LONDON BOROUGH OF HAMMERSMITH & FULHAM

Report to: Strategic Director for the Environment (in Consultation with the Cabinet Member)

Date: 28/05/2024

Subject: Proposal For Replacement Of Air-Cooled Chiller And Gas Fired Boiler With Air Source Heat Pump At The Public Mortuary, 200 Townmead Road, London, SW6 2RE

Report of: Cabinet Member for Economy - Councillor Andrew Jones

Report author: Ethelbert Clarke, Project Manager

SUMMARY

The existing Air-Cooled Chiller is at the end of its economic life cycle. It is proposed that the existing Air-Cooled Chiller and gas fired boilers are replaced with an Air Source Heat Pump(s) (ASHP). This action will provide for a reduction in Green House Gases (GHG) emissions and reduction in energy costs in line with LBHF (London Borough of Hammersmith & Fulham) climate net zero commitments.

The estimated replacement costs for the existing Air-Cooled Chiller with an Air Source Heat Pump and associated Air Handling Units, Hot Water Cylinders and upgraded controls is estimated to cost over the threshold for public contracts for goods. It is proposed to go to the open market for competitive tender to undertake these works.

There are no requirements for planning as the new plant replacing the existing has similar dimensions and does not impact on the existing building or surrounding environment.

RECOMMENDATIONS

1. To note that Appendix 2 is not for publication on the basis that it contains information relating to the financial or business affairs of any particular person (including the authority holding that information) as set out in paragraph 3 of Schedule 12A of the Local Government Act 1972 (as amended).

2. To approve the procurement strategy to tender for the replacement of existing Air-Cooled Chiller and boilers gas fired Hot Water Heaters with Air Source Heat Pumps and existing Air Handling Units with new, to provide heating and hot water, cooling, and ventilation for The Public Mortuary.

3. To note that it is proposed that the contract will commence on 19th August 2024 subject to approval of the award. The contract is expected to have a duration of between 6 – 12 months. There are options within the contract to

extend it. This will require the contractor to formally apply for an extension of contract, stating the reasons for the request. This would then have to be agreed by the Client, London Borough of Hammersmith and Fulham, before an extension can be granted.

Wards Affected: Sands End

Our Values	**Summary of how this report aligns to the H&F Values**
Building shared prosperity	Well maintained buildings will reduce the CO2 emission and less GHG with the ASHPS making the building environmentally friendly. This improves the wellbeing of users which is conducive for all occupants. The contractor will be required to deliver Social Value equivalent to 20% of the contract values for all spend over £100,000. This will have a positive impact on local wellbeing prosperity.
Creating a compassionate council	The maintenance of LBHF council's buildings to suit and meet all personnel requirements and needs. The inclusion of the decarbonisation strategy will further enhance the local environment and contribute to the overall residents' wellbeing.
Doing things with local residents, not to them	The ASHP(s) will provide heating and hot water in line with LBHF climate strategy net zero target by 2030 by reducing GHG. This will enhance the environment, whilst reducing energy cost and improving efficient energy generation for the buildings and compliant for public use. This will reduce the CO2 emission and greenhouse gases whilst enhancing a more resident friendly environment for resident to live, work and play.
Being ruthlessly financially efficient	By tendering through capitalEsourcing open tender process, the heat pump bidding and award will be as competitive as is reasonably possible. The evaluation will be based on quality, technical competencies, and value for money.
Taking pride in H&F	The installation of energy efficient and carbon reducing ASHP(s) in well maintained buildings can be used as models of the Council's corporate assets on decarbonisation target and

	strategy.
Rising to the challenge of the climate and ecological emergency	Buildings maintained to meet LBHF climate and ecological standards by installing ASHP(s) to meet LBHF Climate Strategy commitments towards net zero target for 2030.

Financial Impact

Details of the current and future budgetary impact of the decision must be set out here covering: -

- The estimated full cost of works is set out in the confidential appendix 2 with all the works expected to be completed in the fiscal year 2023/24.

- Within the current Capital Planned Maintenance programme (CPMP) for 2023/24, £2,400,000 of approved budget is given for the Energy and Decarbonisation works an appropriate proportion of which will be given to the Public Mortuary works.

Will Stevens, Finance Manager (ECO) Dated 17th November 2023
Verified: Sukvinder Kalsi, Director of Finance, Dated 17th November 2023

Legal Implications

The Council has power to carry out this procurement as the installation of a heat pump is incidental to the functions being carried out at the premises.

