Report for: Cabinet 16th March 2021

Item number: To be added by the Committee Section.

Title: Award of Contract for a Street Lighting Central Management System

Report authorised by: Stephen McDonnell, Director of Environment and Neighbourhoods.

Lead Officer: Carol O'Gowans, Project Manager, Environment and Neighbourhoods.

Ward(s) affected: All Wards.

Report for Key/ Non-Key Decision: Key Decision

1. Describe the issue under consideration.

1.1. This report seeks approval for the award by Cabinet of a Street Lighting Central Management System (CMS) Contract following a competitive tendering exercise, to **Bidder 1,** for a total value of up to **£2,347,750.00** as permitted under CSO 9.07.01(d)**.**

1.2. The CMS supplier is required to supply and install a CMS IT solution consisting of software hosted by the supplier and then to maintain the system for a period of up to 5 years. The CMS supplier is also required to supply the system's hardware consisting of on-site nodes and gateways which the Council's existing street lighting term contractor will install on site.

2. Cabinet Member Introduction

2.1. The London Borough of Haringey (LBH) maintains approximately 25,000 street lighting assets across its network, and, within a separate project, existing non-LED lamps are due to be replaced with new LED lamps by 31st March 2022. The investment in a street lighting central management system (CMS) is part of the broader Street Lighting Investment Plan, as set out in a report to Cabinet on 9th March 2021. This will then enable the Council to monitor and control the exact level of lighting for each street light within the Borough.

2.2. The CMS is to be fully capable of delivering the functions of controlling, switching, trimming, providing variable lighting levels, reporting and fault

monitoring, energy management and supporting future 'smart city' applications.

2.3. The recommendations within this report are for the appointment of the preferred bidder to deliver the Street Lighting Central Management System Contract and ensure that the improvements arising from the system's provision are delivered for the benefit of Council and local residents and businesses.

3. Recommendations

3.1. It is recommended that the Cabinet:

3.1.1. Approves the award of a Street Lighting Central Management System Contract to **Bidder 1** identified in the exempt report in the maximum sum of **£2,347,750.00**, as permitted under CSO 9.07.01(d).

The CMS contract term shall be for a period of up to 5 years consisting of an initial term of two (2) years for a maximum contract sum of £1,697,250.00 with an option to extend for an additional three (3) years for a maximum contract sum of £650,500.

3.1.2. Authorises the issue of a Letter of Intent (LOI) for the amount of £201,450.00 being 10% of the contract price (excluding client third party discretionary funding).

4. Reasons for decision

4.1. The appointment of the preferred bidder will enable the Council to deliver additional savings in terms of reduced energy consumption and CO_2 emissions, together with reductions in ongoing maintenance costs.

4.2. Officers have undertaken a mini-competition tendering exercise to call off a contractor from an existing Yorkshire Purchasing Organisation (YPO) framework agreement to deliver the street lighting CMS. Through this process, **Bidder 1** has demonstrated that it should be awarded the contract.

4.3. In awarding the contract to **Bidder 1,** the Council is securing delivery of the street lighting CMS. The contract value also allows for additional spend on

other lighting assets (such as those in parks and on housing estates) as resources allow.

4.4. **Programming –** For the installation and commissioning of the CMS, the programme end date (which is 31st March 2022) will tie in with the completion of the street lighting LED replacement programme. An objective of the installation of the CMS in tandem with the LED provision is to maximise on saving energy.

4.5. The key benefits once the CMS is installed and in operation are:

4.5.1. Energy and operating cost reduction from:

4.5.1.1. Variable lighting (by dimming or raising the lighting levels), trimming of burning hours and part-night switching off for individual lights, groups of lights or the whole lighting system.

4.5.1.2. Accurate measurement of burning hours and energy consumption, only paying for what is used.

4.5.1.3. Reduced street lighting outages by the ability to monitor performance and predict failures.

4.5.1.4. Operating the lighting infrastructure in a dimmed or switched state, extending single component life.

4.5.2. Carbon reduction from:

4.5.2.1. Reduced energy consumption realised by the change in operating profile, reducing CO_2 emissions and contributing to the asset owner's Carbon Reduction Commitment (CRC2) strategy.

4.5.2.2. Potential reduction in night scouting requirement, therefore yielding a reduction in carbon footprint captured from scouting vehicles.

4.5.3. Tailored lighting policy from:

4.5.3.1. The ability to employ variable lighting levels at an individual streetlight allowing specific lighting to suit the individual requirements of communities.

4.5.3.2. A flexible approach, allowing remote changes to lighting policy without the need to visit site, reducing exposure to health and safety risk and labour costs.

