

LONDON BOROUGH OF HAMMERSMITH & FULHAM

Report to: Sukvinder Kalsi (Executive Director, Finance and Corporate Services) in consultation with Councillor Frances Umeh (Cabinet Member for Housing and Homelessness)

Date: 14/01/25

Subject: Phase 3 LED Lighting Contract for Block Communal Lighting

Report authors: Paul Grady, Electrical Contracts Manager
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Richard Buckley, Assistant Director (Building and Resident Safety)

Responsible Director: Richard Shwe, Director of Housing

SUMMARY

OpenView Security Solutions Limited recently completed phase one and phase two of our LED lighting programme. In phase one, this involved upgrading communal lighting in corridor stairs and exterior of buildings in 422 blocks on Council Housing Estates at a cost of £4,559,575.41. In phase 2, OpenView have carried out LED upgrades to the value of £850,000.00 in phase 2. In phase 2, sheltered schemes and hostels were prioritised due to the age and vulnerability of our residents. During phase 2 we managed to upgrade LED lighting in 8 Sheltered Schemes, 10 Hostels and 20 Residential blocks.

To keep on track with our LED lighting programme time and specification delivery targets, we now need to embark on phase 3 of the LED programme in Quarter 4 of 2024. This will involve LED lighting upgrades to the following properties: 22 Housing Blocks, 28 Tenants Resident Association Halls and 83 plant rooms which Contains Boilers, Pumps etc. We estimate that the cost of this work will be around £1,200,000

Given the success of the incumbent contractor OpenView Security Solutions Limited and the cost advantage of supplier continuity, we seek approval to compliantly direct award the phase 3 contract to OpenView Security Solution Limited via the Fusion 21 'Building Safety and Compliance' Framework.

RECOMMENDATIONS

1. To approve the procurement strategy and contract award approval of a compliant contract by the direct award procedure to OpenView Security Solutions Limited via the Fusion 21 'Building Safety and Compliance' Framework. This is a blended call-off covering the 'lighting equipment and emergency lighting' and 'Warden call and Tele-Health' categories'. The contract will be for £1,200,000.

Wards Affected: All

Our Values	Summary of how this report aligns to the H&F Corporate Plan and the H&F Values
Building shared prosperity	The contractors will be required to deliver Social Value equivalent to 10% of the contract values. This should have a positive impact on local wellbeing prosperity.
Creating a compassionate council	This project will create infrastructure that is more cost effective from maintenance/repair and revenue point of view. This will therefore make service charges more cost effective for our customers.
Doing things with local residents, not to them.	The LED lighting project was put forward to residents via the Resident Working Group (RWG). Residents were consulted on the scope of the project and this project was subsequently signed-off by the relevant channels/parties pertaining to this group.
Being ruthlessly financially efficient	In terms of our sourcing method, we will be using a Framework to procure OpenView. This Framework ranks providers based on a 60% quality vs 40% cost Most Economically Advantageous Tender' (MEAT) split. 'MEAT' considers the best value for money blend between quality and cost. OpenView is ranked number 1 on this framework and therefore are the best value for money. To add an extra level of due-diligence and ensure that the Framework rates resemble good value for money, the service will also benchmark these rates against historic cost data that the service holds on similar works.
Taking pride in H&F	The upgrades to LED lighting will be a further step towards meeting our climate change objectives as Greenhouse gas

Our Values	Summary of how this report aligns to the H&F Corporate Plan and the H&F Values
	emissions associated with the LED lights are significantly lower than typical incandescent or Compact fluorescent lights. These upgrades across our blocks will be showing H&Fs commitment to its Climate goals and ensure it continues leads the way on addressing the climate challenge.
Rising to the challenge of the climate and ecological emergency	As per the above, evidence supports the case that switching to LED lighting can reduce our greenhouse gas emissions. Therefore, this programme is very positive in working to prevent climate and ecological emergency.

Financial Impact

The report seeks approval to appoint a contractor, OpenView Security Solutions Limited, to undertake LED lighting upgrade works at an estimated cost of £1,200,000. The works are anticipated to commence by the end of November 2024 for a period of 6-9 months. The cost will therefore cross financial years 2024/25 and 2025/26. Payments will be made to the contractor in monthly instalments based on delivery to a satisfactory standard, which will be monitored by the Electrical Project team. Payments will be withheld by the Service in the event of unsatisfactory performance.

Across the estates, the projected contribution from leaseholders is £144,000, subject to the issue of S20 notices to leaseholders and completion of the works. The Housing Revenue Account (HRA) Asset Management 4-Year Capital Programme budget variations for 2024-28 was approved by Cabinet in October 2024 and contained a budget provision for electrical safety works and LED upgrade schemes, of £20.4m across financial years 2024/25 to 2027/28, which is sufficient to cover the cost of the procurement in this report.

A Credit Safe Report run on Thursday, 31st October 2024 on the supplier OpenView Security Solutions Limited provided a credit score of 78 (very low risk and above the Council's minimum threshold score of 51), and a suggested contract limit of £11,500,000, which is well above the value of the procurement in this report.

The works are wholly capital in nature as they are expected to extend the life of the Council's assets. Finance officers will work closely with the budget holders to monitor spend within the agreed budget envelope and will report updates to the financial position via the quarterly Capital Programme Monitor.

Anjeli Chadha, Principal Accountant – Housing Capital, 6th November 2024

Verified by: Danny Rochford, Head of Finance (Housing), 13th November 2024

Legal Implications

The Council has the power to undertake these works to comply with their obligations as a landlord under the Landlord and Tenant Act 1985.

The value of the proposed works is below the threshold for the Public Contracts Regulations 2015 to apply. There are therefore no statutory requirements governing this procurement.

This is a high value contract for the purposes of the Council's Contract Standing Orders (CSOs). The use of a suitable third-party framework in accordance with its terms is a compliant method of procurement. The Fusion 21 framework was let in accordance with the relevant procurement regulations and the Council is entitled to call-off contracts under it.

The framework allows for direct awards having regard to "the Member's requirements and business needs by reference to the Brief/Specification for the provision of Services and/or carrying out Works;". The use of the direct award procedure is therefore compliant with the terms of the framework and the CSOs.

The strategy and award of this contract are a key decision under the Council's Constitution and needs to be included on the key decision list on the Council's website.

