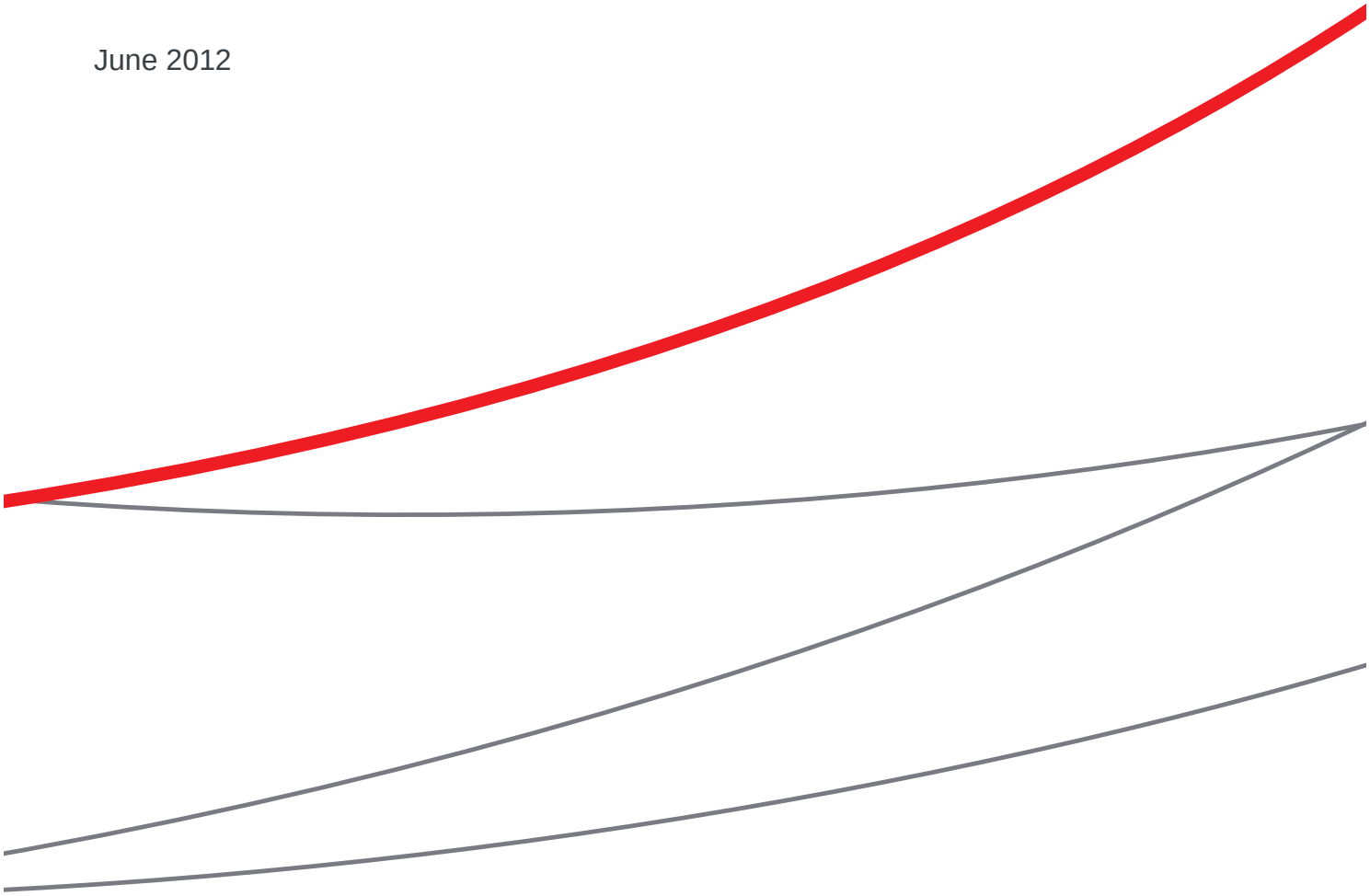
London Borough of Hammersmith and Fulham

Feasibility Report for the Upgrade of Hammersmith Library, Shepherds Bush Road, Hammersmith, London W6 7AT

June 2012



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1 Executive Summary

1.1 EC Harris LLP (ECH) were appointed by London Borough of Hammersmith and Fulham (LBHF) in February 2012 to advise in respect of a project to upgrade the fabric of the Hammersmith library in Shepherds Bush Road and to upgrade the services offered by the library to the users.

1.2 ECH met representatives of the library service on 13th March to discuss their requirements in further detail and carried out surveys of the premises in April to assess the works required. The principal requirements for LBHF were:

- Carry out external redecorations and repairs
- Carry out internal redecorations, remedial works to the plaster and renewal of floor finishes
- The installation of secondary glazing to reduce heat loss and sound transmission
- Reconfigure the ground floor library facilities
- Report about the feasibility of creating an open plan office on the first floor
- Report about the feasibility of installing a lift
- Investigate the extent and causes of dampness in the basement
- Improvement of the staff facilities on the second floor
- Improvement and replacement of the automated entrance doors
- Improve the performance of the heating installation
- Improve the quality of the lighting
- The installation of RFID units
- The provision of Wi-Fi coverage throughout the library
- The renewal of the shelving
- New signage

1.3 We carried out a survey of the premises in April 2012 to assess the condition of the library and the feasibility of carrying out the above works to enable us to provide an estimated cost. The surveys were none intrusive and the front elevation of the roof could only be inspected from ground level.

1.4 Overall the fabric of building is in a good state of repair with the majority of the works that are recommended are associated with preventative maintenance, internal redecoration and renewal of floor finishes.

- External decorations and repairs are required to ensure that the condition does not deteriorate creating a risk that any external repairs become more expensive.
- Although LBHF advised that water penetration is an issue we consider this to be localised and renewal of the roof covering is not necessary. We also consider that the majority of the works required to the roofs are required to the flat roofs
- The most significant issue in respect of the exterior that will require consideration is associated with the renewal of the main roof light that serves the ground floor library area. We recommend replacement due to the extent of the repairs that appear to have already been carried out although this proposal is subject to the outcome of discussions with the conservation officer and review of the health and safety issues associated with this work.
- The internal decorative finish to the public areas remains reasonable although the finishes to the staff areas are becoming tired and LBHF may wish to consider adding this to the scope of works. As such we have included estimated costs in this report.
- The costs also include for the stripping of paint from the walls in the circulation areas since we do not know if there are too many layers of paint on the walls to enable a class 0 surface spread of flame rating to be achieved. However, we propose that an adhesion test of the paintwork can be carried out in advance of the specification being written.

- However, there two issues associated with the structure that are subject to further investigation:
  - There is cracking in the soffit of staircase 2 and the adjacent external wall at first floor level. This is currently being monitored and we are awaiting the outcome of these investigations.
  - There is cracking in the wall over the door opening to the children's library which requires further investigation.
- We also recommend that consideration is given to replacing the existing fire doors with doors that meet the current certification requirements and we have also included costs in the feasibility below.
- We recommend that further investigations are carried out to find out the causes of dampness within the basement. However, we have a budget cost for tanking of the walls in staircase 2 and room 3 in the basement.

1.5 Overall the mechanical and electrical installation is in serviceable condition. However, we highlight the following:

- Although the wireless fire alarm system was installed five years ago LBHF have reported a history of faults with the alarms and unsatisfactory performance. On this basis we recommend that a new wireless fire alarm system is installed to replace the existing.
- Although LBHF have expressed concern with the quality of the heating we consider that it is functional and that the problems are associated with a lack of maintenance and the temperature controls being insufficient to provide staff with the ability to regulate the temperature in different areas.
- The boiler is reaching the end of its serviceable life and we recommend that it is renewed as part of these works.
- With the exception of the lighting in the existing children's library we consider the level of lighting to be sufficient for the needs of library users and staff. However, if LBHF were to reconfigure the layout of the library it may be necessary to review the proposals and advise upon the need for supplementary localised lighting.
- Although we recommend the replacement of the automated entrance door and the operating mechanisms we propose that the existing lobby be retained with the doors only being renewed.
- We are currently reviewing a periodic inspection report that was recently carried out in respect of the electrical installation and enquiring the extent to which the works recommended in that report have been carried out. We recommend that any outstanding items are included in the scope of works although we have not included this in the estimated cost below.

1.6 The feasibility of several of the items is dependent upon further investigation or design development and as such we have only been able to provide budget costs.

- The supply and installation of secondary glazing will be very dependant upon the outcome of consultation with the conservation officer and the feasibility of developing a design compatible with the existing window details. There is a risk that the provision of secondary glazing will create a requirement for additional mechanical ventilation (although this is not included in the estimated costs)
- The feasibility of opening up the existing children's section on the ground floor of the library is subject to the review of the proposals by a structural engineer.
- The creation of the open plan office on the first floor is subject to an assessment of the structure by a structural engineer, a fire risk assessment and an application for Building Regulation consent.
- The feasibility of installing lifts is subject to consultation with a structural engineer, a fire risk assessment, a DDA audit and an assessment of the benefits obtained by the provision of the lift against the cost of this work. The costs advised below are budget costs based upon the construction of a standard lift shaft and passenger lift and do not allow for any specific requests made by a conservation officer or for the installation of a scenic lift in the public area.
- Although damp readings were recorded in the basement we consider that further monitoring and investigations are required prior to a proposal being developed for remedial works.

1.7 Although LBHF have included the replacement of the shelving within the library as part of the works required we have presumed that LBHF will procure the supply and installation separately and that this work is not included in their budget allocation of £1.1m. As such the cost of this work is not included in the budget estimate below.

1.8 LBHF propose to supply and install RFID units that will allow the public to borrow books through an automated bar code process. The proposal anticipates that the RFID units will be located adjacent to the entrance to the library. We understand that LBHF will be procuring the units and that the cost for this is not included in the budget allocation of £1.1m. However, the estimated cost does include the cost of power and data within the proposed location of the RFID units to enable them to operate.

1.9 LBHF have advised that they need to examine the impact that the proposed elements will have upon their carbon footprint. We consider that the scope of work needs to be agreed following the evaluation of the costs and following this the carbon foot print can be reviewed. However if new lifts are not installed and LBHF decide not to proceed with the installation of secondary glazing it is unlikely that these works will have any impact upon the carbon footprint.