4.5.3.3. The ability to allow the CMS to directly react to external sources such as traffic counts, pedestrian movements, etc.

5. Alternative options considered.

5.1. Option 1: Do nothing
Pursuing this option would fail to achieve the additional reduction in energy usage, operating costs and carbon that the Council is seeking to achieve. It would also fail to provide a tailored lighting policy (as per Section 4.5.3). Option not recommended.

5.2. Option 2 Direct Award to Term Maintenance Contractor
This option was discounted since it was considered more cost effective to undertake a procurement process to secure the most economically advantageous tender to the Council.

5.3. Option 3 In-house delivery
This option was discounted as the Council currently does not have the requisite in-house resource and expertise to deliver the work.

6. Background information

6.1. With an imminent increase in energy tariffs applicable to many local authorities, there is increasing focus to reduce energy consumption and costs.

6.2. By commissioning consultants Project Centre, LBH explored strategies to reduce energy on its street lighting network. This would enable energy saving targets to be achieved whilst delivering cost savings over time.

6.3. The business case set out the required financial commitment and predicted cost returns when considering three potential scenarios:

6.3.1. Do-Nothing
6.3.2. Implement an LED luminaire replacement programme across the Borough.
6.3.3. Implement an LED luminaire replacement programme alongside a street lighting CMS.

6.4. Project Centre's report states that, if no action is taken, total costs per annum (cumulative) could rise to £66-84m by 2050. By implementing the LED replacement and CMS, the potential long-term total savings to 2050 would be in the range of £15-24m.

6.5. Greater CMS energy savings will be realised by further profiling the existing street lighting network. Additional dimming and trimming regimes will be

investigated with the inclusion of a Street Lighting Policy. Maintenance costs will be optimised with fewer “non-working” lights, reduced number of “day burners”, abortive fault site visits and with the ability to eliminate the need for street lighting night scouting. It will also assist in the verification of insurance claims where lighting is a contributing factor. The CMS will provide flexibility in-house to change and override settings (e.g., for events, the street lighting levels can be increased or for TV production, the street lighting levels can be switched off / reduced).

6.6. Further to the above business case scenarios, smart city systems were also explored as part of this project to enable additional benefits to the public, residents, and LBH. Smart city systems are where integrated wireless networks and sensors connect numerous assets and services, whilst collecting real-time data.

6.7. Potential revenue streams enabled by smart cities are of interest to LBH. However, many of these are still at concept stage and need to be developed further. Considering this, and the additional level of investment (over and above the LED luminaires and CMS), it was not considered to be a feasible option at this current time. In the future, there is scope to incorporate additionality to the contract as the CMS is scalable.

6.8. Funding was approved in December 2019 to implement a network-wide strategy to realise energy and cost savings. Key to the street lighting energy saving strategy is the use of new technologies, notably energy efficient LED luminaires and a CMS to intelligently monitor and control the street lighting network.

6.9. The tender package for the street lighting central management system was completed and issued in December 2020. The legal work was managed by LBH and outsourced to TLT Solicitors. The tender returns for the works were in January 2021.

6.10. **Key objectives** which the supplier is required to achieve through its performance of the contract are as follows:

6.10.1. To provide the most efficient street lighting CMS that, when combined with LED lighting, controls the correct level of lighting required for each road category within the Borough. The system must also deliver cost savings in terms of reduced energy consumption and CO_2 emissions, together with reductions in ongoing maintenance costs.

6.10.2. To install and operate a CMS to control the Council's street lighting network, which is fully capable of delivering the functions of switching, trimming, controlling, providing variable lighting levels, energy management, and supporting future 'smart city' applications.

6.10.3. To ensure the complete CMS installation and commissioning programme runs smoothly, the supply and delivery of all the CMS equipment shall be completed in accordance with the overall LED lighting conversion timescale which is by 31st March 2022.

6.11. The **scope of the proposals** include:

6.11.1. Setting Up:

6.11.1.1. Network planning - supplier performs network planning with input from the Council.

6.11.1.2. Commissioning and installation:

- CMS - installed by CMS supplier.
- CMS to gateways communications links - CMS supplier procures and installs communications links.
- Gateways - CMS supplier attends installation and commissions equipment. The Council's street lighting contractor provides the traffic management and access arrangements.
- Nodes – the Council's street lighting contractor installs and commissions on user interface.

6.11.1.3. Training - CMS supplier trains the Council's engineering, IT and street lighting contractor staff.

6.11.2. In-Service:

6.11.2.1. On-going support services - CMS supplier provides remote support to the Council's users / engineering staff and IT staff.

