

Committees: Corporate Projects Board <i>for decision</i> Corporate Asset Sub <i>for decision</i> Projects Sub <i>for decision</i>	Dates: 03 November 2021 24 November 2021 17 November 2021
Subject: Energy Reduction Programme – Phase 1 Unique Project Identifier: 12210	Gateway 2 Regular Issue Report
Report of: City Surveyor Report Author: Mark Donaldson	For Decision
<h1>PUBLIC</h1>	

1. Status update	<p>Project Description: a programme of energy efficiency projects within the corporate operational site portfolio to provide a simple payback under 5 years. Phase 1 consists of 8 sub-projects.</p> <p>RAG Status: Amber (Green at last report to Committee)</p> <p>Risk Status: Medium (Medium at last report to committee)</p> <p>Total Estimated Cost of Project (excluding risk): £490,089</p> <p>Change in Total Estimated Cost of Project (excluding risk): Decrease of £662,911 since last report to Committee</p> <p>Spend to Date: £13,345</p> <p>Costed Risk Provision Utilised: £0;</p> <p>Funding Source: £180,940 City Fund; £89,250 City's Cash; £304,098 S106 Carbon Offset Fund.</p> <p>Slippage: none</p>
2. Requested decisions	<p>Next Gateway:</p> <ul style="list-style-type: none"> • Gateway 3/4 - Options Appraisal (Regular) for Central Criminal Court LED Lighting • Gateway 3/4/5: Options Appraisal and Authority to Start Work (Regular) for Smithfield Car Park LED Lighting • Gateway 3/4/5: Options Appraisal and Authority to Start Work (Regular) for Tower Hill Coach & Car Park LED Lighting <p>Requested Decisions:</p>

1. That Option 3 is approved for:
 - a) Change in scope to limit the project to the three sub-projects, for LED Lighting at: Central Criminal Court, Smithfield Car Park and Tower Hill Coach and Car Park. These to be received for further approval as separate gateway papers (as set out above under 'Next Gateway'). Note the total estimated project cost including risk is £574,288 for completion in 2022/23.
 - b) Increase of allocated S106 Carbon Offset funding from £247k to £304k which will be wholly used to fund the LED lighting and the Central Criminal Court.
 - c) Reallocation of £229,200 of unrequired provisional funding allocation to the 'BEMS Upgrade Project-CPG Estate – Phase 1' to support energy reduction for the Guildhall.
 - d) Withdraw provisional funding allocation of £245,610 which is no longer required for this project.

These changes are summarised in the below table:

	Total (£k)	S106 (£k)	City Fund (£k)	City's Cash (£k)	BHE (£k)
Original funding allocation	£1,225.0	£247.0	£440.0	£489.0	£49.0
Revised requested Phase 1 project est. cost incl. risk	£574.3	£304.1	£180.9	£89.3	£0.0
Remaining funding following scope changes	£650.7	-£57.1	£259.1	£399.8	£49.0
Requested additional S106 funding allocation	£57.1	£57.1	N/A	N/A	N/A
Approved reallocation to Guildhall Cooling Project	£233.0	£0.0	£144.5	£76.9	£11.7
Requested reallocation to BEMS Upgrade Project	£229.2	£0.0	£114.6	£114.6	£0.0
Requested return to centre	£245.6	£0.0	£0.0	£208.3	£37.4

2. Approve: cancellation of the project titled 'Guildhall Complex Walbrook Wharf Sub-metering' (Project Number: 55800048) which was superseded by the above named 'GHC Sub-Metering' and is now being delivered through the PSDS project.

1. Budget

The following is based on approval of the requested decisions set out above.

Total estimated cost of the 'Energy Reduction Programme – Phase 1' is £490,089 (excluding risk) and £574,288 (including risk). The project aims to achieve a 5-year simple payback based on energy and maintenance cost savings, equating to combined savings of £114,858/yr.

The Phase 1 programme is comprised of three projects:

- **Tower Hill Coach and Car Park LED Lighting:** estimated total cost of £180,940 (incl. risk) to be met wholly from City Fund, with an annual savings target of £36,188/yr.
- **Smithfield car park LED Lighting:** estimated total cost of £89,250 (incl. risk) to be met wholly from City's Cash, with an annual savings target of £17,850/yr.