Verified by John Sharland, Legal Services, 25th November 2024

Background Papers Used in Preparing This Report

None

DETAILED ANALYSIS

Background

1. In 2020, the Mechanical and Electrical Engineering team commissioned a 5-year LED lighting upgrade programme. This was due to start on April 2021 and is to be completed in April 2026. We have managed this project in phases in order to undertake the works in a methodical and controlled manner. Currently this programme is running to schedule.
2. In April 2021, OpenView Security Solutions Limited undertook phase 1 and phase 2 of our programme to upgrade communal lighting in corridor stairs and exterior of buildings in blocks on Council Housing Estates.
3. These works were commissioned on the rationale contained within the business case attached in appendix 1.

4. The contract for phase 1 was for a total of £4,559,575.41. The works took 104 weeks to undertake and were completed on Friday, 31 March 2023. During this phase, we managed to upgrade LED lighting in 422 blocks. The phase 1 work project completed successfully as all LED lighting was installed to the requirements set out in contract specification.
5. On completion of phase one, we procured a contract for phase 2 (at a total of £850,000) with the incumbent contractor OpenView Security Solutions Limited. The works were planned to take 42 weeks to complete and will be completed in November 2024. During this phase, we have managed to upgrade LED lighting in 38 blocks. This has been a successful project as the contractor has delivered all of the contractually specified lighting requirements.
6. The contractor (OpenView Security Solutions Limited) procured for these works delivered these works in a manner that satisfied the safety, quality, cost, and time outcomes of the contract allowing for a smooth transition into phase 3 of the upgrade programme.
7. 'Phase 3' of this programme is earmarked to cost £1,200,00 and will involve LED lighting upgrades to 22 Housing Blocks, 28 Tennant Resident Association Halls, and 83 Plant rooms.
8. To continue the pace of the programme, we need to start these works by the end of November 2024. We anticipate that these works will take between 6 to 9 months to complete.
9. Given the strong performance of OpenView Security Solutions Limited and their familiarity with the H&F Client team, we are looking to leverage the principles of our previous contract (phase 1 & 2 LED programme) to compliantly direct award a contract for phase 3 of this programme via the Fusion 21 'Building Safety and Compliance' Framework. This is a blended call-off covering the 'lighting equipment and emergency lighting' and 'Warden call and Tele-Health' categories.
10. Given our successful 'phase 1' and 'phase 2' experience with OpenView and the cost of advantage attached with supplier continuity, we are requesting approval to compliantly direct award the phase 3 contract to OpenView Security Solutions Limited so that works can start as of Quarter 4, 2024.
11. Housing Programme Managers will ensure that residents are consulted so that they are aware of work information and our progress towards completion.
12. To manage this, before works commence, for every site, the Mechanical and Electrical team and OpenView undertake a resident coffee morning. This morning provides residents with the scope of works, programme timelines and feedback regarding any issues that we are aware of. We also give the residents opportunities to proactively ask us questions or raise any issues.
13. Once works have commenced, we keep residents updated via letter communications. As well as providing works information, these letters contain

contact details for the Mechanical and Electrical team so that residents can engage further.

Reasons for Decision

14. In Quarter 4, 2024, the service needs to begin 'phase 3' of the programme for LED lighting upgrades to communal lighting in corridor stairs and exterior of buildings, plant rooms and blocks on Council Housing Estates. The award of this contract is critical in delivering these works.

Contract Specifications Summary

15. See table below for a description of the works or services being procured:

Contract	Contract Value	Description of Works/Services
JCT project contract.	£1,200,000	<p>These works will ensure that the lighting systems are designed with longevity, energy efficiency, and low maintenance in mind. The lighting system will comply with BS 5266 or "Equivalent". Lighting levels will be in accordance with CIBSE Guides LG9 and LG12 or "Equivalent".</p> <p>These works will ensure that the whole of the system shall be certified by an approved NICEIC or "Equivalent" registered electrical installer, or similar Government approved Competent Person Scheme, and a separate Emergency Light Test certificate shall be issued by the approved installer.</p> <p>The Institution of Lighting Professionals 'Guidance Notes for the Reduction of Obtrusive Light' recommendation for zoning of areas shall be used when assessing lighting requirements.</p>

Procurement Route Analysis of Options

16. There are a range of procurement options available to procure providers of these works:
- Competitive tender
 - Mini competition from a suitable framework or Dynamic Purchasing System (DPS)
 - Direct award from a suitable framework

17. **Option 1: Deliver the supplies, services, and/or works in-house (make/buy decision) – Not Recommended**

The Council does not have the necessary skills and/or experience in-house to undertake this type of work, therefore, this option is not recommended.

18. **Option 2: Undertake a full regulated procurement process, advertised to the market – Not Recommended**

These options provide varying levels of assurance that the resulting providers are value for money. A full regulated procurement process, advertised to the market is the best guarantor of value as it is open to the whole market, However, these processes take a significant amount of time in relation to developing procurement documentation and running the relevant procurement process.

This process can take up to 4 to 6 weeks to seek tenders and evaluate the results, before 3 or 4 weeks required for the contract award Governance. As this requirement is part of an existing project, and additionally, will improve resident safety, this option is not recommended due to the timescales involved. Given that the current provider is performing well and offering good rates, the quality and value for money 'cost/benefit' of undertaking an open tender is not justified.

19. **Option 3: Procure using a compliant framework or Dynamic Purchasing System (DPS) by way of mini competition – Not Recommended**

These options provide varying levels of assurance that the resulting providers are value for money. As with a full regulated procurement process, advertised to the market, this process takes a significant amount of time in relation to developing procurement documentation and running the relevant procurement process, which may be only marginally quicker than undertaking a full regulated procurement process, advertised to the market. As this requirement is part of an existing project, and additionally, will improve resident safety, this option is not recommended due to the timescales involved.

20. **Option 4: Procure using a compliant framework or Dynamic Purchasing System (DPS) by way of a Direct Award –Recommended**

Direct award using a framework provides a limited degree of assurance (from the fact of the competition required to get onto the framework in the first place), however, the service is aiming to start phase 3 of the programme by no later than Quarter 4 2024 and therefore we have ruled out all but the compliant direct award from the framework because of the time required to deliver them. Given the performance of OpenView, we are aiming to compliantly direct award this package of works via a compliant Framework. The preferred framework we want to use (based on its scope and regional relevance) is the Fusion 21 'Building Safety and Compliance' Framework. This is a blended call-off covering the 'lighting equipment and emergency lighting' and 'Warden call and Tele-Health' categories. The only other option is a direct award outside of any framework. This route is less desirable than a call off through a competitively tendered framework as it would not meet the requirements of Contract Standing Orders.