The make-up of the contract is primarily for the cost of the pump, with labour making up a smaller proportion. Therefore, this contract is a treated under the Public Contracts Regulations 2015 as an above threshold contract for goods. In addition, the value of the contract means that it is a high value contract for the purposes of the Councils Contract Standing Orders. The use of capitalEsourcing portal is compliant method of obtaining a contract of this value following CSO (Councils Standing Order) 18.

The report sets out that the procurement procedure will be using the capitalEsourcing portal as a vehicle to invite bidders competent and capable of delivery heat pumps projects. This is following the procedures set out in the PCR.

The proposed 60:40 weighting in favour of price is a reversal of the default position in the Contract Standing Orders but is justified in light of the high proportion of the contract allotted to the cost of the pump itself.

The value of the contract means that its award will be a Key Decision under the Council's Constitution and will need to be included on the Council's Key Decision list.

John Sharland, Senior solicitor (Contracts and procurement) email john.sharland@lbhf.gov.uk, 2nd November 2023

Background Papers Used in Preparing This Report

None.

DETAILED ANALYSIS

Proposals and Analysis of Options

1. If the existing Air-cooled chiller and air handling units fail, the Mortuary will have to be closed, the impact will affect the immediate borough and the wider community.

2. The plant has exceeded its life expectancy. The site for the past year, there have been numerous plant failures which have had a detrimental effect on its business-as-usual operations. This is due to the failure of existing Chiller and air handling units. If the aforementioned plant fails, the mortuary must close.

3. The ASHP installation is in line with the commitment of H&F policy on the reduction of greenhouse gases (GHG) and decarbonisation strategy.

4. Consideration was given to replacing the equipment as a like-for-like replacement. Alternatively, Air and Ground Source Heat Pumps were considered as replacement for the Air-Cooled Chiller and boiler replacement. Taking into consideration LBHF Climate Strategy commitments towards net zero target, economics and installation restrictions, the Air Source Heat Pump installation was shown to be the most suitable option.

- Option 1: This is the preferred option.
  Run an open tender via the capitalEsourcing portal for the appointment of one supplier. This option would be to tender the works on the open market from companies with the know-how and experience in the supply and installation of ASHPs. From the tender returns, select the most advantageous tender based on the quality, technical and commercial values competencies.

- Option 2: Procure the works via a framework.
  This option is limited to the number of contractors on the Framework, which reduces the Local Authority's ability to invite a wider range of contractors to quote for the works when compared to an open tender. This includes a limited number of contractors affiliated to the Local Authority framework, while an open tender includes all those contractors with the discipline to do the works, which is a far greater pool and is more likely to supply a more competitive tender and hence value for money. This goes to one of LBHF's statements of being ruthlessly financially efficient. It is more beneficial to use Option 1.

- Option 3: do nothing
  This is not an option.

Do nothing, and the failure of the plant will cause a complete shutdown of the building and hence an essential service. This would affect LBHF and the other partners, i.e., London Borough of Hounslow plus 5 others sharing this service.

Risk Assessment and Proposed Mitigations

5. The supply chains of heat pumps have significantly improved as the various manufacturers have begun stocking domestic and commercial heat pumps to meet demand. The shortages of heat pumps and materials during covid-19 and Brexit, have gradually subsided. The high demand for heat pumps, driven by the government climate strategy to reduce GHG and to reach net zero by 2030, have contributed to manufacturers now stocking low carbon technologies products, such as heat pumps. There is a significant improvement of the supply of air source heat pumps to meet the demands to end user.

6. The Procurement process will ensure availability of the air source heat pumps. The tender specification will ensure the availability and deliverability by the successful tenderer in line with LBHF requirements and contractual agreement.

7. Consideration should include the risk profile of the procurement such as: value of the procurement; complexity of the proposed procurement approach; strategic importance of the procurement arrangement.

Timetable

Key Decision Entry (Strategy)	01/11/2023
Contracts Assurance Board (Strategy)	06/12/2023
SLT/Cabinet Member/Cabinet Sign off (Strategy)	28/05/2024
Publication of Tender documents	06/05/2024
Closing date for LBHF to respond to clarifications	21/06/2024
Closing date for clarifications	14/06/2024
Closing date for submissions	12/07/2024
Evaluation of Tenders	19/07/2024
Key Decision Entry (Award)	26/07/2024
CAB (Award)	02/08/2024
SLT/Cabinet Member (Award)	09/08/2024
Contract engrossment	12/08/2024
Contract mobilisation and implementation	19/08/2024
Contract Commencement date	19/08/2024

Selection and Award Criteria

8. The service area will conduct an open market tender.
   The proposed tender will be weighted, 60% Commercial and 40% Technical.