1.10 The costs of carrying out the works are outlined below.

ELEMENT	COST (ex VAT)
FABRIC WORKS	
Repairs to the pitched roofs	£15,000.00
Repairs to the flat roofs	£17,500.00
Repairs to the rainwater goods and waste drainage	£5,000.00
Repairs and redecoration to windows and external doors	£17,000.00
Supply and installation of secondary glazing	£26,500.00
Repairs to external masonry	£75,000.00
Alterations to the main entrance	£5,000.00
Reinstatement of brick arches and opening up of the children's library	£15,550.00
Internal plaster and render repairs	£27,500.00
Remedial works in respect of dampness (provisional sum)	£11,000.00
Redecoration of interior of library	£55,000.00
Renewal of floor coverings	£112,500.00
Creation of open plan office on the first floor	£30,000.00
Creation of new staff facilities on the second floor	£12,500.00
Renewal of doors	£50,000.00
Refurbishment of the WC facilities	£25,000.00
Structural repairs	£9,000.00

Repair hardstand areas	£5,000.00
Supply and installation of reception counter (provisional sum)	£20,000.00
Renewal of shelving and furniture	TBC

MECHANICAL & ELECTRICAL WORKS	
Renewal of boiler	£100,000.00
Upgrading of the heating system	£20,000.00
The installation of two passenger lifts (including lift shaft and structural alterations)	£250,000.00
The upgrading of the lighting	£80,000.00
Renewal of fire wireless fire alarm system	£32,000.00
The installation of RFID self-service units	£35,000.00
The installation of Wi-Fi	inc
Works to the electrical intake cupboard	£2,000.00
Total value of works	£1,053,050.00
Scaffolding: Provisional sum	£150,000.00
Preliminaries @ 12.5%	£150,000.00
Statutory fees	£15,000.00
Professional fees (budget cost)	£203,000.00
Contingency sum @ 20%	£315,000.00
Total	**£1,886,050.00**

1.11 Our recommendations are as follows:

a) A CDM co-ordinator should be appointed prior to the design development

b) The proposed works are aligned read in conjunction with the existing fire risk assessment. The design proposals and fire risk assessment should be developed in alignment.

c) A DDA audit is carried out in respect of the library and evaluated against the proposed works.

d) The external decorations and repairs as outlined in this report should be carried out. LBHF consider the benefit that will be derived from the creation of an open plan office on the first floor and evaluate this against the cost.

e) The existing wireless fire alarm system should be replaced

f) The boiler should be replaced

g) The heating installation should be upgraded and a suitable maintenance regime put in place

h) The lighting should be upgraded with localised lighting being installed if required. LBHF consider the benefit that they will derive from the installation of the lift against the cost of installation

i) There is further discussion between LBHF and ECH in respect of the requirements of the library facilities on the ground floor to allow the costs and design to be properly evaluated.

1.12 We draw LBHF's attention to the following legislative requirements which will be applicable to this project:

a) The Regulatory Reform (Fire Safety) Order 2005

b) The Control of Asbestos Regulations

c) Listed Building Consent

d) Planning Permission

e) Building Regulation

f) Construction Design Management Regulations 2007

g) Disability Discrimination Act

h) Site Waste Management Regulations

i) The Control of Lead at Work Regulations

1.13 These are outlined in greater detail in section 8.0 of this report.

2 The Brief

2.1 On 31st January 2012 LBHF advised ECH that they have a budget of £1.1m for the following works:

a) To carry out remedial work to the external fabric of the building

b) To carry out alterations within the building to allow for improved services to be provided to the library users

2.2 As part of this project LBHF have requested that consideration should be given to the impact that the proposed work elements will have on the carbon footprint of the library.

2.3 They have also requested that consideration should also be given in respect of the procurement options and logistical issues that the contractor will have to resolve to carry out the works so that the necessary project approvals can be clarified and included within an overall project delivery programme.

2.4 They also advised that they required the following works to be carried out:

2.5 Building Fabric

a) Repairs and replacement of all defective rainwater goods

b) Repairs and replacement of slate roofs, associated flashings and general brickwork

c) Restoration and repairs to the existing period windows

d) The installation of secondary glazing to reduce heat loss from the premises and the level of sound transmission from outside the premises

e) Improvement or replacement of the automated doors

f) Reinstatement of the original bricked in archways through the children's library to the staff office

g) Remodelling of the cellular offices on the first floor to provide one open plan space

h) Installation of a new staff welfare room and the provision of a new kitchen

i) Repairs to the plasterwork to the interior of the building

j) Remedial works to the dampness in the basement area

k) Redecoration of all areas throughout the building

l) Replacement of the floor coverings throughout the building

m) Renewal of shelving and furniture (particularly throughout the public areas) which includes the removal of the fixed wooden shelving on the ground floor that was installed in the 1950's

2.6 Mechanical and Electrical Services

a) Upgrading of the heating system (including a rationalisation of the service pipe runs)

b) The installation of a passenger lift and the creation of step free access to certain areas on the first floor to improve accessibility in accordance with LBHF policy

c) The upgrade of the lighting with the use of LED luminaries and the replacement of power distribution to current standards including the provision of floor mounted power sockets throughout the ground and first floor public areas

d) The installation of RFID self-service units

e) The installation of Wi-Fi

2.7 On13th March Ben Walsh and Ann Cooper of LBHF met Paul Chapple and Patrick Castello of ECH to discuss the brief in further detail. Following this ECH carried out a survey of the library in April 2012 so that they could make recommendations to LBHF in respect of the brief. However, LBHF had previously advised on 22nd February that priority should be given to the works that are required to prolong the life cycle of the external fabric of the library. Only when they are assured that there is

sufficient budget allocation to carry out the repairs to the exterior of the premises will they give consideration to the proposed internal alterations.

2.8 Ben Walsh confirmed that consideration should be given to ownership of the interest in the adjacent premises and clarification was required in respect of ownership of the demise although discussion of this issue is not included within this report.

3 Hammersmith Library

3.1 Hammersmith Library is a Carnegie Central Library designed by Henry T Hare with construction being completed in 1905 and is Grade II listed. The library is considered to be an example of "full blown Edwardian Baroque" with external walls comprising red stock brick and Portland stone construction with Palladian windows (photograph 1). The front elevation features sculptural ornaments (including those of Shakespeare and Milton and reliefs of Literature and Art, Industry and Science) in Portland stone by F.E.E. Schenck. The roof is principally a pitched roof with a covering of natural slate although there are flat roofs with and asphalt roof covering to the rear. The windows are single glazed leaded light metal casement windows within timber frames.

3.2 The library principally comprises ground and first floor levels although there is also a basement and second floor within the south wings of the building. The main ground floor section of the library and the first floor reference library receive natural light through single glazed roof lights (in addition to the single glazed windows). The internal decorative finish is principally painted walls although the Chief Librarian's offices, the main library areas and the main public staircase contain particularly ornate decorative friezes

4 Condition Summary and Recommendations

Overview

4.1 Overall the building is in a good state of repair although general maintenance is required in future to maintain the value of the asset and the following works are recommended:

a) Renewal of the asphalt upstands

b) Replacement of the main roof light

c) Preventative maintenance to flat roofs

d) Remedial works to the rain water goods

e) Repairs to the brickwork affected by frost damage

f) Stone work repairs

g) External decorations and repairs

h) The replacement of the existing wireless fire alarm system

i) The replacement of the boiler

j) The provision of additional controls to the heating installation and an overhaul of the heating installation.

k) The replacement of the automated doors.

l) Remedial works to the electrical installation

Building Fabric

The Roof

4.2 The main roof is a pitched roof with a slate covering although there are flat roofs at the rear of the premises covering the rear ground and first floor offices. Although there was access to the flat roofs at the rear enabling an inspection of the rear elevation main roofs the front elevation roofs could only be inspected from ground level in Shepherds Bush Road.

4.3 Overall the pitched roof can be considered to be in fair condition with the slate course being level and the roof structure being free of deflection.

Water Penetration

4.4 Water penetration currently appears to be restricted to the following areas:

a) The reference library at first floor level on the west side of the building although the problem could be associated with a failure of a parapet gutter (this is discussed further in the section about rainwater goods).

b) The newspaper store at first floor level at the front of the building

c) The east elevation wall to the ground floor section of the library although we consider this to arise from the walls and will be discussed in a separate section of the report.

d) The roof over the staff entrance to the library

e) The wall in the Chief Librarian's Office (room 6 on the first floor) on the wall adjoining room 5

f) The ceiling in the corridor (room 3 on the first floor)

g) The staff kitchen (room 2 on the second floor)

4.5 During the meeting of 13th March LBHF drew attention to the possibility of water penetration to the newspaper store adjacent to the main staircase although further inspection suggests that if this area is still affected by water penetration the problem could be more associated with a failure within the walls. The wall finish at the head of the window has very noticeable evidence of water penetration although the ceilings are not bowed and are subject to very light staining only. If there was a failure in the roof or parapet gutter over this area we would have expected the ceiling to have been in a more advanced state of disrepair.

The Cupola

4.6 At the centre of the roof there is a cupola comprising a lead pitched roof supported on a single glazed timber frame. The cill is dressed with lead with the base structure being protected with slate cladding with lead flashing has been dressed at the abutment between the main pitched roof and the cladding. Although several of the slates have slipped from the cladding the cupola can be considered to be in a reasonable state of repair and requiring general redecoration and minor repairs to maintain the condition.

The Pitched Roof

4.7 The roof is protected at the ridge with half round clay ridge tiles with the lightning conductor running across them. The ridge tiles are beginning to exfoliate and several require rebedding and we recommend the replacement of the ridge tiles that are affected by exfoliation and the rebedding of any loose ridge tiles. However, this work will also entail the removal and refixing of a lightning conductor.

4.8 Approximately 60 slates on the east (rear) facing section of the roof are held in place with tingles indicating that slates have previously slipped or become broken and required replacement/refixing. However, in proportion to the quantities of slates over the roof this would appear to be insignificant in a roof covering that has achieved up to half of its estimated life cycle. Since these slates are securely fixed we would not consider it necessary to carry out any further remedial works.

The Roof Light

4.9 The east facing (rear) elevation of the main roof includes a roof light (photograph 2) which provides natural light to the main library area on the ground floor. The following issues were noted in respect of its condition:

a) Nine of the twenty glazing bars have received repairs in flashband.

b) The flashings at the abutment between the upper and lower sections are torn.

c) Four of the glazed sections are cracked.

d) The lead flashings on each side of the rooflight appear to have received a coating of a water proof coating indicating that there have been problems of water penetration in the past.

e) The rooflight is supported by an upstand wall with a lead flashing dressed under the bottom of the glazed section. However, lead flashing has slipped from under the rooflight and requires replacement.

4.10 We recommend that the roof light is replaced although it will be a building regulation requirement that it should be replaced with a double glazed unit. It is likely that the conservation officer will object to this when an application for listed building consent is submitted and that Building Control may agree to the replacement with a single glazed rooflight.

