

Decision Maker: Resources Portfolio Holder

Following Pre-Decision Scrutiny by the Executive & Resources Policy Development And Scrutiny Committee on

Date: 8 July 2014

Decision Type: Non-Urgent Non-Executive Non-Key

Title: MULTI-STOREY CAR PARK LIGHTING UPGRADE

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Chief Officer: Nigel Davies, Executive Director of Environment & Community Services

Wards: Bromley Town, Kelsey and Eden Park

1. Reason for report

The Executive established a Carbon Management Programme (CMP) in 2008 to take action to reduce energy consumption, revenue costs and carbon emissions.

To fund initiatives, the Executive also established a Carbon Management Fund, authorising officers to deliver projects. Savings derived from these projects are repaid into the Fund, thereby creating a self-sustaining source of investment for new energy reduction measures.

The work detailed in this report will be put out to tender (because there is no suitable Framework Contract) and, due to the anticipated value of the contract, Council Contract Procedure Rules require the Resources Portfolio Holder's approval for this.

2. **RECOMMENDATION**

That the Resources Portfolio Holder:

- 2.1 **Agrees the proposal set out in this report to replace the lighting in the Council's Multi-storey Car Parks and proceed with the proposed tendering process.**

Corporate Policy

1. Policy Status: Existing Policy: Carbon Management Programme
 2. BBB Priority: Excellent Council:
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Financial

1. Cost of proposal: Estimated Cost £250k
 2. Ongoing costs: Potential revenue savings of at least £52k per annum following repayment of the Carbon Management Fund
 3. Budget head/performance centre: Carbon Management Fund and Parking Services
 4. Total current budget for this head: £500,000; a balance of £261k is available for this scheme, £261k revenue
 5. Source of funding: Carbon Management Fund and existing revenue budget for 2014/15
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Staff

1. Number of staff (current and additional): 1
 2. If from existing staff resources, number of staff hours: 0.33fte
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Legal

1. Legal Requirement: None:
 2. Call-in: Applicable:
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Customer Impact

1. Estimated number of users/beneficiaries (current and projected): Over 1.1 million visits to Bromley's MSCPs each year
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Ward Councillor Views

1. Have Ward Councillors been asked for comments? No
2. Summary of Ward Councillors comments:

3. COMMENTARY

Background

- 3.1 The Council's Carbon Management Fund, which invests in energy reduction measures, started operating in 2008/09. By the end of 2013/14 the programme had saved the Council over £280,000 in energy costs and 1,360t of carbon emissions, reducing the Council's liability for carbon tax.
- 3.2 In line with current industry best practice, other councils (e.g. Northampton, Medway and Wigan) have taken action to upgrade their car park lighting to more efficient LED lighting.
- 3.3 LB Bromley has three Multi-Storey Car Parks (MSCPs) lit by fluorescent tubes, which are between 25-30 years old and coming to the end of their working lives. The MSCPs are lit 24 hours a day, seven days a week, and maintenance and running costs are significant.
- 3.4 Currently the three MSCPs (Civic Centre, Bromley; The Hill, Bromley; Village Way, Beckenham) collectively consume nearly one million kWh of electricity, at a cost of £105k each year plus maintenance costs of £20k p.a.
- 3.5 With energy prices increasing and a new parking contract to be let in October 2016, it is imperative that the Council takes action to reduce lighting costs.

Proposed Project

- 3.6 The proposal is to reduce operating costs by replacing the existing light fittings and fluorescent tubes with new integrated LED fittings at all three Council MSCPs.
- 3.7 Experience in other local authorities, and soft market testing, indicates that LBB's current consumption and costs could be reduced by an estimated 50% (over £50k p.a.).
- 3.8 In addition to replacing the fittings the proposal is to install improved controls, such as movement and daylight sensors and dimming capability, to reduce running costs still further.
- 3.9 The installation will conform with industry standards and be sufficient to ensure the safety of car park users. In addition, improved lighting quality will enhance the customers' experience.
- 3.10 The proposal is for a 'supply and fit' service contract tendered under the EU's restricted process, using Due North to manage the process in consultation with Corporate Procurement.
- 3.11 Pre-tender research has been undertaken. An initial proposal to swap fluorescent tubes for LED tubes has been further developed to include replacing the entire fitting. This will achieve greater savings and reduced maintenance costs. In addition, various options for use of daylight and movement sensors have been identified which will inform the tendering options (para 3.14).
- 3.12 Officers are working with AECOM – the Council's term contractor for Highways consultancy activity – to develop the necessary contract documentation and access expert advice on technical issues.

Technical & Functional Requirements

- 3.13 In addition to replacing the existing fluorescent lights and fittings with integrated LED fittings, tenderers will be asked to set out how the lighting could be made still more efficient through the use of sensors (in relation to movement and/or daylight) and dimming capability.

3.14 Three options are being considered:

Option 1a (currently preferred option)

- Perimeter lighting: LED lighting controlled by daylight sensors (so the car park always appears light, safe and open for business).
- Main lighting: controlled by Passive Infrared (PIR) movement sensors with lights usually dimmed to 10%, increasing to 100% capacity when movement detected
- Rooftop lighting: Both daylight and PIR movement sensors

Option 1b

- As per 1a but the perimeter lighting remains fully on 24/7 – no daylight sensors fitted.

