Scope of Works: Horniman Museum Fire Strategy Consultant Tender

Strategic Definition:

Fire Strategy & Stopping Remediation Project at both sites of the Horniman Museum Estate:

The sites covered by this tender are the Horniman Museum at 100 London Road, Forest Hill, SE23 3PQ. This is the grade II* listed main museum and associated buildings.

And the Study Collection Centre (SCC), Dreadnought Building, old School Close (off Millennium Way) Greenwich, SE10 OPG. This is the site of our stored collections and is open to visiting researchers on appointment, it has a staff team based at the site.

Fire risk assessments for the past two years have raised the need to investigate the state of fire stopping and compartmentation across the estate at both the London Road and SCC sites. A survey, conducted at the start of the project and based on a retrospective fire strategy produced as the initial phase of the project, will develop a risk register of areas where fire stopping is significantly degraded or non-existent.

This project will work with our consultant Architect (Llandolt and Brown), Fire Risk assessors (Quadriga), Quantity Surveyors (A J Oakes & partners) and a fire stopping specialist to install specific risk reducing measures in areas identified. Whilst it is not possible to predict the findings of the initial survey, these are anticipated to be primarily around plant rooms, lift shafts, stairwells and storage areas for high value or vulnerable collections. Both stages A and B of this project are to be delivered by the 31st March 2023.

Structure of project:

This project is to be broken into two parts. A and B.

Stage 'A' will involve the procurement and appointment of a suitably qualified fire safety specialist consultant (the consultant must be a chartered fire engineer, accredited with a suitable institution). A series of surveys (if intrusive surveys are required the museum will supply the contractor to undertake these) across our sites and the development of a fire strategy and report with prioritised recommendations. The consultant will determine an outline specification and assist the project manager and QS with the creation of a pricing schedule and site drawings for tender issue, to be issued as an open tender for contractors to price as a cost plus tender. Stage 'A' must be completed no later than the 5th December 2022.

Stage 'B' will involve the procurement of a contractor to undertake a 'find and fix' fire stopping and remediation contract on a cost plus basis according to the fire strategy put together by the consultant as per stage A and with the input of the museums specialist consultants as necessary. Listed building consent, if needed, will be applied for by our consultant architect once the completion of stage 'A' and will run concurrently with the procurement of stage 'B'.

Fire Engineering Consultant – Duties for Tender.

Stage 'A':

- 1.1) Produce a written Fire Strategy for the SCC (Study Collection Centre, our object storage facility in North Greenwich).
 - **Please Note: While floorplans and elevation drawings are available for the SCC upon email request to thopkins@horniman.ac.uk it is strongly recommended that a site visit

to the SCC is made to familiarise yourself with the nature of the building and operation before pricing this element.

- 1.2) SCC Fire Strategy should include:
 - Marked up drawings (DWG's/PDF's of as built structure will be provided) showing locations of all fire compartments, with details on fire ratings and resistance times of walls, floor, ceilings and structural openings (including doors, internal glazing, redundant fireplaces, flues/chimneys and all other vents or openings in the building fabric) where these are required to be of fire resistant materials.
- 1.3) Written retrospective fire strategy for the Museum building, which takes the form of one continuous building, constructed in three phases but all operating as one. The dates of construction of these 'extensions' are 1901, 1911 and 2001, there is an existing fire strategy for the 2001 extension created by Allies & Morrison, this should be reviewed and incorporated into a fire strategy for the building. The fire strategy should cover B1-B5 of the Approved Document B from the Building Regulations of England and Wales, and these can be presented separately for each 'extension' phase, but within the overarching fire strategy document for the museum building or as a single integrated report treating the museum as a single entity, please specify which in your tender response. The museum building is served by two external plant areas, that are to be considered as part of the strategy, these are the Aquarium Chiller compound, and the energy centre. They are interlinked with the museums fire alarm.
- 1.4) The CUE building and Conservatory are in close proximity to the museum, although both are separate structures. The CUE building houses some elements of the collection and both are interlinked through the fire alarm system. A retrospective fire strategy should be produced for both these buildings.