4.11 If the roof light is replaced consideration will have to be given to the following:

a) The construction details where the roof light meets the roof will require consideration. The rooflight will have to be double glazed and the increased thickness may increase the level of the rooflight above the level of the slate covering.

b) Keeping the court weathertight throughout the duration of this work.

c) Carrying out the works in a safe manner (operatives will be working at a height of two stories and will be working above the glazed roof light over the ground floor of the library (photographs 7 and 8))

d) The feasibility of developing a design that is in keeping with the existing details as far as is reasonably practical so that listed building consent may be obtained.

4.12 The benefit of replacing the roof light with a double glazed roof light is that the level of heat loss from the premises will be reduced. However, if the cost exceeds the benefit or it is not possible to obtain listed building consent for this work an alternative solution would be to apply a Clearglaze liquid coating manufactured by Liquid Plastics over the roof lights. However, the same health and safety issues that apply to the replacement of the rooflight are applicable to the application of the Clearglaze coating.

4.13 There are also roof lights on each side of the pitched roof over the reference library (photograph 3). Although there was insufficient access to enable us to properly inspect the condition of these we do not propose to carry out any remedial works to them. However, if LBHF did wish to carry out preventative maintenance works at this stage we recommend that consideration is given to applying a liquid coating such as Decothane Clearglaze by Liquid Plastics since they do not appear to have suffered the same level of deterioration as the rooflight serving the main library area on the ground floor.

4.14 The feasibility of engaging a roped access team should also be considered to avoid incurring the cost of erecting scaffolding. Nevertheless, this would be subject to the appropriate risk assessments being carried out and the contractor properly demonstrating that they can carry out the work in a safe manner.

Flat Roofs over the Ground and First Floor Offices

4.15 Although not outlined on your brief we recommend that further remedial works are carried out to the flat roofs (photographs 2, 4, 5 and 6).

4.16 The asphalt flat roof over the first floor is generally free of splits tears and bubbles although the solar reflective paint finish is beginning to crack.

4.17 There is a raised section of flat roof over the first floor where promenade tiles have been bonded to the asphalt. Although there is no evidence of deterioration it is not possible to assess the quality of the asphalt covering in this section of the roof. However, there is a risk that the bitumen bonding the promenade tiles to the asphalt could react with the asphalt and cause the asphalt to deteriorate.

4.18 However, the application of the original asphalt roof coverings did not take account of the need to allow for differential movement between the concrete slab and the walls although at this stage the only defect that is visible is a crack in the abutment between the flat roof and the upstand to the rooflight. On this basis we recommend that the asphalt skirting is cut out and renewed throughout the whole of the flat roof.

4.19 Following the renewal of the asphalt upstands and lead flashings we recommend that two coats of solar reflective paint are applied to the roof covering to provide protection against the sun and prolong the life of the asphalt.

4.20 The surface of the asphalt roof covering over the ground floor offices is affected by more noticeable surface cracking. Nevertheless, this only affects the surface and we consider that the remedial measures carried out on the first floor roof will be sufficient over this roof.

4.21 However, the flat roof coverings over the staff entrance lobby and corridor are in a more severe state of repair (the asphalt upstands have detached from the wall and slumped and the flat roof covering is rippled) and we recommend that these roof coverings are replaced.

4.22 The application of a water proof coating (such as Acropol) would not normally be acceptable because the Building Regulations now require the insulation levels of the roof to be enhanced to the current requirements of Part L2B of the Regulations.

4.23 In this case it may be possible to obtain a waiver to this requirement because of the insulation thickness can only be increased if the window cills are raised which will then require the windows to be renewed.

4.24 Nevertheless, Building Control may to agree to this waiver on the grounds that the cost of supplying and laying new insulation exceeds the cost saving generated by the saving in energy although the conservation officer is likely to support a request to restrict the remedial works to the application of a waterproof membrane so that the existing windows can be retained.

4.25 However, a cost benefit analysis of these two options will need to be carried out.

Lantern Lights

4.26 There are two single glazed lantern lights over the ground floor offices overall these are in a fair state of repair. The metal framework is in a good state of repair and requires repainting although there are approximately five panes of glass which have broken and will require replacement.

Masonry Repairs at Roof Level

4.27 The following masonry repairs are also required at roof level:

a) The hacking off and renewal of the render finish that has blown from a pier / chimney stack on the rear elevation

b) The replacement of the flaunching to the tile creasing to the rear parapet wall at ground floor level where the existing has deteriorated

c) The replacement of the render above the asphalt upstand to the parapet wall to the roof at first floor level

The Rainwater Goods

4.28 At the meeting of 13th March LBHF advised ECH that they considered the principal cause of water penetration into the building to be associated with balls from the adjacent school landing on the roof and obstructing the rain water outlets. This prevented rainwater from being easily discharged from the roof causing it to overflow into the library resulting in damage to the plaster within the premises.

4.29 The rainwater goods comprise, principally, of 150mm diameter half round PVCu rainwater pipes and cast iron rainwater pipes. At the front elevation the rainwater discharges into a parapet gutter and into a two hopper heads and rainwater pipes. At the sides and rear elevations rainwater runs into 150mm diameter half round PVCu gutters and into rainwater pipes and across the flat roof areas to the rear.

4.30 Overall the rain water goods are in a reasonable state of repair although the following issues were noted:

a) There is evidence of water penetration into the reference library although it was not possible to gain access to the roof at the front elevation to inspect the condition of the guttering and roofing details. At this stage the problem could be associated with either a failure in the lining of the parapet gutter or the deterioration of the condition of the rainwater pipes where they pass through the walls. Nevertheless a defect to the roof covering should not be discounted. We recommend that consideration is given to the appointment of a roped access team to inspect the condition of the front parapet gutter and carry out any necessary remedial works.

b) At the front elevation there is dark staining on the wall indicating that there was previously a leak from the rainwater down pipe on the right hand side in this area. Since the staining is not green it is presumed that any leak has been remedied and that the current discoloration is historic. A new section of rainwater pipe appears to have been inserted at pavement level indicating that repairs have been carried out.

c) A section has broken from the bracket to the rain water pipe on the left hand side of the front elevation at ground level. This will require replacement which will entail breaking out the section of Portland stone plinth which encloses it. The staining on the wall in the vicinity of this area is green indicating that the water over flows from this area.

d) It appears that the original brackets to the cast iron rain water goods comprised an ornate scroll pattern where they were fixed to the wall although the majority of these appear to have disappeared.

e) The hopper heads to the rain water down pipes on the North elevation incorporates ornate details although an element of this appears to have been lost from the hopper head to the right hand side.

f) The rainwater pipe adjacent to the door to the roof over the first floor stack room is not securely fixed and appears to be supported by the asphalt roof covering.

g) The rain water goods in the rear courtyard (adjacent to rooms 3 -7 on the ground floor) appear to be undersized when consideration is given to the fact that all rainwater discharged onto the rear elevation rooms runs into these two rainwater pipes.

4.31 As advised earlier the rainwater goods are in a reasonable state of repair and propose that the following works are carried out:

a) Investigate the condition of the front parapet gutter and remedy any defects.

b) Repairs to the cast iron rainwater pipe on the front elevation.

c) Replace the PVCu rainwater pipe that discharges on to the roof over the stack room at first floor level (that is not properly secured)

d) Replace the rainwater downpipes in the rear courtyard (outside rooms 3-7) so that they are of a size that is proportionate to the volume of rainwater which discharges into this area.

e) A general overhaul of the rainwater goods (ensuring that brackets are secure and joints are watertight)

f) Redecoration of the rainwater goods

4.32 LBHF may also wish to give consideration to restoring ornate details (such as the brackets to the rainwater pipes) and the hopper head on the north elevation although these repairs are of cosmetic and not functional improvement. However, the restoration of these details has not been included in the cost of these works.

The External Walls

4.33 The front elevation is constructed from red stock brickwork laid in English bond and Portland stone cladding in a mixture of all three (Ionic, Doric and Corinthian) classical architectural styles.

4.34 Each side of the front elevation is constructed principally from Portland stone cladding and single glazed stain glass windows. Corinthian cornices crown the top of the elevations with the window opening at first floor level being supported by columns with Ionic capitals. However, the openings across the windows at ground floor level are supported by columns with Doric capitals.

4.35 The front elevation walls between these wings comprises Portland stone cill and columns at first floor level with an Ionic capital supporting the main front parapet wall also formed from Portland stone with a lead flashing dressed over the top of the frieze. The walls at ground floor level are red stock brickwork with Portland stone plinth at ground level.

4.36 The side and rear elevations are principally constructed from red stock brick in English bond although the windows are enclosed in a Portland stone surround with Portland stone mullions.

4.37 Overall the condition of the external walls can be considered to be good; they are plumb and are free of cracks although there are areas that are stained. However, the face of the brickwork has eroded in areas and significant quantities of brickwork repairs are required and this problem is particularly acute in the following areas:

a) The rear boundary walls

b) The area below the ground floor windows on the north facing side elevation wall

c) The brickwork on either side of the staircase to the basement on the south facing elevation

d) The rear courtyard outside rooms 3-7.

4.38 Red stock bricks are particularly soft and absorb water more easily than other bricks and as such they are more vulnerable to frost damage than other bricks.

4.39 The estimated costs allow for the re-facing of the brickwork although consideration should also be given to cutting out and replacing the bricks although this will also depend upon the budget available and the ease of access (e.g. if access requires the erection of scaffolding there may be greater benefit in replacing the brickwork rather than refacing).

4.40 Although the Portland stone is generally in a good state of repair the following was noted:

a) Areas of stone work have chipped from the cill and stonework repairs will also be required. At this stage the problem would appear to have been caused by frost action and exposure to rain

b) The Corinthian cornices are not protected by leadwork and are heavily stained from rainwater. We recommend that the staining is cleaned from the walls and a lead cladding is applied over the top of the architrave.

c) The walls are affected by staining and the facing of the Portland stone cladding at pavement level is affected by surface erosion and we would recommend that any loose and friable material is scraped from the surface and that stonework repairs are carried out. However, we need to carry out a further evaluation of the feasibility of this repair to satisfy ourselves that a relatively this coating will remain suitably robust.

The Windows

4.41 The windows are single glaze metal casement leaded light windows within timber frames with the windows to the first floor reference library and the front elevation also incorporating stained glass. LBHF advised during a meeting on 13th March that the windows benefited from major repairs in the 1980's with extensive timber repairs and renewal of the leaded lights to the windows.

4.42 Overall the condition of the windows appeared to be good although there was only limited access to the window which prevented a thorough inspection from taking place.

a) The paintwork appears to be deteriorating at the bottom of the frames although there does not appear to be any timber decay (although the timber cills on the windows overlooking the rear flat roofs do appear to require timber repairs).

b) The leaded light windows were pressed as part of the survey and there was no movement indicating failure of the joints in the leadwork.

c) The condition of the ironmongery was not fully inspected although it appears to be operational.