Market Analysis, Local Economy, and Social Value

21. There is a robust and mature market for works of this nature. The Framework that we will use has a lot of capacity within it and therefore we do not anticipate supply issues.
22. OpenView Security Solutions Limited were the successful bidder of our tendering exercise for phase 1 of this project. Although OpenView Security Solutions Limited are not based in Hammersmith and Fulham, they are based in London and therefore have a good understanding of the local supply chain context and more importantly our customers need. This has been evidenced by their strong performance in phase 1 and phase 2 of the programme.

Risk Assessment and Proposed Mitigations

23. The Client team will closely project and contact manage the Contractor to ensure that the works are delivered on time, on cost and to the right quality and safety standards.
24. All works will be paid when works have been completed, inspected, quality checked, certificates received, and quality checked.

Timetable

25. Please include an estimated timetable of the competition process through to contract commencing.

Activity	Date
Key Decision Entry (Procurement Strategy and Contract Award)	Friday, 1 st November 2024
Contracts Assurance Board (Procurement Strategy and Contract Award)	Wednesday, 4 th December 2024
Cabinet Member Sign off (Procurement Strategy and Contract Award)	Tuesday, 14 th December 2024
Contract mobilisation and implementation	By 31 st January 2025
Contract Commencement date	By 31 st January 2025

Selection and Award Criteria

26. This will be a single tender award via a framework – the suppliers met formal selection criteria to secure a place on the framework. The award is made to the highest-ranking provider who had capacity to meet our needs.
27. Price mechanisms are described in the table below:

Contract	Pricing Mechanism
JCT Project Contract	Schedule of Rates

Contract Management

28. The standard of workmanship and service will be monitored and measured by the M&E client team. The contractor will need to provide works reports evidencing the works undertaken. The service will be allocating a supervisor resource to these works, and they will be reporting directly into David World, Head of M&E. The contractor will be required to provide David with a time assessment of the works prior to commencement and this will be scrutinised. The M&E team will call every resident once the works have been completed to ensure satisfaction, and if there are any issues no payments will be certified until they are resolved.
29. There will be performance meetings in which key project milestones and KPIs will be reviewed. Key Performance Indicators (KPIs) will include:

KPI	Description	How Measured	Target
1.	Resident Satisfaction	Percentage of residents responding positively to the following question at the time that particular resident's property is connected to the new lateral mains: <i>"Overall, how satisfied were you with the contractor who carried out the works?"</i>	90%
2.	Construction time – project	Number of days between programmed and actual handover date	<28 days
3.	Predicted Cost	Percentage within the estimated contract sum	<5%
4.	Health and Safety	Reportable Accidents/Incidents (Number of reportable accidents or incidents ÷ Headcount on site)	0%
5.	Defects – end of Defects Liability Period (DLP)	To be rectified within four (4) weeks of notification	100%

30. Social Value will be monitored and managed by the M and E Service with support of the Contract Governance Team.

Equality Implications

31. This contract will not pose any equality implications on our residents and wider stakeholders.

Risk Management Implications

32. There is a reputational risk that the establishment of the lighting may not be as advantageous as existing lighting. This can be mitigated through clear communication and contact with residents to help them understand the benefits and address any questions.
33. There is a secondary financial risk that the lights themselves will become targets for vandals thereby incurring additional costs once they are installed. Mitigation through light placement, motion sensor lighting where possible, surveillance measures, signage and community engagement to help deter and then responding quickly to repair any damage.

Jules Binney, Risk and Assurance Manager, 24th December 2024

Procurement Implications

34. It is recommended the procuring officer works with the Procurement and Commercial team to ensure the call-off is undertaken compliantly and in accordance with the Public Contracts Regulations 2015, framework or DPS terms of use, and the Council's own Contract Standing Orders.
35. The framework proposed for use has been subject to full diligence checks by the Procurement and Commercial team, which have not identified any issues of concern. The framework is therefore compliant for use by the Council in procuring this requirement.
36. Compliant use of the framework requires actions to be taken using a dedicated portal, established by the framework provider. However, a project must be created on the Council's own eProcurement portal, and all associated details and documents must be attached to the project to satisfy the mandatory transparency requirements.
37. A Contract Award Notice must be published to Contracts Finder, to satisfy the requirements of the Public Contracts Regulations 2015 for contracts equal to and over £30,000 (including VAT). This must be completed using the Council's [capitalEsourcing](#) eProcurement portal.
38. The contract must be added to the [capitalEsourcing](#) eProcurement portal, to ensure it is published on the Council's [Contract Register](#) in line with the legislated transparency obligations.
39. A named contract manager must be allocated to the contract on the Council's [capitalEsourcing](#) eProcurement portal.

Chris Everett, Category Lead – Procurement and Commercial, 2nd December 2024

Climate and Ecological Emergency Implications

1. This contract supports the decarbonisation of H&F's housing by installing energy efficient lighting.
2. As part of the contract award process, we will ask the supplier to provide a method statement detailing their approach towards climate change and net zero. This response will be scored on a pass/fail basis. We will also review the delivery of their method statement intentions at contract annual reviews to manage their performance and continuous improvement in relation to climate change.
3. The supplier will also be asked to try and prioritise climate outcomes in its social value commitments.
4. Requirements from providers around decarbonisation will be developed as part of the long-term repairs model and included in the future procurement of longer-term contracts.

Verified by Tim Pryce, Clean Energy Lead, 7th November 2024

Local Economy and Social Value Implications

5. It is a requirement that all contracts let by the council with a value above £100,000 provide social value commitments that are additional to the core services required under the contract.
6. OpenView has proposed social value measures amounting to this 10% requirement. Most of this social value proposed comes from committing to use a specified local business from which to procure materials for the contract.
7. The commissioner should work with Legal to ensure appropriate social value clauses are included in the contract, so that the council can enforce its right to compensation if social value commitments are not delivered.

Verified by Oliur Rahman, Head of Employment and Skills, 7th November 2024

Consultation

27. The original business case and procurement strategy (appendix 1) pertaining to this programme involved extensive consultation.
28. Consultation took place with Tenants and Residents (Repairs Working Group) via the Lighting Subgroup, as improved lighting is a high priority for residents.

29. Through the consultation described in paragraph 19, where possible, resident preferences have been considered and incorporated where appropriate into the project.
30. The original business case (appendix 1) provides further details of consultation undertaken (see Page 9, Paragraph/Section 8).