Option 2

- Perimeter lighting: remains fully on 24/7 – no daylight sensors fitted.
- Main lighting: controlled by Passive Infrared (PIR) movement sensors which activate lighting when movement detected (but not dimmable).
- Rooftop lighting: Both daylight and PIR movement sensors

3.15 Control systems should be adjustable (i.e. the amount of time they remain on after the last detected movement can be varied) or capable of being over-ridden (lights are all on or all off in a particular zone).

3.16 For safety, lighting will be permanently on in the following locations: stairwells; entrances & exits; pay stations; and perimeters & boundaries visible by the public from the outside.

3.17 The new lighting should be both an improvement on the existing scheme in terms of user experience and also comply with the following lighting standards:

- Roof Top Car park levels – BS EN12464-2:2007 Lighting of Outdoor Workplaces: Average Illumination of 10 lux and Uniformity factor of 0.25
- Enclosed Car park levels – BS EN12464-1:2011 Lighting of Indoor Workplace: Average Illumination of 75 lux and Uniformity factor of 0.4

Procurement and Installation

3.18 LB Bromley has retained the consultancy services of AECOM as an expert technical partner to produce a lighting inventory and the necessary tender documentation, which will be agreed with the Council's Legal Department.

3.19 The contract will be let under the EU's restricted tendering process 'service contract route'. This process can take up to seven months.

- Issue an EU Notice
- Potential contractors register their interest
- Issue Pre-Qualification Questionnaire (PQQ)
- Review PQQ responses and produce tender list (from 5-8 suppliers)
- Issue Invitation to Tender
- Receive tenders (electronically via the Due North system)
- Evaluate tenders and select preferred contractor(s)
- Produce report to the Resources Portfolio Holder to award contract
- Award of Contract

3.20 There is some uncertainty regarding the long-term future of the Civic Centre MSCP. However there are currently no Member-approved proposals for any change in use of this facility within

the next 3.5 - 5 years (the anticipated pay-back period). Separate prices will be requested for each of the three MSCPs (and for the three options detailed in 3.14) in case there is a change in the Council's position.

- 3.21 In addition, a more competitive collective price will be requested for undertaking Option 1a (the Council's preference) at all three MSCPs, to achieve greater economies of scale.
- 3.22 Tenders will be evaluated on the Council's standard 60:40 (price:quality) basis. In particular an assessment of Whole Life Costing will be made in terms of avoided energy consumption, carbon emissions and costs. There will also be an evaluation of the installation warranties and equipment guarantees to protect the Council's investment.
- 3.23 Once the contract has been awarded, it will take a further 10 weeks to install the lighting.
- 3.24 MSCP user data will be used to identify the best dates and times for the installation, to minimise customer disruption and loss of income. Soft market testing indicated that contractors could undertake phased and or night-time working to accommodate any issues.

4. POLICY IMPLICATIONS

- 4.1. This report accords with the Building a Better Bromley's 'Excellent Council' ambition in relation to 'scrutinising everything we do and how we do it to provide efficient services' and 'continue a financial strategy that focuses on stewardship and sustainability'.
- 4.2. This activity also contributes to delivering the Council's agreed objective for the Carbon Management Programme to reduce energy consumption, costs and carbon emissions by 15% over five years.

5. FINANCIAL IMPLICATIONS

- 5.1. Currently, lighting at the three MSCPs consumes about 1m kWh of electricity p.a. at a cost of £105k p.a. plus annual maintenance costs of £20k p.a. Should the LED lighting project proceed, energy costs could be reduced by at least 50% (i.e. £52k) per annum and maintenance costs should also decrease.
- 5.2. The estimated cost of the project is £250k and will be met from the Council's Carbon Management Fund. The Fund will have a balance of £261k in December 2014, following repayments from other schemes as shown in the table below: -

Carbon Management Fund: Position Statement	£'000	£'000
Fund balance as at 31.3.14		176
Repayments due into the fund during next 9 months		
M126 lantern conversion (street lighting)	16	
North Block Lighting scheme	13	
SON Replacement dimming LED (Street Lighting)	49	
Beckenham library heat control insulation	6	
Lit Signs PECUs Phase 2 (street lighting)	1	
	<hr/>	85
Fund balance as at 31.12.14		<hr/> 261
Estimated capital project cost		250
Fund balance post project completion		<hr/> <hr/> 11

- 5.3. As shown above, the Fund will have a balance of £11k following project completion.
- 5.4. If the project identifies any additional ancillary works that are necessary, funding is available from the Car Park Maintenance budget of £166k.
- 5.5. The estimated annual savings of £52k will initially be used to pay back the Carbon Management Fund within 5 years. Once fully repaid, the annual savings would permanently reduce revenue costs.
- 5.6. Currently, the cost of MSCP energy consumption is met by Vinci Park and the charge is included in the overall contract price.
- 5.7. In accordance with the operating criteria of the Fund, as set out by Salix, the Council needs to be the financial beneficiary of the scheme. It will therefore be necessary for the contract price to be reduced by £105k and for the Council to become responsible for meeting the energy costs of the MSCPs. The Council would repay the Fund using the savings generated from the reduction in energy consumption.
- 5.8. As the LED lighting requires much less maintenance due to the long life of the fittings, the savings should be reflected in a lower parking contract price when re-tendered in 2016.

Non-Applicable Sections:	Legal Implications Personnel Implications
Background Documents: (Access via Contact Officer)	Carbon Management Programme: Executive Report ED08067 (7 October 2008) and meeting minutes