4.43 Although there was limited access to thoroughly inspect the windows we consider that they are in a good state of repair and that remedial works can be restricted to redecoration and to minor timber repairs. There was little visual evidence of timber decay (with the exception of the cills overlooking the roof to the flat roof over the ground floor) and there appeared to be little deterioration of the joints between the lead sections within the casements. The specification will also allow for ensuring that the joint between the window and the structural openings are weather tight.

4.44 Nevertheless, the full extent of repairs will only be determined when an access scaffold or cherry picker is provided and so that the condition of the windows can be properly inspected from the exterior of the premises.

External Decorations

4.45 Overall the decorative finish externally is in fair condition although we recommend that full external redecoration is carried out to maintain the condition of the fabric. These works should entail:

a) The cupola over the main roof

b) Repainting of the fascias and soffits at roof level

c) The painting of previously painted doors and windows

d) The wrought iron gates on each side of the premises

e) The wrought iron gates to the front of the premises

f) The rainwater gutters, hopper heads and downpipes

g) The metal railings on the front elevation

The Hardstand Areas

4.46 The hardstand section on the north elevation is tarmac and although it is not breaking up or significantly affected by cracking the surface is very uneven and there is vegetation growing from within the abutment between the hardstand area and the walls indicating that water is running into these areas. We would recommend that the new hardstand area is constructed so that it falls away from the library building and reduces the risk of water penetration to the basement areas.

The Internal Walls, Ceilings, Floor Coverings and Doors

4.47 The interior of the library areas (photographs 8, 9 and 10) comprises principally of a painted walls and ceilings although the walls to the main public staircase are clad in marble up to the handrail height. The finishes to the main public areas on the ground and first floor and the Chief Librarian's office are particularly ornate and include cornices etc and overall the interior of the premises is in a fair state of repair although the decorative finishes to the staff offices are now very tired.

4.48 The walls are generally plumb and there is no deflection of the walls or ceilings indicating that the structure is generally sound. However, the following was noted in respect of the condition of the structure:

a) There is a fracture on both sides of the wall over the door leading to the children's library which is evidence that there could be a structural issue and this requires further investigation.

b) There is ongoing monitoring of cracking to the rear staff staircase which is reported to have been taking place over the last six months. Tell tales have been placed over a crack in the wall and to the soffit (photograph 12) to the staircase at first floor level. The location and pattern of the cracking in the wall is not consistent with a problem such a subsidence or structural failure although the cracking in the staircase requires further investigation, particularly as the concrete is very thin.

4.49 In the section about roof coverings the report comments about the areas of water penetration and this section of the report comments upon the east facing wall on the ground floor of the history section of the library. The wall is stained and the paintwork is flaking. An inspection of the exterior of the wall showed salt deposits on the wall suggesting that moisture is absorbed and retained within this section of wall. Red stock bricks are particularly soft and more easily absorb water and it may be that replacement of the bricks in this area is required to remedy the problem.

4.50 There are category one cracks in the ceiling finishes which in themselves do not give cause for concern. However, if the ceilings are lath and plaster, the cracking could represent the early stages of failure in the lath and plaster and a closer inspection from a tower to find out if the lath and plaster is beginning to debond from the ceiling will be required. However, at the time of inspection the ceilings were generally level and free of deflection and we do not consider this to be an issue of immediate concern. However, the nature of lath and plaster ceilings is that there is a risk that they can collapse without prior warning.

4.51 Although there are no obvious defects (with the exception of them being tired) to the floor finishes on the ground floor (e.g. split floor coverings, fraying carpets etc) the floor slab appears to be uneven. If the floor coverings are replaced allowance will have to be given for the repairs to the screed and the application of an additional coating of screed to provide a level surface.

4.52 Overall the internal doors are in a serviceable state of repair although we recommend that consideration is given to the replacement of the existing doors with fire doors certified to current standards. Nevertheless we recognise that given the listed status of this building this will not be possible in all cases and works to some of the doors will have to be restricted to an upgrade as far as is reasonably practicable.

4.53 However, the door to the electrical riser cupboard on the ground floor is a timber panel door which does not appear to provide any level of fire resistance and replacement with an FD60S doorset to match the existing is required.

WC facilities

4.54 Although we were not asked to comment upon this as part of the brief the internal WC facilities, although serviceable, are tired and LBHF may wish to consider their upgrade as part of a major renovation project. As such we have included the cost of this work in the estimated costs.

Mechanical Services

Boiler

4.55 The existing heating boiler plant consists of one Hoval SR Plus boiler, complete with Nu-way pressure jet gas fired burner. The boiler is connected to a stored water feed tank in the roof space and direct expansion buffer vessel located in the boiler room. The boiler and associated plant was last replaced in 1993 and have a rated heat output of 190 kW.

4.56 The floor mounted boiler is located within the basement plant room and visually appear to be in fair condition for their age. The boiler is controlled via a simply date and time control unit and inter-lock with mechanical supply and extract ventilation plant for the room so that in the event of a failure of the ventilation system the boiler switches off.

4.57 Based on the Chartered Institute of Building Services Engineers (CIBSE) Guide M Appendix 13.A1 Indicative life expectancy table, the boiler plant and associated equipment will be due for a life cycle replacement within the next 5 years. It is recommended that the existing boiler is replaced with a modulating high efficiency condensing boiler unit.

Hot Water Services

4.58 Hot water is provided from individual wall mounted unvented electrical water heaters at each sink or wash hand basins the toilet and staff kitchen areas. They are estimated to be five years old and, based upon a visual inspection, are considered to be in serviceable condition. We have not received any reports of any problems and on this basis we do not consider it necessary to replace the hot water heaters.

Heating

4.59 The library areas and the offices on the ground and first floor are heated by floor standing fan convectors and the staff areas on the second floor are heated by various pressed steel panel radiators.

4.60 During the meeting of 13th March LBHF requested that consideration be given to providing an improved level of heating in the public areas. They advised that there are whole areas of the building that do not benefit from sufficient levels of heat and highlighted the following issues:

a) The main library and the study rooms are the principal areas where there are issues

b) There are two large fan heaters in the reference library / study room (at first floor level) which provide excessive heat in the summer and insufficient heat in the winter.

c) The old administrative office has two convector heaters which are placed 300mm apart.

d) The heating system was installed in 1995 and the boiler has tripped out.

4.61 Although LBHF considers that the level of heating is poor we consider the installation itself to be operational and do not consider that replacement of the heating system is required. We consider that the problems that LBHF are experiencing with the level of heating are associated with the fact that there are a very limited number of controls which mean that the library's staff does not have the facility to adjust the heating levels to meet the specific needs of zones within the building. As such our recommendation is that additional temperature controls are installed which will allow temperature to be regulated to the specific needs of a particular area.

4.62 Although the majority of fan convectors were installed as part of the refurbishment of the mechanical services installation in 1995 they appear to remain in satisfactory condition. A visual inspection was carried out of these units and it appears that they are not receiving the correct level of maintenance (e.g. the convectors should be cleaned annually although this does not appear to be happening). We consider that the overhauling of the convector heaters allied with the installation of additional controls will address the problems that LBHF are currently experiencing.

4.63 We do, however, recommend that new low surface temperature fan convectors are supplied and installed in the areas listed below:

a) The existing children's library area following the removal of partitions and the creation of new arches

b) The proposed open plan office on the first floor

4.64 We also recommend that a new warm air curtain is supplied and fitted over the main public entrance to the library.

Distribution Pipework

4.65 The pipework to the heating installation is mild steel and is surface mounted. We were only able to carry out a visual inspection and the majority of the pipework was concealed by insulation. Nevertheless, the limited areas of pipework that were visible for inspection suggests that the pipework is in serviceable condition and there was no visual evidence, such as staining, which indicates that there are no leaks from the pipework.

4.66 We did note that sections of insulation were damaged and we recommend that these are replaced.

4.67 We also recommend a more detailed inspection of the heating pipework although we do not propose to carry this out until works commence on site where a section of pipe will be cut out to assess its internal condition although the estimated costs do not include for pipework replacement.

4.68 Nevertheless we estimate that the pipework is between 25 and 30 years old and estimate the remaining life to be between 10 and 15 years.

Valves & Cocks

4.69 Generally, the valves & cocks form part of the original mechanical services installation and visually appear to be in satisfactory condition for their age. On this basis we do not consider it necessary to carry out any remedial works.

Cold Water Services

4.70 During our survey, we were unable to gain access to the cold water storage tanks, and therefore cannot comment on their condition. However, we have read an L8 report which confirms that the cold water storage tank is in good condition and that no additional works are required.

Ventilation

4.71 The majority of the library is ventilated by natural ventilation although this is supplemented by various wall / floor mounted extractor fans or air intake units, complete with individual controllers. Based upon a visual inspection these can be considered to be in satisfactory condition and no remedial works are recommended.

4.72 However, the post room and the administrative office adjacent to the WC facilities on the ground floor do not appear to benefit from mechanical ventilation and we recommend that consideration is given to the provision of this. However, the cost has not been included in this report.

4.73 If secondary glazing is installed the windows will not be as easy to open and consideration may need to be given to providing mechanical ventilation to compensate for the fact that natural ventilation is less readily available. However, we have not included a cost for this additional ventilation in the budget costs.

4.74 Ventilation to the basement boiler is provided by a ducted supply and extracting system, which includes a inter-locking controls to the gas boiler equipment so that in the event of a failure of the ventilation system the boiler switches off.

Comfort Cooling

4.75 Comfort cooling is provided to the first floor reference library reception area and the computer room. Various other individual redundant units are located throughout the building although we have no details of the model, outputs and refrigeration type.

4.76 Visually the system appears to be in poor condition and it is recommended all redundant plant and equipment are safely drained of refrigerant and removed from site in accordance with F-gas regulation. At this stage we do not recommend that replacement comfort cooling is installed on the basis that the majority of the existing installation is redundant and the library appears to be suffering no loss of amenity as a result of this.

Electrical Services - Low Voltage Distribution System

4.77 The incoming supply to the library consists of a 200A three phase and neutral (TPN) service, which feeds a panel board containing conventional busbar chamber which in turns feeds local miniature circuit breaker (MCB) type distribution board.

4.78 The main low voltage switchgear is located in the electrical intake room on the ground floor next to main entrance.

4.79 The electrical installation is estimated to be approximately 25 years old, and is satisfactory condition. The installation had its most recent periodical inspection in March 2012, it is clear that a number of recommended remedial works are outstanding, including the provision of over current protection devices to socket outlets, to comply with BS 7671:2008, general overhaul of containment system and removal of unauthorised storage material.

4.80 Galvanised steel trunking containment, busbars and fuse switches in electrical intake room is dated, no circuit charts and poor labelling, recommended remedial workings included in above item.