LIST OF APPENDICES

Appendix 1 – Original Business Case and Procurement strategy report for LED lighting programme:

Appendix 1 – Original Business Case and Procurement strategy report for LED lighting programme:

<p>London Borough of Hammersmith & Fulham</p> <p>CABINET</p> <p>4 MARCH 2019</p>		
<p>BUSINESS CASE & PROCUREMENT STRATEGY: THE PROCUREMENT OF LED LIGHTING FOR RESIDENTIAL BLOCKS AND ESTATE COLUMN LIGHTING</p>		
<p>Report of the Cabinet Member for Housing – Councillor Lisa Homan</p>		
<p>Open Report</p>		
<p>Classification: For decision Key Decision: Yes</p>		
<p>Consultation:</p> <p>Finance Legal, Procurement, Business, Commercial, IT and Risk Management</p>		
<p>Wards Affected:</p> <p>ALL</p>		
<p>Accountable Director: Jo Rowlands Strategic Director of Growth and Place</p>		
<p>Report Author: Richard Buckley Assistant Director Growth and Place</p>		<p>Contact Details: Tel: 07769882207 Email: Richard.buckley@lbhf.gov.uk</p>

1. EXECUTIVE SUMMARY

- 1.1. This report sets out the business case and procurement strategy for upgrading lighting on Council estates to LED equivalents. This includes communal lighting in corridors stairs and exterior of buildings together with estate lighting comprising of lighting columns on green spaces, external walk-ways, and carparks.
- 1.2. Detailed financial modelling has been carried out to assess the business case for the project for the replacement and upgrading of the lighting.
- 1.3. The main drivers for investing in LED Lighting are reduced energy consumption, reducing our carbon footprint and lower maintenance costs.

- 1.4. The Council is committed to reducing the impact it has on the environment in accordance with Council values, reducing pollution and working towards the Council becoming the greenest borough in Britain. The Council is working hard to reduce carbon emissions in the Borough and reducing fuel poverty by helping residents to save money on their energy bills. Once all the lights have been upgraded and the capital costs recovered, the new LED lamps will help to save the Council around £650,000 each year by reducing energy consumption and lower maintenance costs.

2. RECOMMENDATIONS

- 2.1. That the existing residential block and estate lighting be replaced with LED equivalent which is consistent with the Council's aim of being the Greenest Borough in the Country.
- 2.2. That the Business Case and Procurement Strategy for LED Lighting for Residential Blocks and Estate Column Lighting procurement (at Appendix 1) be approved.

3. REASONS FOR RECOMMENDATIONS

- 3.1. To comply with the requirements contained in Contract Standing Orders to seek Cabinet approval for the business case and procurement strategy for any proposed procurement, before a regulated procurement exercise is commenced.

4. PROPOSAL AND ISSUES

- 4.1. The proposal has 2 main parts:
- Communal Lighting
 - Estate lighting.

Communal Lighting

- 4.2. Survey information has been analysed of communal lighting across 530 sites across the Borough. The survey collected data on the number of internal and external lights (both emergency and non-emergency lights), wattages, and condition of the lights and wiring.
- 4.3. The survey information combined with a range of cost information (see cost assumptions in the Business Case and Procurement Strategy at Appendix 1) has been used to model the financial business case for upgrading the lighting.
- 4.4. The power consumed (wattage) of an LED can be around 50% less than an equivalent fluorescent light. Whilst the capital cost for an LED fitting will be higher than replacing the existing fittings on a like for like basis, significant savings can be achieved through reduced energy bills and operational maintenance costs.

Estate Lighting

- 4.5 A survey has been carried out into the structural condition of column estate lighting Columns with the following ratings and were modelled for LED upgrades:

1. Red: Replace within 6 months
2. Amber High: Replace within 3 years
3. Amber low: Replace within 6 years

- 4.6 There are 67 sites listed with columns meeting the above criteria. This totalled 490 columns/lamps to be upgraded. All sites/estates with columns that require upgrading, were also within the scope of the communal lighting survey.

5. OPTIONS AND ANALYSIS OF OPTIONS

- 5.1 A detailed options appraisal is contained in Appendix1 (Paragraph 3).

6. CONSULTATION

- 6.1 Extensive consultation has taken place with Tenants and Residents (Repairs Working Group) via the Lighting Sub Group, as improved lighting is a high priority for residents and where possible resident preferences have been considered and incorporated where appropriate into the project. Further details of consultation undertaken by the SRT are given in Appendix 1 (see Paragraph/Section 8).

7. EQUALITY IMPLICATIONS

- 7.1 The planned improvement and reliability of the new LED Lighting will benefit all residents providing a safer and better illuminated environment. It is not anticipated that there will be any negatives on any groups with protected characteristics under the terms of the equality Act 2010.
- 7.2 Implications verified/completed by: Peter Smith Head of Policy & Strategy, tel. 020 8753 2206.

8. LEGAL IMPLICATIONS

- 8.1 As required by Contract Standing Order 8.12, this report is being presented to Cabinet for approval of the Business Case and Procurement Strategy for the proposed procurement of new lighting for communal area and estate lighting on Council housing estates.
- 8.2 As recognised by the Business Case and Procurement Strategy, this procurement exceeds the EU threshold for works, so the full requirements of the EU public procurement rules need to be followed.

- 8.3 The proposal to follow a full tender process advertised in the OJEU and on the Council's capital-Esourcing tendering portal will secure compliance with the Council's Contract Standing Orders (CSOs). For a contract of this value, CSO 10.2 requires the use of an EU compliant framework agreement, or alternatively the placing of an EU contract notice in OJEU plus advert on the Council's own tender portal.
- 8.4 In the event of the EU public procurement rules ceasing to apply before this tender is advertised, due to Brexit, the process outlined in Appendix 1 will still need to be followed to secure compliance with CSOs, except with an alternative form of advertising to OJEU, as required by any applicable alternative rules such as the World Trade Organisation rules.
- 8.5 Legal services will continue to advise the service area in relation to the proposed evaluation methodology and the most appropriate contract terms.
- 8.6 Due to the estimated value of the contract exceeding £5m, a Cabinet decision will be required to approve the contract award.