	<ul style="list-style-type: none"> • Central Criminal Court LED Lighting: estimated total cost of £304,098 (incl. risk) to be met wholly from S106 Carbon Offset funding, with an annual savings target of £60,820/yr. This is an increase in the S106 allocation of £247,000 previously approved. <p>A total estimated project cost budget breakdown and anticipated expenditure profile is provided for each of these projects in Appendix 3.</p> <p>A budget of £40,300 (excl. risk) was approved in Mar-20 as part of the GW2 paper for the ‘Energy Reduction Programme – Phase 1’, see background papers. Commitments to date against this budget is £13,345, comprised of:</p> <ul style="list-style-type: none"> • £6,150 for consultancy services to provide a costed lighting proposal for Tower Hill Coach and Car Park. • £7,195 for consultancy services to provide a survey of the condition of the electrical wiring to the light fittings at Central Criminal Court and advise on its implications for lighting replacements. <p>Note, we do not anticipate requiring the remaining uncommitted budget of £26,955 to reach the next gateway for the remaining in scope projects.</p> <p>Note: we anticipated a Costed Risk Provision of £84,199 for the whole project, and for this to be funded from:</p> <ul style="list-style-type: none"> • £55,484 for the Central Criminal Court LED Lighting to be met wholly from the S106 Carbon Offset funding. • £28,715 for the Tower Hill Coach and Car Park LED Lighting project, to be met wholly from City Fund. <p>Costed Risk Provision requested for this Gateway: £0 (as detailed in the Risk Register – Appendix 2)</p>
<p>2. Issue description</p>	<ol style="list-style-type: none"> 1. The still live project titled ‘Guildhall Complex Walbrook Wharf Sub-metering’ (Project Number: 55800048) has been superseded by the ‘GHC Sub-Metering’ sub-project proposed within the ‘Energy Reduction Programme – Phase 1’. 2. The following sub-projects from the Energy Reduction Programme – Phase 1 project which are now being delivered through the PSDS Project, see background papers: <ul style="list-style-type: none"> • GSMD Milton Ct Lighting • GSMD Silk St LED Upgrade • GHC AHU EC Plug • GHC Sub-Metering 3. A feasibility study has been completed for the ‘LMA Zone & Demand Ctrl HVAC’ sub-project. Although found to be technically feasible, the impact of the proposed works of this project on the stored

	<p>archive materials was found to be unviable. The works would require removal of stored manuscripts within certain areas of shelving in each of the four floors of the Extension block. Following detailed discussions with site management it was decided these works would be very difficult to managed and present a risk to the preservation of the materials.</p> <p>4. Due the known reduction in the funding required for the ‘Energy Reduction Programme – Phase 1’, CASC and Project-Sub Committee previously approved reallocating £233k of central funding (£144,460 City Fund, £76,890 City’s Cash, and £11,650 BHE) to the ‘Guildhall Cooling Plant Replacement’, see background papers.</p> <p>5. Note: an issue has been raised with the ‘BEMS Upgrade Project-CPG Estate – Phase 1’ of a funding shortfall, see background papers (note this paper is to be presented alongside at the same committee meetings). The BEMS upgrade project is vital for ensuring the energy consuming building services within the Guildhall are controlled efficiently.</p>
<p>6. Options</p>	<p>All options include the following:</p> <ol style="list-style-type: none"> 1. Approve: cancellation of the project titled ‘Guildhall Complex Walbrook Wharf Sub-metering’ (Project Number: 55800048). 2. The scope of the Energy Reduction Programme – Phase 1 will need to change under all the options to reflect the fact that elements of the original proposed scope are being delivered by the separate PSDS Project, and the LMA project has been found to be unviable. Therefore, all options recommend: <ul style="list-style-type: none"> • change in scope to remove the following sub-projects from the ‘Energy Reduction Programme – Phase 1’ project: <ul style="list-style-type: none"> ○ GSMD Milton Ct Lighting ○ GSMD Silk St LED Upgrade ○ GHC AHU EC Plug ○ GHC Sub-Metering ○ LMA Zone & Demand Ctrl HVAC • progressing the three sub-projects for LED Lighting at: Central Criminal Court, Smithfield Car Park and Tower Hill Coach and Car Park, whose estimated total project cost including risk is £574,288 (of which £270,190 is central funding) for completion in 2022/23 and for these to be received for further approval as separate gateway papers (as set out above under ‘Next Gateway’). This includes an increase allocation of available S106 Carbon Offset funding from £247k to £304k. 3. The 2020/21 approved capital bid for this project provisionally allocated £978k of central funding (£440k City Fund, £489k City’s Cash, and £49k BHE). Following the revised project scope cost (incl.

risk) of £270k of central funding, and the already approved reallocation of unused central funding of £233k to the 'Guildhall Cooling Plant Replacement' project, the remainder of the provisionally allocated central funding of £978k comes to £474,810 (£114,600 City Fund, £322,860 City's Cash, and £37,350 BHE). The following sets out the options for the £474,810 remainder of the original central funding allocation to the 'Energy Reduction Programme – Phase 1'.