Museum fire strategy should include:

- 1.5) Marked up drawings (DWG's/PDF's of as built structures are available) showing locations of all fire compartments, with details on fire ratings and resistance times of walls, floor, ceilings and structural openings (including doors, internal glazing, redundant fireplaces, flues/chimneys and all other vents or openings in the building fabric) where these are required to be of fire resistant materials.
- 1.6) Marked up drawings showing locations of all fire dampers, smoke dampers and smoke vents in AHU's.

Fire Strategies for both sites should cover at a minimum B1-B5 of the Building Regulations, including:

- The means of escape
- Occupancy type and occupancy number calculations
- o Fire alarms
- Emergency lighting
- o Elements of fire resistance of walls, doors, floors and structure
- External fire spread to adjacent buildings
- Fire-fighting facilities and access for fire brigade
- Recommendations to improve the fire protection and enhance the fire safety of the buildings.
- Please also include potential fire safety measures/improvements aimed at property and contents protection.

Stage 'B':

Using the compartmentation ratings and findings produced in the fire strategy the museum will release a cost plus tender to suitably qualified ASFP contractors to undertake invasive surveys at both sites and undertake remedial work to breaches in the fire stopping compartmentation. The fire consultants are required to allow for the below duties in their tender responses:

- 2. Provide details on repair specifications for typical situations for inclusion in the remediation tender, e.g. services through fire compartment. The fire stopping contractor will be responsible for the details under a design and build contract, and will propose a set of remediation details as a package which the fire engineer will review and agree prior to work commencing.
- 3. Allow for review and scoring of tendering fire stopping contractors quality assessments (top five most competitive only)
- 4. Allow for attendance at contractor interviews, via video conference, ½ day.
- 5. Allow for visits to both sites to review quality of work, please state how many visits allowed for at each site.
- 6. Assist QS, Employers agent and Head of Estates (Project Manager) with any technical issues or queries.
- 7. Support the employer's agent for the fire stopping remediation work. With support from the museums Quantity Surveyor (A J Oakes and Partners) will undertake valuations. The fire consultant will be required to certify the works.
- 8. The fire consultant needs to provide in the tender an hourly rate for attendance at either site, and a rate for additional work off site if required.

The following documents are available on request to support the tender:

- Digital floorplans of both sites available as DWG and PDF.
- Fire Door survey from 2021 at both sites.
- Fire Risk Assessments for both sites.
- Fire Strategy for 2001 extension.
- Asbestos Management Surveys for both sites.
- AHU Fire Damper Survey Report from 2021

Pricing:

Please submit pricing for your tender return using the pricing document (excel format) the below is shown for information only:

Stage A	£
Items 1.1 and 1.2 Produce a written Fire Strategy for the SCC (Study	
Collection Centre, our object storage facility in North Greenwich). Including	
drawings as per requirements.	
Items 1.3, 1.4, 1.5 and 1.6 Retrospective fire strategy for the museum	
complex, including drawings as described.	
Stage B	
Items 2, 6 and 7:	

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Provide details on repair specifications for typical situations for inclusion in	
the remediation tender, e.g. services through fire compartment. Assist QS	
and Head of Estates with any technical issues or queries. Act as the	
contract administrator for the fire stopping remediation work. With	
support from the museums Quantity Surveyor (A J Oakes and Partners) will	
undertake valuations. The fire consultant will be required to certify the	
works and manage the 12 month rectification period.	
Items 3 and 4:	
Allow for review and scoring of tendering fire stopping contractors quality	
assessments (top five most competitive only)	
Allow for attendance at contractor interviews, via video conference, ½ day.	
Item 5:	
Allow for visits to both sites to review quality of work, please state how	
many visits allowed for at each site.	
Item 8:	
The fire consultant needs to provide in the tender an hourly rate for	
attendance at either site, and a rate for additional work off site if required.	
Total:	