6.11.2.2. Software maintenance - CMS supplier provides software upgrades and implements same.

6.11.2.3. CMS - hosted by CMS supplier.

6.11.2.4. CMS / Gateway communications link - CMS supplier administers communications link.

6.11.2.5. Network operation - CMS supplier's responsibility.

6.12. **Funding** - CMS hardware and software for 20,000 assets on the public highway (including implementation, licencing, management, software /

hardware maintenance and training / hardware connections and establishment support) will amount to £1,697,250.00. There are a further 5,000 assets available through the tender available for third parties (e.g., Homes for Haringey) which will be funded separately by them to a value of £336,250.00. The remaining amount of the tender value is £314,250 (supporting years 3 to 5) which is for the on-going maintenance and will be funded from revenue associated with savings in the reduction in night scouting and component failure savings due to the installation of LED lamps and LED energy savings in 2020/21.

6.13. The total capital budget for spending Year 2021 / 2022 is £3.5m as follows:

The CMS capital funding (20,000 assets)	= £1.697m
Installation costs for CMS	= £1.008m
Installation costs for LED luminaires and other highway illuminated assets	= £0.686m
Contingency 3%	= £0.102m
Total:	= £3.493m

6.14. **Consultation –** Not applicable.

6.15. **Procurement Process** - A mini-competition tendering process, led by the Council's Strategic Procurement team, was undertaken to call off the contract from a framework agreement held by the Yorkshire Purchasing Organisation (YPO), a public sector procurement and reseller organisation. All 17 suppliers from the Yorkshire Purchasing Organisation framework - Street Lighting Products and Services: 1027 (Lot 2 – Internet of Things and Central Management System) - were invited to participate in the procurement.

6.16. An invitation to tender was issued to all suppliers on 15th December 2020, under Lot 2 – Internet of Things and Central Management System of the YPO framework. Six (6) tenders were received by the set deadline date of 25 January 2021.

6.17. The received tenders were evaluated based on 40% price and 60% quality criteria as set out in the Invitation to Tender pack.

6.18. The tenders were checked for completeness and compliance. As part of this exercise, it was noted that two (2) of the six (6) bidders had qualified their bids.

6.19. Clarifications were sought requesting the two (2) suppliers to rescind their qualifications before the Council would progress further with the assessment of their overall bids.

6.20. The two eventually withdrew from the process leaving the Council with four (4) bidders to consider for potential award.

6.21. A panel of evaluators, made up of four Council officers, conducted the quality evaluation exercise in accordance with the criteria set out in the Invitation to Tender (ITT) document. This was followed by a moderation meeting led by Strategic Procurement to agree on consensus scores.

6.22. Following the quality moderation, a bidder was disqualified as their overall quality score did not meet the minimum threshold required to progress further as set out in the tender document. As a result, this left the Council with three (3) bidders to consider for potential award.

6.23. The commercial evaluation exercise was conducted by the lead service officer and validated by the Strategic Procurement team.

6.24. Following on from the evaluation, the price and quality scores were added to provide an overall total weighted score for tenders. The total percentage score secured by **Bidder 1** following this exercise was considered the most economically advantageous tender to the Council. The below provides a breakdown of the scores for each Bidder.

6.24.1. Bidder 1 – Quality score of 34.0%
Price score of 37.63%
Total score of 71.63%

6.24.2. Bidder 2 – Quality score of 38.0%
Price score of 31.14%
Total score of 69.14%

6.24.3. Bidder 3 – Quality score of 30.0%
Price score of 37.4%
Total score of 67.4%

6.25. The Council is aiming to commence the implementation of the street lighting CMS provision in April 2021 and complete the installation by 31st March 2022.

7. Contribution to strategic outcomes

7.1. This project will contribute to Priority 3 (Place) of the Borough Plan 2019 - 2023. Priority 3 aims to provide a healthier, active and greener place by reducing expected carbon emissions to 600 kT CO_2 by 2022 (in line with a target of zero emissions by 2050). This project will also maximise energy efficiency within the LED street lighting network.

8. Statutory Officers' comments (Chief Finance Officer (including procurement), Head of Legal and Governance, and Equalities)

8.1. **Finance**

8.1.1 The recommendation of this report is to award a contract for the delivery of a street lighting central management system (CMS). The contract award will initially cover the existing street lighting estate of approximately 17,500 items as well as provision for growth of 2,500 items. Should the Council add additional items to the CMS over the 20,000 allowed for, the contract provides for that growth. The anticipated capital cost of the nodes for the CMS for the 20,000 items is £1.697m. The installation cost of the nodes is estimated at £1.008m, totalling £2.705m.