Implications verified/completed by: Deborah Down, senior associate with Sharpe Pritchard Solicitors on secondment to the Council
ddown@sharpepritchard.co.uk

9. FINANCIAL IMPLICATIONS

- 9.1 The HRA Capital Programme 2018-19 to 2021-22 (Second Quarter) Monitoring revised budget was approved by Cabinet on 14 January 2019 includes £702,000 allocated for the estate lighting works.
- 9.2 The proposals will require an estimated budget of £836,000 for the estate lighting works which will be funded to the extent of £702,000 from this current budget allocation. The balance needed for estate lighting (£134,000) and the total estimated requirement for the communal lighting in the blocks (£5.3m), totalling to £5.4m, will need to be met from the unallocated budget pool.
- 9.3 For the communal lighting, the proposed option of replacement with LED lights will result in an additional cost of £2.7m compared to the cost that would have been incurred if replaced with similar fluorescent lights. However, the replacement with LED lights will result in savings in revenue costs by way of reduced energy consumption as well as significantly longer useful asset lives. The savings will have a positive impact on the HRA revenue budget.
- 9.4 The table below summarises the key financial figures:

Elements of works	Approved budget (£)	Estimated spend (£)	Budget shortfall (£)	Unallocated budget balance (£)	Comments
Estate lighting	702,000	836,000	134,000	Quarter 2 approved - £36.3m Quarter 3 proposed for	The budget shortfall needs to be funded from the unallocated budget pool. Spend is likely to exceed £836,000, but cannot be

				approval - £29.2m	quantified yet (para 9.5) and will need to be funded from the unallocated budget pool.
Communal lighting	-	5,266,436	5,266,436	Quarter 2 approved - £36.3m Quarter 3 proposed for approval - £29.2m	This shortfall needs to be funded from the unallocated budget pool.
Total	702,000	6,102,436	5,400,436		

- 9.5 The actual costs of estate lighting is likely to exceed the estimate above due to re-wiring of underground cables. However, these costs cannot be modelled at present due to lack of survey information. Any such additional cost will also need to be funded from the unallocated budget pool.
- 9.6 Cabinet approved the revised capital budget through the Capital Programme 2018/19 to 2021/22 (Second Quarter) Monitoring report on 14 January 2019. This included the unallocated budget amount of £36.3m. The Third Quarter Monitoring report being considered by Cabinet on 4 February 2019 includes an unallocated budget of £29.2m, taking into account Cabinet and Cabinet member decisions since the second quarter.
- 9.7 Project spend will be monitored and reported via the Decent Neighbourhood monthly budget monitoring and the quarterly capital monitoring by Cabinet. It is recommended that project managers maintain project cash flows that are shared with Finance to ensure strong budgetary control.
- 9.8 The works will be rechargeable to leaseholders and recharged across either the block or the estate as applicable. As these cost projections are not presently available and will be calculated in different manners, it is difficult to accurately project the expected revenue arising. However, based on the approximate leaseholder/tenant ratio of 30%, the Council might broadly expect to recharge approximately £1.8m from the projected £6.1m expenditure.
- 9.9 Finance will carry out credit check of the contractors proposed to be selected in future for the works approved by this report.

Financial Context

- 9.10 The plans set out in this report are not expected to adversely impact on the current projected level of HRA cashable reserves. The plans in this report are also not expected to adversely impact on the level of debt in the HRA as measured by the HRA Capital Financing Requirement (CFR), as the Capital Programme has a sufficient budget envelope to fund this contract.
- 9.11 Implications completed by: Sudhir Kafle, Housing Investment Accountant, Contact tel. 020 8753 4391.

- 9.12 Implications verified by: Emily Hill, Assistant Director, Corporate Finance, tel. 020 8753 3145.

10. IMPLICATIONS FOR BUSINESS

- 10.1 The successful contractor will be encouraged to use local supply chains for the supply of materials and labour where possible. The Commissioning Manager will work with the Economic Development Team to ensure that economic and social criteria is delivered and to create employment and skills prospects for residents and supply opportunities for local businesses in the Borough.
- 10.2 Implications verified/completed by: Alben Karameros Programme Manager, tel. 020 79388 583.

11. COMMERCIAL IMPLICATIONS

- 11.1 The recommendations and the procurement strategy are in line with the Council's Contract Standing orders (CSOs) and the Public Contract Regulations (PCR2015)
- 11.2 The recommendation is to undertake an OJEU compliant restricted procedure. A TAP will be established to assess the suppliers based on a 60%/40% quality-price ratio. The process will be published via the designated electronic system, capital Esourcing and advertised in Contracts finder and Tenders Electronics Daily (TED)
- 11.3 A PIA must be signed off before publishing the tender to be compliant with internal Data Protection processes.
- 11.4 Procurement will support the officers in ensuring the compliance with the multi lot procurement exercise recommended.
- 11.5 Implications verified/completed by Andra Ulianov, Procurement Consultant, tel. 020 8753 2284.

12. SOCIAL VALUE CONSIDERATIONS

- 12.1 Social Value, sustainability and environmental issues will be weighted at 15% of the quality questions which is normally at 5%. This satisfies the Social Value Act 2012 requirements. Recommendations would be to have questions specifically addressing the number of apprentices and creation of local jobs during the lifetime of the contract. This will also be included as a KPI in the contractual agreement.
- 12.2 Implications verified/completed by Ilaria Agueci-procurement Consultant (Projects), tel. 020 8753 4762.

13. IT IMPLICATIONS

- 13.1 As Option 3 is the recommended option, there are no apparent IT implications resulting from the proposal in this report. If Option 2 were to be considered

which includes remote monitoring via Wi Fi IT Services will be consulted to ensure that all necessary safeguards, permissions, and budgets are in place, and that the new functionality is aligned with the ITS strategy.

- 13.2 IM Implications: If the contractor will be processing data on behalf of H&F, such as names as names and addresses of residents, a privacy impact assessment will need to be completed to ensure all potential data protection risks are properly assessed with mitigating actions agreed and implemented. For example, a contract data protection and processing schedule or an information sharing agreement template and a Supplier Security checklist to ensure the systems used by the contractor comply with H&F's regulatory requirements.
- 13.3 The contract will need to include H&F's data protection and processing schedule. This is compliant with the General Data Protection Regulation (GDPR) enacted from 25 May 2018.
- 13.4 Implications verified/completed by: Karen Barry, Strategic Relationship Manager, IT Services, tel. 0208 753 3481.

14. RISK MANAGEMENT IMPLICATIONS

14.1 Health & Safety Management

Once projects are live, Health and Safety is the number one priority and the first agenda item at monthly progress meetings. Risks are constantly monitored with an on-going action plan as per the live Risk Register.

H&S performance is monitored via KPIs and reports focusing on near misses, minor incidents, employee absence from work due to incident and RIDDOR.

The Contruction Phase Plan is used as a management tool to ensure that at each project stage there will be a safe start. This includes a comprehensive site induction to all Contractors including checking of permits and asbestos awareness training.