4. **Option 1. Not recommended.** Retain all remaining £474,810 (£114,600 City Fund, £322,860 City's Cash, and £37,350 BHE) provisionally allocated funding to support the remaining three Phase 1 sub-projects.
5. **Option 2. Not recommended.** Release all the remaining £474,810 (£114,600 City Fund, £322,860 City's Cash, and £37,350 BHE) provisionally allocated funding.
6. **Option 3. Recommended.**
 - Reallocation of £229,200 of the now unallocated central funding (£114,600 City Fund and £114,600 City's Cash) to the 'BEMS Upgrade Project-CPG Estate – Phase 1' to meet the stage 2 works for that project which are specific to the Guildhall east wing works.
 - Release the remaining £245,610 (£0 City Fund, £208,260 City's Cash, and £37,350 BHE) provisionally allocated funding.
7. Option 3 is recommended as:
 - The BEMS upgrade project is vital for ensuring the energy efficient operation of the sites, and without an increase in funds to meet its budget the scope of works will need to be reduced. This project therefore offers an attractive substitution project for the provisionally allocated funding for the Energy Reduction Programme – Phase 1.
 - We are confident the funding allocated to the remaining three in-scope Phase 1 sub-projects is sufficient for them to be delivered to achieve a 5-year simple payback.
8. The following table summarises the estimated original and revised project costs and funding allocations, and the requested reallocations.

	Prev. Est. Cost and funding allocation (incl. risk) £k					Requested Decision	Revised. Est. Cost and proposed funding allocation (incl. risk) £k				
	Total	S106	City Fund	City's Cash	BHE		Total	S106	City Fund	City's Cash	BHE
Energy Reduction Programme - Phase 1, Sub-Project											
LMA HVAC Control	£46.8	£46.8	£0.0	£0.0	£0.0	Cancel	£0.0	£0.0	£0.0	£0.0	£0.0
GSMC Milton Ct Lighting	£56.8	£0.0	£0.0	£56.8	£0.0		£0.0	£0.0	£0.0	£0.0	£0.0
GSMC Silk St Lighting	£206.1	£0.0	£0.0	£206.1	£0.0		£0.0	£0.0	£0.0	£0.0	£0.0
GHC Ventilation Fans	£244.8	£0.0	£244.8	£0.0	£0.0		£0.0	£0.0	£0.0	£0.0	£0.0
GHC Sub-Metering	£246.9	£0.0	£72.6	£125.3	£49.0		£0.0	£0.0	£0.0	£0.0	£0.0
CCC Lighting	£198.5	£198.5	£0.0	£0.0	£0.0	Proceed	£304.1	£304.1	£0.0	£0.0	£0.0
Smithfield Car Park Lighting	£90.6	£0.0	£0.0	£90.6	£0.0		£89.3	£0.0	£0.0	£89.3	£0.0
Tower Hill Car Park Lighting	£122.6	£0.0	£122.6	£0.0	£0.0		£180.9	£0.0	£180.9	£0.0	£0.0
Total	£1,213.1	£245.3	£440.0	£478.8	£49.0		£574.3	£304.1	£180.9	£89.3	£0.0
Original funding allocation:							£1,225.0	£247.0	£440.0	£489.0	£49.0
Remaining funding following scope changes:							£650.7	-£57.1	£259.1	£399.8	£49.0
Additional S106 funding allocation							£57.1	£57.1	N/A	N/A	N/A
Reallocation to Guildhall Cooling Project:							£233.0	£0.0	£144.5	£76.9	£11.7
Reallocation to BEMS Upgrade Project:							£229.2	£0.0	£114.6	£114.6	£0.0
Return to centre:							£245.6	£0.0	£0.0	£208.3	£37.4

Appendices

Appendix 1	Project Coversheet
Appendix 2	Risk Register
Appendix 3	Projects budgets breakdown

Background documents (available on request)

- Gateway 2 Energy Reduction Programme – Phase 1
- Gateway 2 (issue) BEMS Upgrade Project-CPG Estate – Phase 1
- GW2 Issue - Guildhall Chilling Plant Replacement

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