8.1.2 This budget for the CMS is contained within the scheme for updating the borough's street lighting which has a budget of £7m. If the recommendation of this report is accepted, the estimated outturn for the overall updating of the Borough's street lighting scheme will be on budget.

8.1.3 The contract recommended for acceptance also includes a maintenance element. This is estimated at £0.105m per annum from years 3-5. This additional cost will be met from a reduction in night scouting costs (£0.015m) and a reduction in the cost of component failure due to the improved quality of the lights now installed and LED energy savings (£0.090m).

8.2. **Procurement:**

8.2.1 The recommendation to award the contract to Bidder 1 in accordance with CSO 7.01.(b) is supported by Strategic Procurement subsequent to a compliant procurement process conducted under Lot 2 (Internet of Things & Central Management System) of the Yorkshire Purchasing Organisation (YPO) framework, Street Lighting Central Management System.

8.2.2 The overall proposal submitted by Bidder 1 is considered to be the most economically advantageous tender to the Council and, as such, the intended contract will deliver additional savings in terms of reducing energy consumption and CO_2 emissions, together with further reductions in ongoing maintenance costs as broadly outlined under paragraph 4.5 of this report.

8.3. **Corporate Legal Services:**

8.3.1 This report is proposing the award of a contract by way of a call-off after a mini-competition from a Yorkshire Purchasing Organisation (YPO) framework agreement.

8.3.2 Pursuant to Contract Standing Order (CSO) 7.01(b) and 7.02 and Regulation 33 of the Public Contract Regulations 2015 the Council may award a contract called off under a framework established by another public sector body.

8.3.3 External lawyers have provided guidance in this procurement on aspects of the tender process. Strategic Procurement has also advised that a compliant procurement process was conducted under the YPO framework.

8.3.4 Pursuant to CSO 9.07.1(d), the award of a contract valued at £500,000 or more must normally be approved by Cabinet.

8.3.5 Subject to the further considerations set out in paragraph 2 of the exempt report, the Head of Legal and Governance is not aware of any legal reason preventing Cabinet approving the recommendations in this report.

8.4. Equalities - Alex Kenmure, Policy Manager comments:

8.4.1 The Council has a Public Sector Equality Duty under the Equality Act (2010) to have due regard to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited under the Act.
- Advance equality of opportunity between people who share those protected characteristics and people who do not.
- Foster good relations between people who share those characteristics and people who do not.

8.4.2 The three parts of the duty applies to the following protected characteristics: age, disability, gender reassignment, pregnancy/maternity, race, religion / faith, sex and sexual orientation. Marriage and civil partnership status apply to the first part of the duty.

8.4.3 Securing consistent and quality street lighting is important in ensuring that the council provides a safe environment for residents to live in. In particular, good street lighting helps to mitigate dangers associated with:

- Crime and anti-social behaviour
- Night-time road accidents
- Trip, slip and fall accidents.

8.4.4 The following protected characteristics are most likely to be impacted by the quality of street lighting in their local area:

- Older people: although proportionally less likely to be outside of their home at night-time, appropriate street lighting could have an impact on fear of crime in the local area and confidence in leaving the home, particularly in the winter months where they could be at risk of trips and falls.
- Younger people: more likely to be outside of the home at night-time (particularly younger adults) and more at risk of dangers associated with crime and anti-social behaviour and road accidents due to inappropriate street lighting levels.
- People with a disability: well maintained and appropriate street lighting levels will be important to any residents with a limiting disability where poor light levels negatively impact on their ability to navigate the local area.
- Gender: women may feel more vulnerable to crime as a result of reducing lighting
- Sexual orientation: Gay, Lesbian and Bisexual people may feel more vulnerable to hate-crime as a result of poor/inappropriate lighting.
- Gender reassignment: people in this category may feel more vulnerable to hate-crime as a result of poor/inappropriate lighting.
- Race: Community safety is an important issue for all including people from minority ethnic backgrounds, with prevention of street crime and racially motivated crime being particularly relevant.

8.4.5 The agreement of this award will ensure that the Council has a modern, robust and adaptable street lighting management system which will enable the Council to better respond to issues raised by equality groups across the borough, improving the safety and wellbeing of residents from all backgrounds.

9. Use of Appendices

9.1. None.

10. Local Government (Access to Information) Act 1985

10.1 This report contains exempt and non-exempt information. The exempt information is not for publication as it contains information classified as exempt under the following categories (identified in the amended Schedule 12A of the Local Government Act 1972):

(3) Information relating to the financial or business affairs of any particular person (including the authority holding that information); and

(5) Information in respect of which a claim to legal professional privilege could be maintained in legal proceedings.