9. The List of questions that will be used in quality and technical section of the tender will endeavour to show the tenderer's various skills and competencies, such as Contract Management, Health, and Safety Management, recent experience of similar works, competency to deal with issues arising during the installation phase, conflict resolution, and ability to deliver the programme on time and within budget.

Contract Management.

10. This contract will be supervised and checked, and continuously evaluated by the Project Manager alongside the contractor's air source heat pumps installers and dedicated control engineer. The size of the contract would require regular weekly site visits in addition to site visits as and when needed. Internal and external stakeholders involved will be well informed and communicated with of the progress of the works via weekly or monthly site meetings. The contract management team will meet on a weekly or monthly basis as needed, which are needed to run such a contract to ensure installations of the heat pumps are delivered smoothly and on time.

11. Risk assessment, health, and safety measures compliant to Construction Design and Management (CDM) Regulations 2015 will be undertaken by the contractor with LBHF agreement / sign-off.

12. The Project Manager will supervise the successful tenderer, Contract Manager, whilst they undertake the project works to ensure successful delivery of the air source heat pumps and associated works on the site. The Project Manager will monitor KPIs (key performance indicators) ensuring that they are met, or in the likelihood that it looks like the KPI's will not be met, take the necessary action and or instruct the contractor, as necessary.

Reasons for Decision

13. The plant has exceeded its life expectancy. The site for the past year, there have been many plant failures which have had a detrimental effect on its BAU. This is due to the failure of existing Chiller and air handling units. If the plant fails, the mortuary must close.

Equality Implications

14. There are no equality implications or risks relevant for this proposed contract as procurement is only relevant to heat pumps installation parameters and manufacturer's guarantee.

Risk Management Implications

15. The project manager will ensure that the new contract will begin under the strict procedures and processes of Construction Design and Management (CDM) Regulations 2015 to avert any health and safety issues arising from the external statutory inspections. The contractor must produce a risk assessment via their Risk Assessment Method Statement (RAMS) submission before the works started. These RAMS will be reviewed and agreed, relevant to site heat pumps installation before the commencement of the project works on site.

Comments verified by David Hughes, Director of Audit, Fraud, Risk and Insurance, 17 November 2023

Climate and Ecological Emergency Implications

16. This tender aligns with our retrofit programme and decarbonisation strategy to replace existing end of life equipment, irreparable gas boilers and gas boilers not fit for purpose with new low carbon technologies that will reduce the usage of fossil fuel across the council's corporate portfolio.
    Replacement of the gas boilers with new energy efficient air source heat pumps models align to H&F Climate and ecology strategy route to net zero target by 2030. These upgrades will reduce the greenhouse gas emission, improve the air quality, health, and safety of the entire environment as well as wellbeing of the occupants and users.
    It reduces carbon dioxide emission thereby saving the cost of gas usage on the site. This action will reduce future costs from the impacts of climate change and maintenance cost of the infrastructure assets of the building.

Hinesh Mehta, Head of Climate Change Dated 17 November 2023.

Local Economy and Social Value

17. The Heat pumps renewable sector market has matured over the years with various heat pumps manufacturer such as Mitsubishi, Daikin, Viessmann, Stiebel Eltron, Grant, Valiant, Nibe, Samsung, Flakt Group, and LG for both domestics and commercial installations. Therefore, supply chains for this project will be seamless and within the contract time limit.

18. The building will be provided with heating, hot water, and cooling generated through low carbon clean renewable energy technology in line with government and the councils carbon zero commitments there is a drive to replace C02 producing assets.

19. It is a requirement that all contracts awarded by the council with a value above £100,000. Bidders should propose social value measures for this contract award amounting to a proxy value of at least 20% before the contract is awarded.

20. This social value proposal should count as 10% of the overall value of each bid.

21. The responsible commissioning officer should work with the Legal team to ensure that the social value measures proposed by the winning bidder are committed in the contract with remedies if they are not delivered.

Local Economy and Social Value Implications completed by Paul Clarke, Social Value Officer 17 November 2023.

LIST OF APPENDICES

Appendix 1 – Business Case For Replacement of The Mortuary HVAC Systems
Appendix 2 – Confidential Appendix – Estimated cost of contract - £710,000