4.81 The sub main distribution system includes surface run SWA/PVC cabling concealed within the surface conduit, is circa 25 years old and in satisfactory condition commensurate with age. Local distribution switch fuses are generally 63A single phase and neutral (SPN) are circa 25 years old and appear to be in a satisfactory condition, commensurate with age.

4.82 On 27th March 2012 an Electrical Periodic Inspection survey was carried out and recommended that various electrical repairs to a valve at a cost of £2,000.00 are carried out. LBHF have instructed that these works are carried out as part of the refurbishment works.

Lighting

4.83 The lighting installation to the main lending library areas on the ground and first floor consists of modern suspended linear, in-fill fluorescent luminaires, with up-light diffuser are circa 5 years old and in satisfactory condition. To reduce energy consumption it is recommended that consideration be given to converting existing fluorescent tubes to LED lamps throughout.

4.84 Lighting to the general office areas is generally provided by surface mounted fluorescent fittings with Cat2 type louvers or polycarbonate cover diffusers, these are approaching the end of their economic life and replacement is recommended within the next 3 years.

4.85 On 13th March LBHF advised that they considered the level of lighting within the children's area to be insufficient for their needs. The lighting in this area consists of individually suspended globe fittings with compact fluorescent lamps and recommend that these are replaced with low glare luminaires that have a much better visual performance.

4.86 Emergency lighting provided by a mixture of stand alone non-maintained bulkhead fittings and luminaires fitted with integral maintained emergency control module and batteries for three hours duration. The installed appears to be in satisfactory condition and complies with current BS 5266 standard.

4.87 The external lighting fittings are mainly 2D type and appear to be in an acceptable condition.

Power

4.88 Electrical socket and data outlets are located within perimeter metal skirting trunking containment system and flushed floor units, in the library areas and generally surface mounted in other areas.

4.89 Overall the power and data installation appears to be in a satisfactory condition. The small power cabling, socket outlets and data containment, and appears to have been installed circa 10 years ago, although some of the elements of the small power appear to have been replaced recently. However, if the office space on the first floor is refurbished we recommend that multi-compartment trunking system is installed to provide the flexible working areas.

4.90 At the meeting of 13th March LBHF requested that the refurbishment of the library should include the provision of a sufficient number of socket outlets so that customers may use laptop computers. However, they were unable to advise of the number of visitors that should be catered for and as such the costs do not include this element of the works.

Fire Alarm

4.91 The fire alarm system was last replaced circa 5 years ago and consists of EMS Fire point 5000 main panel, the system is wireless and consists of manual call points, detectors and sounders. The fire alarm system forms part of analogue addressable system, protecting to L2 standard, which includes fire alarm coverage of designated escape routes and plant room area within the building. The installation is maintained, but has recurring faults including defective sensors and battery depletion issues. Staff advised of history of faults to the alarms and unsatisfactory performance. The installation does not comply with the current regulations for the installation of wireless fire alarm: BS 58 BS 5839 2002: Part 1 + A2: 2008. EN 54 Parts 3, 5,7,11 & 25. EN 300-220 Part 1.39 2002: Part 1 + A2: 2008

4.92 Consideration should be given to resolving the observed and reported faults, or the installation of updated replacement wireless system. On this basis we recommend that a new fire alarm system is installed although we still believe that a wireless system should be fitted to minimise the damage to the fabric.

Security and, communication

4.93 The CCTV system includes fixed colour cameras, monitoring and recording equipment, appear in a satisfactory condition. The installed intruder alarm system, appear in satisfactory condition. The

individual access control devices are fitted to staff entrance areas and main entrance door is fitted pneumatically powered overhead door closers. The installations appear to be in acceptable condition and no major works are envisaged other than any alteration required during refurbishment works.

4.94 Telephone and Ethernet (LAN) communications both appear to be in an acceptable condition. New wireless and device charging facility will be required, locations to be agreed. Also additional data, voice and power sockets outlets will be required to facilitate new self service machines to be located in the re-configured entrance foyer.

Lifts

4.95 There are two book lifts that serve the ground floor with one being redundant and the other reported as faulty and not used. However, at the meeting of 13th March LBHF advised that there would be little benefit in removing either of these lifts.

4.96 We would normally recommend the installation of lifts within the building to provide step free access to the first floor although we comment upon LBHF's requirement for a lift in greater detail in section 6 of the report.

Lightning Protection

4.97 A satisfactory lightning protection system installed at this building and we do not consider it necessary to carry out any further works. However, the remedial works to the roof are likely to entail the removal and refixing of the lightning conductor and as such re-testing will be required on completion of these works.

5 Comments in Respect of Hammersmith Council's Requirements

Building Fabric

Repairs and replacement of defective rainwater goods

5.1 Please refer to section 5.0 of the report in which we comment upon the condition of the rainwater goods and make recommendations about the necessary repairs

Repairs and replacement of slate roofs, associated flashings and general brickwork

5.2 Please refer to section 5.0 of the report in which we have comment upon the condition of the report and made recommendation in respect of the necessary repairs.

Restoration and repairs to the existing period windows

5.3 Please refer to section 5.0 of the report in which we comment upon the condition of the windows and make recommendation about the extent of the repairs required.

The installation of secondary glazing to reduce heat loss from the premises and reduce the level of sound transmission from outside the premises

5.4 Although the report includes an estimated cost for this work the cost can only be considered as a budget cost since the following issues require consideration:

a) The design must be sympathetic to the existing building to allow for listed building consent to be obtained

b) The ease of opening the existing windows which is a particular issue in respect of the library where the windows are at high level and rely on a pull cord to open

c) Ensuring that there is a suitable alternative means of ventilation since the library relies upon natural ventilation. The installation of secondary glazing will almost certainly ensure that the windows remain closed and as such a need for mechanical ventilation may arise although this cost has not been budgeted for.

5.5 Although the provision of secondary glazing will reduce the rate of heat loss and reduce the noise from outside careful design of the installation is required to ensure that it is easy to use and is practical to allow natural ventilation to be provided when necessary.

Improvement and replacement of the automatic doors

5.6 On 13th March LBHF advised that the automated doors (photograph 11) are functioning poorly and although the problems users experience are associated with the aesthetics and function of the doors. The entrance comprises two pairs of standard half glazed doors fitted to an enclosure within which a revolving door was originally fitted.

5.7 During the course of the survey it was apparent that the automatic entrance doors are not easy for the general public to use. Additionally the doors are ill fitting and do not prevent drafts. Although they have controls that enable them to be operated by wheelchair users and parents with push chairs the controls are not easily located and customers were using the doors manually, even when using a push chair.

5.8 It appears that LBHF have an aspiration that a completely new entrance should be created although there appears to be limited scope to develop a radically alternative entrance. On this basis we recommend that a solution be developed around retaining the existing lobby but carrying out the following works:

a) Renewing the controls and opening mechanism.

b) Relocating the controls so that the operation of the doors is clearly apparent to people approaching the main entrance

c) Replacement of the existing doors with new double glazed timber doors that are properly sealed to prevent heat loss

d) Connection of the doors to the fire alarm system so that they default to open in the event of a fire

5.9 If this can be achieved there would appear to be no obvious benefit constructing a new lobby, particularly as the design would require listed building consent and the time and effort required to develop a design that has the support of all stakeholders is likely to exceed any benefit.

Reinstatement of the original bricked in archways through the children's library to the staff office

5.10 On 13th March LBHF advised that there were previously arches in the wall separating the children's library and offices from the main library and these were infilled. They propose to relocate the function of the children's library to the other side of the building to create an environment that will allow children to be supervised more easily.

5.11 The library service has expressed a desire to relocate the children's library from the south to the north side of the building and to open out the ground floor library area as shown on drawing P02. This will entail the demolition of the wall that separates the children's library from the work room and the restoration of two arches that were infilled. It appears that the wall is built up to the underside of an existing beam indicating that it is a non-load bearing wall and, if this is the case, there are no structural implications in respect of this proposal. However, a structural engineer should be appointed to confirm this and to advise of the works required to restore the original arches and to ensure that the structural integrity of the building is maintained when they are recreated.

Remodelling of the cellular offices on the first floor to provide one open plan space

5.12 In respect of the proposed creation of office space on the first floor LBHF advised that it was the aim of LBHF to maximise the use of office space and that there is a possibility that the archives could be relocated.

5.13 LBHF advised that the development of the reconfiguration the offices should take account of the following:

a) The removal of all partitions within the first floor office area to create a self contained office area that may be let to external agencies with no access to the welfare facilities created on the second floor

b) The old administrative office on the first floor is to be a public space.

c) The office space on the second floor will be allocated to library staff only.

5.14 ECH's proposals are shown on drawing P03.

5.15 The demolition of the wall between the Chief Librarian's office and the other cellular offices is not included for the following reasons:

a) It appears to be a load bearing wall

b) It incorporates an ornate decorative finishes for which it is unlikely that listed building consent would be granted to allow demolition

5.16 The demolition of the walls to the cellular offices will create an open plan office with a floor area of just under 70 square meters. We have carried out a space planning exercise indicating that space can be created for 11 people (allowing just over 6 square meters per person). However, we have not carried out a structural assessment of the walls that are proposed to be demolished and the feasibility of these proposals is subject to advice from a structural engineer.

5.17 BS 6465 confirms that the minimum sanitary provision for these staffing levels is two WC's and wash hand basins and assuming that there is a reasonably even split of male and female staff the existing WC provision on the first and second floor will be sufficient. Although office space for 11 people can be created it is unlikely that there will be sufficient space for suitable tea making facilities within this space and staff will need access to the LBHF WC and staff welfare facilities on the second floor.

5.18 Although this report will comment separately in respect of fire safety the feasibility of our outline proposal is still dependent upon the outcome of a fire risk assessment. At this stage the costs allow for constructing a fire compartment wall between the first floor offices and the staircase. However, the rooms at second floor level remain open and there is no fire door and partition creating a separate fire compartment between the ground and first floor.

5.19 Although it is possible to create an open plan office on the first floor it does not appear that there is sufficient space to create a satisfactory self contained office space that would meet the needs of an external agency paying a commercial rent.

5.20 We comment upon the feasibility of installing a lift in this area later in the report.

Installation of new staff welfare room and provision of new kitchen

5.21 LBHF and ECH discussed these works on site on 13th March and LBHF confirmed that they required the existing staff room to be redecorated and the refurbishment of the existing staff kitchen facilities in the adjacent kitchen on the second floor.

5.22 The proposals allow for replacement of the existing kitchen units with Howden or a similar standard unit

Repairs to plasterwork to the interior of the building

5.23 The condition of the plaster was principally assessed by a visual inspection. Access to tap onto the walls was limited due to the presence of book cases etc and there was limited access to carry out a physical inspection of the ceilings.

5.24 Although there are cracks in the ceilings this is not unusual for a building of this age and we do not anticipate the need to replace considerable sections of the ceilings.