The Health & Safety file/O&M manual will be developed throughout the delivery of the projects to ensure that those involved in future maintenance work can benefit. The file will be agreed with the Principal Designer and made available to LBHF in both electronic and hard copy. The file will provide detail of any residual hazards, project information, drawings, certificates, guarantees, approvals, details of the project team.

The contractor will also ensure that if there are any dangers they will be clearly identified through signage and all operatives returning to site review the Heath and Safety file prior to return, taking necessary precautions in line with site specific RAMS.

- 14.2 **Implications verified by Michael Sloniowski, Risk Manager, tel. 020 8753 2587.**

15. OTHER IMPLICATIONS

- 15.1 Details of any specific implications relating to property, business intelligence, health and wellbeing, Section 106 and PREVENT are set out in Appendix 1 (see Paragraph/Section 7).

16. BACKGROUND PAPERS USED IN PREPARING THIS REPORT

None

LIST OF APPENDICES

Appendix 1 – Business Case & Procurement Strategy

**REPORT RELATING TO
BUSINESS CASE;
PROCUREMENT STRATEGY; and
PROJECT MANAGEMENT AND GOVERNANCE
FOR COMMUNAL AND ESTATE LIGHTING**

BUSINESS CASE – WHY THE PROCUREMENT IS NEEDED

1. SURVEY INFORMATION

1.1 The proposal has 2 main parts:

- Communal Lighting
- Estate lighting.

Communal Lighting

1.2 Survey information has been analysed of communal lighting across 530 sites across the Borough. The survey collected data on the number of internal and external lights (both emergency and non-emergency lights), wattages, and condition of the lights and wiring.

1.3 The survey information combined with a range of cost information (see section 2 below) has been used to model the financial business case for upgrading the lighting.

1.4 The power consumed (wattage) of an LED can be around 50% less than an equivalent fluorescent light. Whilst the capital cost for an LED fitting will be higher than replacing the existing fittings, significant savings can be achieved through reduced energy bills and operational maintenance costs.

Estate Lighting

1.5 A survey has been carried out into the structural condition of column estate lighting Columns with the following ratings and were modelled for LED upgrades:

4. Red: Replace within 6 months
5. Amber High: Replace within 3 years
6. Amber low: Replace within 6 years

1.6 There are 67 sites listed with columns meeting the above criteria. This totalled 490 columns/lamps to be upgraded. All sites/estates with columns that require upgrading, were also within the scope of the communal lighting survey.

2. FINANCIAL INFORMATION

2.1 MODELLING WORK

A savings calculator was developed to assess the business case for investing in LED upgrades and lighting controls. Each site was modelled for the investment required and the resulting savings. Summary figures for all sites are presented in tables 1, 2 and 3 below. A screenshot of the model calculator is included in Appendix B. Key outputs from the model are discussed below.

Savings in carbon emissions (through reduced use of grid electricity) have been provided in two forms: SAP 2012 and SAP 10. The standard assessment procedure (SAP) is a government tool used to model energy use. SAP 2012 (currently used by government to assess energy in buildings) uses an older 2012 carbon emissions factor, whereas SAP 10 (currently in development) uses an updated and lower emissions factor – grid electricity is now ‘greener’, or less carbon intensive, than it was in 2012 due to increased renewables. Whilst the SAP10 saving provides a more realistic figure when reporting on carbon savings.

Simple payback is based on the total Capital Expenditure (CAPEX) (LED upgrades, lighting controls and re-wiring where required) divided by the resulting annual cost saving. Additional Capex has also been included for review: the modelling work assumes that as a ‘base case’ existing fluorescent lighting is life expired and requires replacing. Additional CAPEX is therefore the extra cost required for upgrading to LEDs when compared to this base case.

2.2 Annual cost savings by installing LEDs are achieved by:

- Reduced energy consumption (the first column in the tables below). The lower wattages of LEDs and the use of lighting controls (occupancy and daylight controls) reduce annual energy spend.
- LED lights have an expected life of 50,000 hours compared to fluorescent lights (communal areas) of 10,000 hours and high-pressure sodium lights (estate lighting) of 24,000 hours. Therefore, the average re-lamping cost per year is lower for LED lighting.

2.3 Summary figures from the model

Communal lighting

Table 1: Outputs from the model for investing in LED lighting and lighting controls in communal areas on the 530 sites

Energy saving (kWh p.a.)	SAP 2012 carbon saving (tCO2)	SAP 10 carbon saving (tCO2)	Total CAPEX (£)	Additional CAPEX (£)	Annual saving (£)	Simple payback (years)
2,698,483	1,401	629	5,266,436	2,693,946	641,022	8.2

Estate Lighting

Table 2: Outputs from the model for investing in estate LED lighting and lighting controls on the 67 sites

Energy Saving (kWh p.a.)	SAP 2012 carbon saving (tCO2)	SAP 10 carbon saving (tCO2)	Total CAPEX (LED only*)	Annual Saving (£)	Simple payback (years)
107,419	56	25	142,760	9,668	14.8

*Cost of column replacement has not been included in this assessment. This would be an additional cost of £693,590.

Combined – Communal and Estate lighting

Table 3: Combined figures from tables 1 and 2

Energy Saving (kWh p.a.)	SAP 2012 carbon saving (tCO2)	SAP 10 carbon saving (tCO2)	Total CAPEX*	Additional CAPEX (£)	Annual saving (£)	Simple payback (years)
2,805,901	1,456	654	5,409,196	2,693,946	650,689	8.3

It is important to note that there are likely to be further costs associated with the estate lighting due to re-wiring of underground cables. There is currently no

survey information available to model this unknown cost and so it has not been included in this costing exercise.

- 2.4 In summary the capital expenditure for this project is £5,409,109 plus £693,590 for replacement lighting columns giving a total of £6,102,696. After the payback period there should be saving of around £650,000 per year.

OPTIONS APPRAISAL AND RISK ASSESSMENT

- 3.1 The first option is to retain the status quo by replacing the existing lighting with similar fluorescent lighting which would cost approximately £2.6 million. However, it is wasteful in terms of energy consumption, ongoing maintenance costs and does nothing to reduce the carbon footprint
- 3.2 Option 2 is to install LED lighting with remote monitoring using Wi-Fi technology to allow staff to monitor bulb failures without having to rely on residents making complaints or estate inspections. Unfortunately, the costs of installing remote monitoring is an additional £3.5 million. For this reason, although it would have been the favoured option it has been discounted for budgetary reasons on economy and affordability grounds.
- 3.3 Option 3 is to replace the existing communal and estate lighting with LED but without remote monitoring. This option will:
- Improve Energy Efficiency
 - Reduce Energy costs
 - Reduce Carbon Footprint
 - Provide a more reliable service for residents
 - Will generate ongoing savings

For the reasons listed above option 3 is the preferred choice.

