduce our carbon emissions to help us work towards a cleaner environment. In addition to the environmental and service benefits, it will also lead to significant savings in the revenue budget.

7. Implications

7.1 Financial

Implications verified by: **Laura Last**
Senior Management Accountant

Year one saving of £125,000 and thereafter could be realised through reductions in energy, after annual charges removed. Set out in Appendix A are the details of the bid submission and costs. Start-up project costs awarded via Capital bid are £1,038,000 split over a 2 year period.

7.2 Legal

Implications verified by: **Tim Hallam**
Deputy Head of Legal and Deputy Monitoring Officer

There are no legal implications other than those governed by Procurement regulations

7.3 Diversity and Equality

Implications verified by: **Becky Lee**
Team Manager - Community Development and Equalities

The provision of the Central Management System will provide an improved consistent level of lighting for all road users which could have a direct impact on anti-social behaviour throughout the Borough.

7.4 Other implications (where significant) – i.e. Staff, Health, Sustainability, Crime and Disorder, and Impact on Looked After Children)

The Central Management System will reduce CO2 emissions annually by approx. 1524000 kg, total reduction over 20 years 30469000kg which is the equivalent of taking 1064 cars off the road.

8. Background papers used in preparing the report (including their location on the Council's website or identification whether any are exempt or protected by copyright):

- None

9. Appendices to the report

- None

Report Author:

Peter Wright

Strategic Lead – Highways Infrastructure

Public Realm