5.25 There was no deflection of the ceilings indicating that they are probably sufficiently bonded to the existing background; however, we will not be able to confirm this until an access scaffold is in place and we can access the ceilings to confirm their condition. Lath and plaster ceilings debond over a period of time and it is not possible to provide any guarantee of the period time that they may last. The estimated costs allow for remedial works to ceilings on the basis of provisional quantities and these will be remeasured if works are carried out.

5.26 Overall the condition of the plaster appeared to be in reasonable condition except for the areas affected by water penetration. We have allowed provisional quantities of replastering which will be confirmed during the commencement of works on site.

Remedial works to dampness in the basement area

5.27 The basement is affected by dampness and staff have been advised that they should not enter Room 1 as shown on drawing E01 due to the levels of dampness and presence of mildew on the books within this room

5.28 The basement was surveyed with the aid of a damp meter. Although there is visual evidence of dampness the readings suggest that the problem is not sufficient to justify the cost of carrying out significant remedial works at this stage.

5.29 There is significant peeling of paint and bubbling paintwork at the bottom of staircase 2 although high damp readings were noted within the centre of this area only. This suggests that the wall could be

drying out although a cause of the dampness has not been identified. LBHF have advised that they are not aware of this area being affected by water penetration during rainfall.

5.30 Paint was peeling from the south elevation wall to the changing room (room 3) although there was no staining or bubbling that would normally be associated with dampness. The surface of the wall had a "chalky" texture suggesting that the walls were previously coated with distemper which was not properly removed prior to the redecoration of this room. However, high damp readings were recorded in this location. We also took damp readings from the walls in the vicinity of the door to the fire exit lobby and low damp readings were recorded.

5.31 The floor paint was peeling from the floor of the plant room (room 2) although this was the result of flooding from a boiler which has since been resolved. In this instance we recommend that the paint is stripped and the floor repainted. High damp readings were noted on the floor and this should be allowed to dry out before it is repainted.

5.32 The books in the storage area (room 1) in the basement are affected by mildew and paint was noted as peeling from the south west corner and at low level on the south elevation wall. However, the damp readings taken on the wall generally recorded low readings although high damp readings were recorded on the floor. Nevertheless, since the books stored in this area are affected by mildew there is clearly a problem which is required to be addressed although we suggest that consideration is given to improving the level of ventilation.

5.33 Overall the basement did not appear to be severely affected by dampness although the inspection of the area was restricted by the presence of lockers and shelving against the walls. Generally the paint was not affected by staining and was not peeling from the wall indicating that there is not a significant problem of dampness. However, the following was noted:

5.34 During a previous visit on 22nd February we noted that the area outside the fire escape door was flooded. We understand that this was associated with a failure in the pump mechanism which pumps water from the gulley to the rainwater drainage at ground floor level. However we understand that this issue has since been remedied.

5.35 The external redecoration and repair works will address any issues that may give rise to water penetration into the fabric during rainfall. At this stage the problem of dampness in the basement does not appear to be sufficiently severe to warrant costly damp proofing works within the basement area itself. We recommend that further damp monitoring takes place over a period of time to assess if there is a problem that is becoming worse or if the symptoms noted above are in the process of drying out or are not becoming any worse.

5.36 The walls are below ground level and it is possible that the damp has arisen from water in the ground that abuts against the basement wall with the water penetrating through the wall. If this is the cause of the dampness consideration would have to be given to applying a waterproof coating / tanking to the wall. However, as advised earlier in the report the cost should be assessed against the benefit of this work.

New signage

5.37 LBHF have requested that external signage is fixed to the front elevation so that its profile becomes more prominent to the public. However, this request is at a very early stage and further details of LBHF's requirements are required before a design proposal can be developed.

Redecoration

5.38 LBHF requested that costs should be provided for the redecoration of the whole of the interior with costs being broken down on an area by area basis.

5.39 There are areas affected by water penetration or flaking paint which will require resolution of specific defects prior to redecoration.

5.40 The wall and ceiling surfaces in the circulation areas must achieve a Class 0 surface spread of flame rating. To ensure that this is achieved it will be necessary to meet a representative of LBHF's preferred paint supplier on site to carry out adhesion tests of the paintwork to the walls and ceilings. If there are too many layers of paint or the paint is beginning to debond from the wall surface it will be necessary to strip the paint from the walls and this cost has been allowed for in the estimated costs for this project.

5.41 Otherwise the proposals for redecoration includes for repainting the walls and ceilings with vinyl silk emulsion and the joinery with gloss paint. The costs include for redecoration of each room as requested.

Replacement of floor coverings throughout the building

5.42 The feasibility report allows for the replacement of floor coverings on a like for like basis (e.g. heavy duty contract grade carpet in the main library and office areas and sheet vinyl floor coverings in the circulation areas that are subject to heavy use). However, we recommend that LBHF review the proposals and confirm the floor finishes that they require in the specific areas.

Renewal of shelving and furniture throughout the public areas

5.43 LBHF advised that they would forward details of the shelving that is fitted within the library area although they emphasised that these were installed during the 1950's and are not fixtures and fittings that were installed as part of the original construction.

5.44 LBHF confirm that the shelving that is fixed to the perimeter of the library was installed during the 1950's and does not form part of the original 1905 construction. The feasibility report allows for a budget cost although further discussion is required with LBHF so that they can confirm their requirements and a more accurate estimated cost can be provided.

Mechanical and Electrical Services

The supply and installation of passenger lifts and creation of step free access

5.45 LBHF advised that the requirement for the lift is a "nice to have" although it is likely that even if a lift were installed it would not provide access to all areas due to the different floor levels within the building.

5.46 We have reviewed the existing plans and the aspiration to provide lifts and step free access conflicts greatly with the need to develop a scheme that is sympathetic with the existing building and that will be satisfactory to the conservation officer. The first floor is spread on several levels and at least two lifts are required to provide access to all levels. Please refer to drawings L01-L04 which show the locations in which consideration has been given to lift installation. However, these demonstrate that the feasibility for installing lifts in the library is very limited.

5.47 Ideally there should be lift access from the proposed children's library on the first floor to the reference library on the first floor. However, the floor level to the adjacent stock room is approximately 1.0 meter below this and as such it is not possible for a wheelchair user to access the rest of the building from the reference library.

5.48 On this basis we considered the feasibility of installing a lift in the south side of the building. However, the only practical location is within the south east corner since the location does not conflict with that of a stairwell and fire escape route. Unfortunately this entails commencing the construction of a lift shaft in the changing room in the basement, through the library area on the ground floor, the open plan office on the first floor and the existing store room on the second floor. The need to create suitable fire compartmentation around the lift shaft and lift lobbies would entail the loss of use of a considerable amount of floor space and it is likely that the cost of installation of a lift would greatly exceed any benefit. Nevertheless to properly establish this fact we recommend that a DDA audit is carried out in respect of these proposals.

5.49 There are two options in respect of the lift installation:

- Supply and installation of a passenger lift
- The supply and installation of a platform lift.

5.50 If a lift were installed we recommend that a passenger lift be selected although the cost is considerably more expensive. The lift should be made available for all library users and as such has the potential for frequent usage. A platform lift is more suited for use on a frequent basis and it is for this reason that we recommend that a platform lift is now installed.

5.51 If a lift is to be installed it should conform to the requirements of BS EN 81-1, 81-2 and 81-70. The minimum internal dimensions acceptable for a lift car are 1100x1400mm which will be sufficient in size for a wheelchair and one accompanying person although there will be insufficient turning circle for the wheelchair. The dimensions above are the internal dimensions of the lift car and additional space is required for the footprint of the lift shaft and access space for the lift.

Heating

5.52 Please refer to section 5.0 of the report for our comments and recommendations in respect of the works required to the heating installation.

Lighting

5.53 Please refer to section 5.0 of the report for our comments and recommendations in respect of the works required to the lighting installation.

RFID System

5.54 LBHF propose to install a RFID system to enable library users to borrow books by use of a swipe card system. They advised that the proposed RFID system should be adjacent to the door and should include for the installation of a security system.

5.55 LBHF have confirmed that they will purchase the RFID system although the specification will allow for the provision of power and data to support the RFID installation.

Wi-Fi

5.56 LBHF advised that the Wi-Fi should cover the entire premises and since the system is wireless the infrastructure can be installed without the need for intrusive works.

6 Estimated Costs

6.1 The overall costs of carrying costs are based on the following assumptions:

a) The premises will be vacated throughout the duration of the works

b) Works will be carried out during normal working hours

c) LBHF will arrange for porterage etc under a separate budget

d) The replacement of new shelving, desks and IT equipment is excluded

e) The removal of the existing M&E facilities to the main entrance

f) The estimated costs provided are based on rates that were obtained under competitive tender. If works were procured as part of a measured term contract or under a framework agreement the costs may increase. Costs obtained under competitive tender are typically lower than those that form part of a framework agreement

g) Works are carried out in accordance with LBHF's list of requirements issued on 31st January

h) The estimated cost for the lift installation is very "high level" and is subject to a detailed analysis and design development

i) The costs for remedial works to plaster are based on provisional quantities and are subject to remeasurement upon commencement of the works.

j) Relocation costs (including the hiring of alternative premises and storing the books) in the event that the library is closed are excluded

k) The cost of library furniture is excluded. The cost of the proposed reception desk is a provisional sum and is subject to further design development

l) Costs for remedial works in respect of dampness are excluded since the issue requires further investigation

m) The fees outlined in the breakdown are a budget cost and will be the fees that are in accordance with the existing agreement between LBHF and ECH.