THE MARKET

- 4.1 There is robust and mature market for works of this nature. The tender which will be subject to OJEU and it is expected that it will attract a number of bids from suitably qualified and experienced companies to carry out this work. It is planned to carry out market testing before commencing the procurement process to determine the level of interest and packaging of work.
- 4.2 We have partnered with Capita through the Greater London Authority who have provided free support under the Mayor of London's Re-New Programme to assist officers with formulating the strategy and creating the financial models for this project.

PROCUREMENT STRATEGY

CONTRACT PACKAGE, LENGTH AND SPECIFICATION

It is proposed to package the works into 2 lots:

- Communal Lighting
- Estate Lighting

The skills differ between communal lighting and estate lighting and it is proposed therefore that Tenderers can bid for one or both lots. By dividing the contract in this way, it may attract bids from smaller companies for the estate lighting package.

It is proposed that the contract be phased over 2 years and it is envisaged that the successful contractor would employ 2 teams working concurrently to complete the contract during this period.

SOCIAL VALUE, LOCAL ECONOMIC AND COMMUNITY BENEFITS

- 6.1 The proposal will see local companies involved in the supply of materials. It is envisaged that there will be opportunities for direct local employment and the creation of apprenticeships, and tenderers' proposals with regard to social value will form of the evaluation process.
- 6.2 New more efficient lighting will reduce energy consumption, costs and the carbon footprint.

OTHER STRATEGIC POLICY OBJECTIVES

- 7.1 The Housing Capital Programme seeks to meet the corporate strategic objectives of improving the quality of the Borough's Housing stock. The LED lighting replacement programme will help to provide safe protected communal areas and contribute to the Green Agenda.

STAKEHOLDER CONSULTATION

- 8.1 Finance, legal and procurement and other stakeholder departments have been consulted in the compilation of this report. Residents have been consulted through the RWG Lighting sub group and have been kept fully informed throughout the process. Leaseholders will be consulted through the Section 20 process:
- 8.2 Residents will be written to advising them of the proposed works and leaseholders will be served with Section 20 Notices.
- 8.3 The cost to leaseholders is calculated in line with the terms of the lease as a set percentage of the total cost of the works.

8.4 The required contribution from leaseholders for the LED lighting upgrades has been modelled. This is for both communal areas and estate lighting. Two scenarios are modelled:

- Contribution from leaseholders if they are consulted under Section 20
- Contribution from leaseholders if they are not consulted under Section 20, i.e. they will pay £250 contribution only per dwelling. H&F would then pay the excess cost.

If consulted, the value of leaseholder contribution is calculated based on 'liability weightings'. These detail the percentage contribution per leaseholder towards work at the site/estate. This contribution is variable per site and so site-by-site modelling was carried out to arrive at the total contribution. The headline results from the modelling are shown below in Table 4:

Table 4: Leaseholder contribution to deliver the full scope of works

	Total Value
No. Leaseholders	4,869
Lighting CAPEX* (£)	6,090,936
S20 LH contribution (£)	2,300,542
Excess paid by LBHF if S20 not done (£)	1,122,607

*includes the cost of columns for estate lighting.

The results from the modelling show that there is a clear business case to consult with leaseholders under Section 20. If the consultation does not take place, and H&F charge leaseholders the maximum £250 only, there would be an excess of £1,122,607 remaining unrecovered by the Council, at an overall loss to the Housing Revenue Account.

8.2 Growth and Place's commitment to consult will ensure that tenants are formally notified of works at the same time as leaseholders are sent Notice of Estimates. There will be further consultation meetings with the Repairs Working Group. A public meeting will be arranged for residents prior to start on site, where the contractor will be introduced, and details of the work will be explained and residents will have the opportunity to ask questions. Ward Councillors and officers from Growth and Place including leasehold services will be invited to this meeting.

8.3 There is a statutory obligation to consult with Leaseholders in accordance with the requirements of section 20 and 20ZA of the Landlord and Tenant Act 1985

("LTA 1985") and Schedule 4 Part 2 of the Service Charges (Consultation Requirements) (England) Regulations 2003 ("the Regulations"). Schedule 4 consultation is a two-stage process and requires the service of a Notice of Intention and then a Notice of Proposal. These two stages straddle the tendering process and leaseholders can nominate the name of an alternative contractor they would like the Council to approach for tender during the first phase.

8.4 There will be 2 separate packages of work:

- Communal Lighting
- Estate Lighting

8.5 Orders will not be placed for the work until the consultation is satisfactorily concluded.

8.6 The Council offers leaseholders a range of payment options to assist with the payment of the estimated invoices. These include a discount of 2.5% for early settlement of bills and a variety of interest free options dependent on the size of the invoice.

Leaseholders who live at their property or do not own more than one additional property within the borough qualify for extended interest-free repayment plans of up to 4 years (subject to final charge). Where required, the plans can be extended out by a further 6 years although this period is interest-bearing at 0.25% above the Council's variable rate of borrowing. All options are explained in the 'Paying for Major Work' leaflet which is available for leaseholders on the Council's web site as well as from Leasehold Services. Leaseholders will also be advised that they may find comparable products within the high street marketplace at banks and building societies.

8.7 Officers from Property Services estimate that individual recharges, inclusive of fees, will range from 1.05% to 4.38%. The rechargeable element of the agreed Task Price will be verified by officers from leasehold services before S20 notices are issued.

PROCUREMENT PROCEDURE

9.1 The estimated cost of this project is above the OJEU threshold and consequently a full OJEU procurement process is required and it is proposed to use the 2 stage restricted process. An EU compliant framework was considered but was discounted due to leaseholder implications.

CONTRACT AWARD CRITERIA

10.1 Prices obtained through the tender procedure will be evaluated alongside quality aspects and methodology for carrying out the work.

10.3 It is proposed to use a 60/40 quality/ price split with 7 quality focussed Questions as follows:

- Understanding of the Council's requirements and proposed methodology for carrying out the works 25%
- Health and Safety Plan and Management 20%
- Resources to be deployed on the contract and experience of the proposed management and supervisory staff 20%
- Social Value, sustainability, and environmental issues 15%
- Management of sub-contractors 10%
- Resident Engagement and Safeguarding of vulnerable residents 10%

PROJECT MANAGEMENT AND GOVERNANCE

11. PROJECT MANAGEMENT

The SRT has been led by the Head of Mechanical and Electrical, Growth and Place reporting to the Head of Property Services who will have overall responsibility for the project management of this scheme. The team includes electrical engineers and representatives from Housing's Asset Management and leasehold service teams. Support will be provided by the Electrical Engineering Team who will oversee the project assisted by a Clerk of Works who will supervise the day to day work.