6.2 The costs are indicative and subject to the outcome of the following further investigations / discussions:

a) A fire risk assessment being carried out in conjunction with the works

b) Consultation with the conservation officer in respect of an application for listed building consent and planning permission

c) A DDA audit

d) An application being submitted for Building Regulation Consent

e) A review of the information in respect of asbestos and the outcome of surveys that are aligned with the scope of works

f) A structural engineer has not had the opportunity to review the proposals for restoring the arches on the ground floor and demolishing the walls on the ground and first floors. The costs may vary subject to review of these proposals by a structural engineer

g) The development of designers' risk assessments in respect of carrying out works at a height

h) The causes of dampness within the basement are subject to further investigation and monitoring and at this stage it is not feasible to develop a proposal

i) LBHF to provide ECH with a more detailed brief outlining their requirements for the re-organisation of the main library area and the office facilities on the first floor. At this stage we have no indication of the requirements for power

j) An energy assessment (such as Bream) being carried out

ELEMENT	COST (ex VAT)
FABRIC WORKS	
Repairs to the pitched roofs	£15,000.00
Repairs to the flat roofs	£17,500.00
Repairs to the rainwater goods and waste drainage	£5,000.00
Repairs and redecoration to windows and external doors	£17,000.00
Supply and installation of secondary glazing	£26,500.00
Repairs to external masonry	£75,000.00
Alterations to the main entrance	£5,000.00
Reinstatement of brick arches and opening up of the children's library	£15,550.00
Internal plaster and render repairs	£27,500.00
Remedial works in respect of dampness	£11,000.00
Redecoration of interior of library	£55,000.00
Renewal of floor coverings	£112,500.00
Creation of open plan office on the first floor	£30,000.00
Creation of new staff facilities on the second floor	£12,500.00
Renewal of doors	£50,000.00
Refurbishment of the WC facilities	£25,000.00
Structural repairs	£9,000.00
Repair hardstand areas	£5,000.00
Supply and installation of reception counter (provisional sum)	£20,000.00
Renewal of shelving and furniture	TBC
MECHANICAL & ELECTRICAL WORKS	
Renewal of boiler	£100,000.00
Upgrading of the heating system	£20,000.00
The installation of two passenger lifts (including lift shaft and structural alterations)	£250,000.00
The upgrading of the lighting	£80,000.00

Renewal of fire wireless fire alarm system	£32,000.00
The installation of RFID self-service units	£35,000.00
The installation of Wi-Fi	inc
Works to the electrical intake cupboard	£2,000.00
Total value of works	£1,053,050.00
Scaffolding: Provisional sum	£150,000.00
Preliminaries @ 12.5%	£150,000.00
Statutory fees	£15,000.00
Professional fees @ 15%	£203,000.00
Contingency sum @ 20%	£315,000.00
Total	**£1,886,050.00**

7 Statutory Compliance

Regulatory Reform (Fire Safety) Order 2005

7.1 Under this order LBHF has a duty to ensure that these regulations are complied with. To summarise this requires LBHF to reduce / prevent the risk of fire and spread of fire on the premises, put in places measures for suitable means of escape in the event of a fire and ensuring that they can be used, put in place suitable measures for detecting a fire. A fire risk assessment of the library should already be in place. However, if major refurbishment works are carried out the proposed works should be reviewed against the current fire risk assessment and the fire risk assessment and works should be reviewed to ensure that LBHF continue to comply with this the Regulatory Reform (Fire Safety) Order.

7.2 The design proposals should be developed against the requirements of BS9999 as well as the requirements of part B of the Building Regulations.

Control of Asbestos Regulations

7.3 Under these regulations LBHF have a duty to manage asbestos in their premises. In respect of this project they have a duty to ensure that a suitable risk assessment in respect of the disturbance of asbestos has been carried out prior to the commencement of these works. At a practical level this means the carrying out of an asbestos risk assessment in alignment with the scope of works prior to the commencement of the works. This will encompass a review of the existing asbestos survey reports of the library and the scope of additional surveys can be specified.

7.4 Although designers and contractors have a responsibility to ensure that all risks associated with asbestos are mitigated it remains incumbent upon LBHF as the duty holder to ensure that these issues are properly managed.

7.5 LBHF has confirmed that they are currently procuring management surveys in respect of asbestos. Following this the report can be reviewed alongside the scope of works and the scope of demolition and refurbishment can be assessed against this.

Listed Building Consent

7.6 Hammersmith Library is a grade 2 listed building and as such listed building consent is required for any alterations to the building. The only works that may be carried out without listed building consent are those that entail like-for-like replacement in respect of maintenance and repairs works.

7.7 It is a criminal offence to extend, demolish or carry out internal or external alterations to a listed building without having Listed Building Consent from the council. Buildings are listed in their entirety including the exterior and interior so, for example, façades are not listed on their own. It is important to note that a listed building includes 'any object or structure fixed to the building' and 'any object or structure within the curtilage [attached land] of the building which, although not fixed to the building, forms part of the land and has done so since before 1 July 1948'. Therefore a garden wall attached to a listed building or a building built before July 1948 within the curtilage of a listed building will also be listed.

7.8 If works were to proceed without listed building consent the LBHF would be at risk of incurring a fine and an enforcement notice to restore the building to the original design or to alter the works already carried out.

7.9 LBHF have advised ECH that consent for this project must be obtained through central government since there is a potential conflict of interest with the Council making a decision upon an application for listed building consent in respect of a premises owned by themselves.

7.10 At the meeting of 22nd February LBHF confirmed that they would organise the consultation process in respect of the application for listed building consent.

Planning Permission

7.11 ECH spoke to the duty planning officer on 14th June. They have advised that planning permission will be required in addition to listed building consent. This is despite the fact that potentially, there are no alterations to the external appearance of the library.

7.12 LBHF propose to submit an application for pre-planning application advice so that they have an understanding of the works that they are likely to obtain approval for prior to developing the design proposals.

Building Regulations

7.13 Building Regulation Consent will be required in respect of the internal alterations to the premises. The sections of the Regulations that will apply in particular are:

Part A: Structure

Part B: Fire Safety

Part F: Ventilation

Part J: Combustion Appliance and Fuel Storage Systems

Part K: Protection from Falling Collision and Impact

Part L2B: Conservation of Fuel and Power

Part M: Access to and Use of Buildings

Part N: Glazing

Part P: Electrical Safety

Construction Design & Management Regulations

7.14 The CDM Regulations will apply to this project since they will require a period in excess of 30 days to be completed. As the Client LBHF have a duty to carry out the following:

a) Appoint designers and contractors who are suitably competent to carry out the role that they are engaged for.

b) Allow sufficient time for the design, planning and construction work to be carried out safely

c) Provide the correct level of information about the premises (.e.g. asbestos, fire safety) and the project to the design and construction professionals to enable them to design and construct a scheme that is safe to build, operate and maintain

d) Ensure that the stakeholders and design team communicate and co-operate so that issues relating to the buildability and maintenance of the premises are discussed at an early stage in the project

e) Ensure that the contractors that you employ have put in place suitable management arrangements to ensure that the works can be carried out safely

f) Ensure that adequate welfare facilities on site for use by the operatives. These will include hot and cold water, WC facilities, tea making facilities and rest areas.

g) Ensure that the workplaces are designed correctly

7.15 To ensure compliance with the above LBHF should appoint a CDM co-ordinator (CDMC) who will provide guidance in ensuring that competent designers and contractors are appointed and will liaise with designers to ensure that the scheme can be constructed and maintained safely. The principal contractor will write a construction phase health and safety plan which will demonstrate how the works

will be managed safely. Although the designers and contractors will be responsible for ensuring that the majority of the issues listed above are complied with LBHF will also be responsible for ensuring that they are complied with and it is a legal requirement that they appoint a CDMC.

7.16 To summarise the regulations require LBHF to do the following:

a) Appoint a CDMC

b) Appoint a principal contractor

c) Ensure that a health and safety plan is in place

d) Keep the health and safety file (issued at the end of the project).

Disability Discrimination Act

7.17 The Disability Discrimination Act, 1995 (DDA) made it unlawful to discriminate against disabled persons in connection with employment, the provision of goods, facilities and services or the disposal or management of premises. Service provision is covered by Part III of the DDA and since October 2004 service providers have had to make reasonable adjustments to the physical features of their premises to overcome physical barriers to access.

7.18 To date LBHF would have been able to argue that the cost of any significant alterations would exceed the benefit. However, now that a budget of £1.1m has been allocated to this project there will be a perception that there are now sufficient funds and opportunity to carry out alterations to meet the requirements of DDA.

7.19 A DDA Audit has not formed part of our original brief and has not been carried out as part of this survey. However, we now recommend that this is carried out and when evaluating this project consideration should be given to the following:

- The suitability of the existing ramps to the main entrance
- The public entrance doors to the library
- The staff entrance
- The location of staff welfare facilities (e.g. is the second floor the most practical location for a staff room and kitchen?)
- The feasibility of increasing the widths of existing door openings within the library
- The heights of power and data outlets
- The provision of a lift
- The reception counter
- The provision of IT facilities to library users

7.20 A design and access statement is likely to be required to be included with an application for town planning and / or listed building consent and this can be developed from the a DDA audit.

Site Waste Management Plans Regulations 2008

7.21 Where a construction project exceeds £300,000 in value the client must prepare a site waste management plan before works begin. This must record decisions taken before the site waste management plan was drafted on the nature of the project, its design, construction method or materials employed in order to minimise the quantity of waste produced on site.

7.22 The site waste management plan must:

a) Describe each waste type expected to be produced in the course of the project;

b) Estimate the quantity of each different waste type expected to be produced; and

c) Identify the waste management action proposed for each different waste type, including re-using, recycling, recovery and disposal.

7.23 The plan must also contain a declaration that the client and the principal contractor will take all reasonable steps to ensure that:

a) All waste from the site is dealt with in accordance with the waste duty of care in section 34 of the Environmental Protection Act 1990 (a) and the Environmental Protection (Duty of Care) Regulations 1991(b);

b) Materials will be handled efficiently and waste managed appropriately.

The Control of Lead at Work Regulations 2002

7.24 Under legislation Employers have a duty, so far as reasonably practicable, to protect any person likely to be affected by work involving lead or substances or materials containing it.

7.25 In respect of the proposed works the principal risk is associated with dust from lead paint being sanded / stripped. Provided the premises are vacated to enable works to proceed it will be operatives of the contractor who will be exposed to this.

7.26 LBHF have advised that they propose that the contractor will include their proposal for managing these risks in their Construction Phase Health & Safety Plan.

7.27 ECH still recommend that a lead survey is carried out prior to the issuing of tender documents to the contractors. This will enable a contractor to be better informed of the risk of exposure to lead and as such provide a more accurate price for the works.

8 Procurement Options

8.1 LBHF may wish to consider the following procurement options in respect of the proposals:

- Traditional competitive tender
- Competitive prices obtained under the umbrella of a framework agreement
- Design and Build

8.2 There is an argument that if a design and build procurement route were followed the works would commence at an earlier stage. This is because the contractor will be required to develop the design and as such a set of Employer's Requirements is not required to be as detailed as a specification of works. However, we do not consider that design and build is a practical procurement route in respect of this scheme. The final design will be subject to the outcome of applications for Town Planning and Listed Building Consent, DDA audit, fire risk assessments and an application for Building Regulation consent.

8.3 There is a risk that, in respect of this project, the Employer's Requirement could be subject to widely varying interpretations by contractors and this would be reflected in their tender returns. As such it would be harder to evaluate the quality of the tender returns and as such assess the extent to which LBHF would derive value for money from this procurement route.

8.4 We consider competitive tenders based upon contractors submitting prices based upon a properly detailed specification to be the procurement route that is most likely to provide value for money for LBHF. There is no requirement for a contractor to develop a design prior to providing a cost for the works. Since all prices submitted would be based upon the one design proposal LBHF can be assured that the lowest price will represent value for money (although this would be subject to an evaluation of the tenders). If LBHF did choose to procure the works upon this basis we would recommend that discussions are held with LBHF's contract control unit to find out if they are able to provide a list of contractors who have experience of carrying out works of this type and value and are able to work in West London.