INDICATIVE TIMETABLE

Projected Programme Milestones

1. Soft Market Testing – January 2019
 2. Preparation of Contract Documents January - April
 3. Publish OJEU/Contracts Finder May
 4. Receive expression of Interest June
 5. Invite Tenders July
 6. Receive Tenders August
 7. Tender Evaluation September
 8. Award of Contract Cabinet Report November
 9. Award of Contract /Section 20 December
 10. Contract Lead in January 2020
 11. Start on Site February/March2020
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APPENDICES

Appendix A – Modelling Assumptions

Communal lighting assumptions

Items	Value	Unit
Average electricity tariff	0.09	£/kWh
Electricity carbon factor (Part L 2013 / SAP 2012)	0.519	kgCO2/kWh
Electricity carbon factor (draft SAP 10 factor)	0.233	kgCO2/kWh
Ballast losses in existing lights	10%	
LED light power drops to X% when PIR not activated - internal	25%	
LED light power drops to X% when PIR not activated - external	100%	
Percentage of time at full power when PIR and daylight controls added - internal	15%	
Percentage of time at full power when PIR and daylight controls added - external	100%	
Basecase run hours for internal lamps taken from SiteDate tab but for external lamps are assumed to be 50% with daylight control i.e.	12	hours per day
Cost of standard fluorescent 2D lamp	7.2	£
Cost of standard 28W fluorescent IP65 square bulkhead	121.2	£
LED retrofit - Quadretro	72	£
LED new fitting - Quadrant	132	£
Integral emergency – additional	72	£
Integral self-test emergency – additional	96	£
m/w sensor & daylight control – additional	80	£
Labour cost - lamp replacement / LED retrofit	37	£
Labour cost - new LED fitting	57	£
Supply & labour cost of new wiring per fitting	182.73	£
Manual monitoring & inspection costs		
Cost of lighting check	60	£ per visit
Two site visits per year means	1060	visits
Cost of monitoring visits	63600	£ p.a.
No. of emergency fittings	7389	
Monitoring cost per emergency fitting	8.607	£ p.a.
Assumed physical inspections required with RM	25%	
Wiring		
1.5mm2 T&E cable (per meter)	0.39	£
Average meters per fitting	7	M
Average supply cost for wiring per fitting	122.73	£
Cost of accessories for re-wiring	120	£

Estate lighting assumptions

Items	Value	Unit
Column and LED replacement (labour and parts)	1700	£
Pre Wattage (High Pressure Sodium)	70	W
Post Wattage (LED)	30	W
Unit electricity cost	0.09	£/kWh
Ballast losses HPS	15	%
Losses LED	7	%
Operational hours pre	4,368	Hours
Operational hours post (Trimming = 40mins less per day)	4,125	Hours
Raise and lower cost	3,350	£
HPS life	24,000	Hours
LED life	50,000	Hours
Lamp life expectancy HPS	5.5	Years
Lamp life expectancy LED	12.1	Years
Cost to supply and install lantern (HPS or LED)	300	£
Re-lamp cost HPS	15.49	£
Additional re-lamp cost for HPS over the LED life	7,590	£

Appendix B – screen shot of the savings calculator from the model

ENERGY CALCULATIONS		
Type	T8 2D	LED 2D
Lamp wattage (full power)	28	15
Lamp wattage (reduced power)	0	3.75
Weighted average battery wattage	5	5
Ballast losses wattage	2.8	0
Internal non-emergency lighting		
Number of fittings	0	0
Daily hours at full power	16	2.4
Daily hours at reduced power	0	13.6
Days per week	7	7
Weeks per year	52	52
Total hours p.a. at full power	5,824	874
Total hours p.a. at reduced power	-	4,950
Total light average full power (W)	30.8	15.0
Total light average reduced power (W)	0	3.75
Total energy consumed (kWh p.a.)	-	-
Internal emergency lighting		
Number of fittings	6	6
Daily hours at full power	16	2.4
Daily hours at reduced power	0	13.6
Days per week	7	7
Weeks per year	52	52
Total hours p.a. at full power	5,824	874
Total hours p.a. at reduced power	-	4,950
Total light average full power (W)	35.8	20.0
Total light average reduced power (W)	5	8.75
Total energy consumed (kWh p.a.)	1,251	365
External non-emergency lighting		
Number of fittings	0	0
Daily hours at full power	12	12
Daily hours at reduced power	0	0
Days per week	7	7
Weeks per year	52	52
Total hours p.a. at full power	4,368	4,368
Total hours p.a. at reduced power	-	-
Total light average full power (W)	30.8	15.0
Total light average reduced power (W)	0	3.75
Total energy consumed (kWh p.a.)	-	-
External emergency lighting		

PARAMETERS FOR COSTING		
Condition of fitting (Excellent, Good, Poor) (1-3)	2	Keep same fitting
Condition of wiring (Excellent, Good, Poor) (1-3)	2	Keep same wiring
No. floors in building	2	
Remote monitoring to be included in costing?	No	
No. data repeaters (1 per 3 floors or 0 if not monitoring)	-	
FINANCIAL CALCULATIONS		
Capital costs	2D	LED 2D
Supply of new / retrofit lights (non-emergency)	-	-
Supply of new / retrofit lights (emergency)	619	1,488
Cost of labour to install (all - emergency & non-emergency)	222	222
Cost of new wiring (if necessary - all)	-	-
Supply, install & commission of remote monitoring (if required)		-
Total cost of relamping vs new LED lighting	841	1,710
Total cost of remote monitoring (if required)		-
Total CAPEX	841	1,710
Additional CAPEX		869
Running costs		
Energy costs £ p.a.	113	33
Lamp life expectancy (run hours)	10,000	50,000
Lamp life expectancy (years given usage level)	1.1	5.7
Re-lamping cost per year including labour (£ p.a.)	232	115
Emergency lighting checks	51.6	51.6
Software & cloud storage		-
Remote data management - assume equiv to time saved managing	-	-
Total cost of ownership (£ p.a.)	397	199
Total saving from LED system (£ p.a.)		197
Payback		
Simple payback		4.4