8.5 If a list of sufficient suitably experienced contractors cannot be procured we recommend that consideration is given to obtaining tenders under a framework agreement (such as LHC or a measured term contract). Consideration could be given to appointing one of the measured term contractors to carry out this work. However, a project of this size and nature is outside the typical scope envisaged when procuring a measured term contract. As such we would need to properly evaluate the capacity of the MTC contractors to carry out these works.

8.6 To achieve the most competitive tender price we recommend that the works are procured through competitive tender.

9 Contract Programme

9.1 We understand that the budget for this project is being made available for payments received by LBHF under Section 206 agreements. However, at this stage we are awaiting confirmation of the periods when the funds will be made available. LBHF have advised that they have received confirmation that an initial sum of £925,000 will be available shortly. The balance of £675,000 will be released at a later date although confirmation is awaited in respect of the timing of the release of these funds.

9.2 We consider that the works should be let as one complete package if LBHF require the works to be carried out at optimum price. This is because economics of scale will be achieved since the following will not be required to be duplicated across two projects.

- Main contractors site set up cost and management costs for the work
- Implementation of CDM regulations
- Only one site waste management plan is required

9.3 On the basis that the budget allocation of £1.6m allows £1.1m for building works we will assume the cash flow for funding is an initial sum of £630,000 with £470,000 to follow. We would recommend that the following works are carried out in phase 1 at a cost of £515,250 plus fees.

ELEMENT	COST (ex VAT)
Repairs to the pitched roofs	£15,000.00
Repairs to the flat roofs	£17,500.00
Repairs to the rainwater goods and waste drainage	£5,000.00
Repairs and redecoration to windows and external doors	£17,000.00
Repairs to external masonry	£75,000.00
Repairs to hardstand areas	£5,000.00
Erection of scaffolding	£130,000.00
Structural Repairs	£9,000.00
Renewal of boiler	£100,000.00
Remedial electrical repairs	£2,000.00
Creation of staff facilities on second floor	£12,500.00
Creation of open plan offices	£30,000.00
M&E (provisional sum)	£15,000.00
WC refurbishment	£25,000.00

Sub Total	£458,000.00
Prelims @ 12.5%	£57,250.00
Statutory fees	£3,000.00
Professional fees @ 15%	£77,300.00
Contingency sum @ 20%	£120,000.00
Total	**£715,550.00**

9.4 The balance of the funds can be held over until the balance of the funding is issued. This will also allow LBHF to review the need for lift installation and plan the management of relocating the library facilities.

9.5 We consider that a period of six months would be required (from date of confirmation of a scheme and an instruction to proceed) before works commence.

a) Approximately twelve weeks would be required to obtain Planning and Listed Building Consent (assuming LBHF are satisfied with the proposal)

b) Following the receipt of Planning and Listed Building Consent a further two weeks would be required to complete and issue the tender documents

c) A nine week period would be required to obtain tenders and write a report

d) A further six weeks for LBHF to make a decision and the main contractor's lead in period

9.6 If the above programme was followed works would not commence on site until 1st February 2013. This is not an ideal time to commence external redecoration and repair due to the likely weather conditions in February. However, the initial stages of the works would entail site set up and erection of scaffold and could potentially start at that time of year.

9.7 The sequence of works would be as follows:

a) Site set up – one month

b) Remedial works to the roof and repairs to brickwork – 6weeks

c) Remedial works to rainwater goods – 1 week

d) Stonework repairs – 2 weeks

e) External decoration and repairs – 4 weeks

f) Staff facilities on second floor – 2 weeks

g) Creation of offices on first floor – 8 weeks

h) Demobilise – one month

9.8 Overall phase 1 of the works would be completed in 20 weeks.

9.9 Phase 2 of the works would principally involve the refurbishment of the main library area and full internal redecoration and lift installation. On the basis that the building is vacated we would anticipate a programme as follows:

a) Site set up – 1 week

b) Confirm extend of plaster repairs – 1 week

c) Demolish wall and create arches in the library – 1 week

d) Carry out plaster repairs – 4 weeks

e) Prepare floor to receive new floor covering – 2 weeks

f) Replace doors – 1 week

g) Fit secondary glazing – 2 weeks

h) Lift installation – 12 weeks

i) M&E alterations – concurrent with lift installation

j) Redecorate library – 8 weeks

k) Renew floor coverings – 2 weeks

l) Demobilise – 1 week

9.10 Overall we estimate that the time required to complete the internal refurbishment is in the region of 25 weeks.

9.11 LBHF to install own shelving etc, and restack books following completion of the works.

Appendices

Appendix A – Limitations of the Report

The report is issued subject to the following:

1. The surveys have been non-intrusive and generally carried out at ground level or from the flat roofs of the ground and first floor of the main library.
2. During the survey we had no access to the front parapet gutter and the cupboard below the staircase between the first and second floor offices
3. The surveys did not examine the presence of asbestos, or check to establish compliance with all current statutory regulations, nor audit disabled access provision or general health and safety issues.
4. A considerable proportion of the wall surfaces in the library, office and storage areas were concealed by shelving and cupboards which restricted the extent to which the condition of the premises could be assessed.
5. The condition of the windows could only be inspected visually from ground level and from within the building. However, the majority of the windows were at high level and it was not possible to carry out a physical inspection of the condition of the timber.
6. Where access allowed the leaded lights were lightly pressed to check if the joints had deteriorated although on the basis of the tests carried out their condition was sound.
7. There was no access to the ceilings to enable us to assess if the ceiling was becoming debonded from the structure. Although provisional costs have been allowed for this work the quantities will only be determined when works commence on site.
8. Although the report includes budget costs for the demolition of walls and restoration of arches we have not discussed the proposals with a structural engineer and the feasibility of the proposals is subject to their investigations.
9. An asbestos survey has not been carried out and we have not reviewed any existing asbestos records. As such the costs and feasibility of the proposals discussed may vary depending upon the availability of this information.
10. The feasibility of the proposals is subject to the outcome of the following investigations / assessments:
    - Fire risk assessment being carried out in alignment with the proposed works
    - We have not assessed the integrity of the existing fire compartmentation and whether or not service penetrations are properly fire stopped where they pass through fire compartment walls
    - Consultation with the conservation officer in respect of an application for listed building consent
    - A DDA audit
    - An application being submitted for Building Regulation Consent
    - An asbestos survey properly aligned with the scope of works being carried out
    - Evidence of structural cracking was noted in the children's library and staircase 2 during the survey. However, we have received no historical information in respect of these issues and the estimated costs associated with these defects are provisional and are subject to discussions with the structural engineers.

Appendix B – Costs

Appendix C – Drawings as existing

Appendix D – Drawings as proposed

Appendix E – Lift Feasibility Drawings

Appendix F – Photographs

Photo 1. Front elevation

Photo 2. Roof light over glazed vault to ground floor

Photo 3. Roof light over reference library

Photo 4. Rear elevation

Photo 5. Rear elevation

Photo 6. Flat roof over the staff entrance

Photo 7. Roof void between roof light and glazed vault over ground floor

Photo 8. Glazed vault over main ground floor area of library

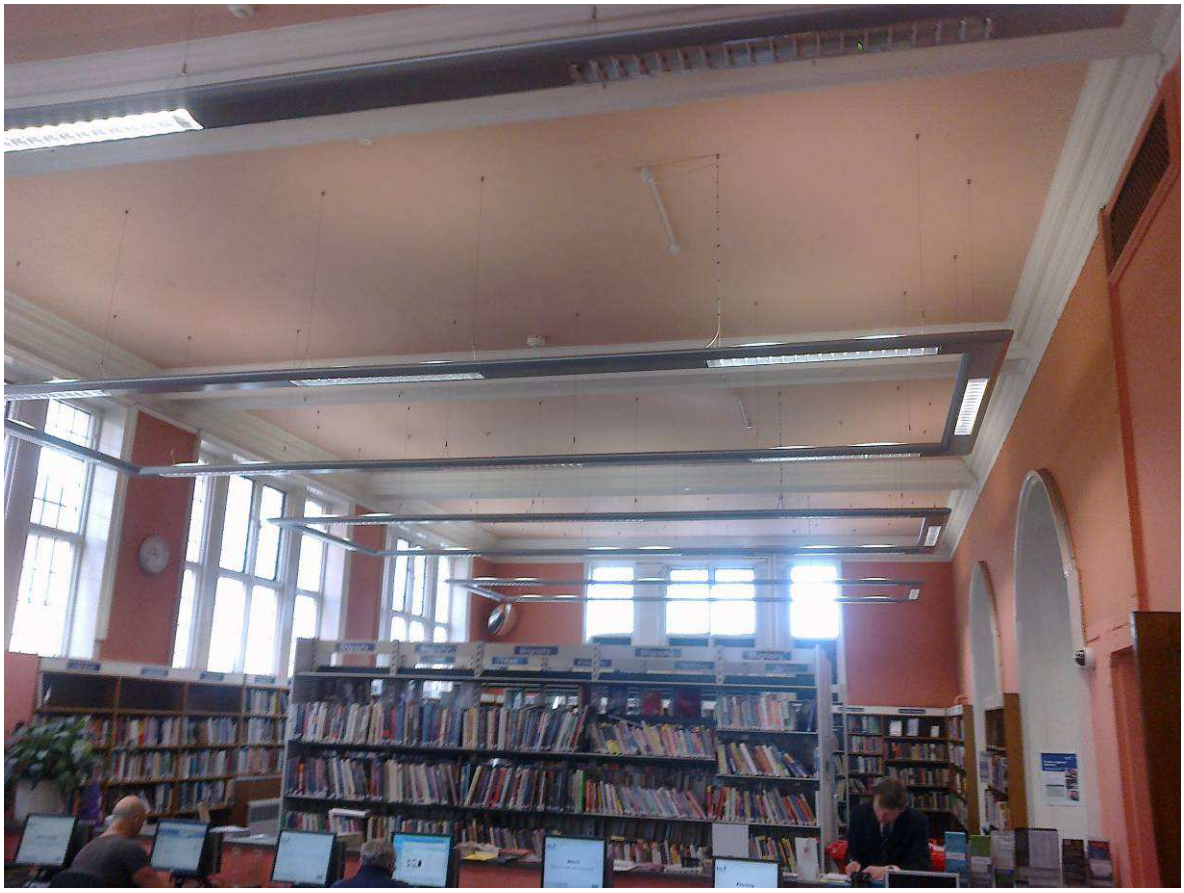

Photo 9. Study area and non fiction section – ground floor

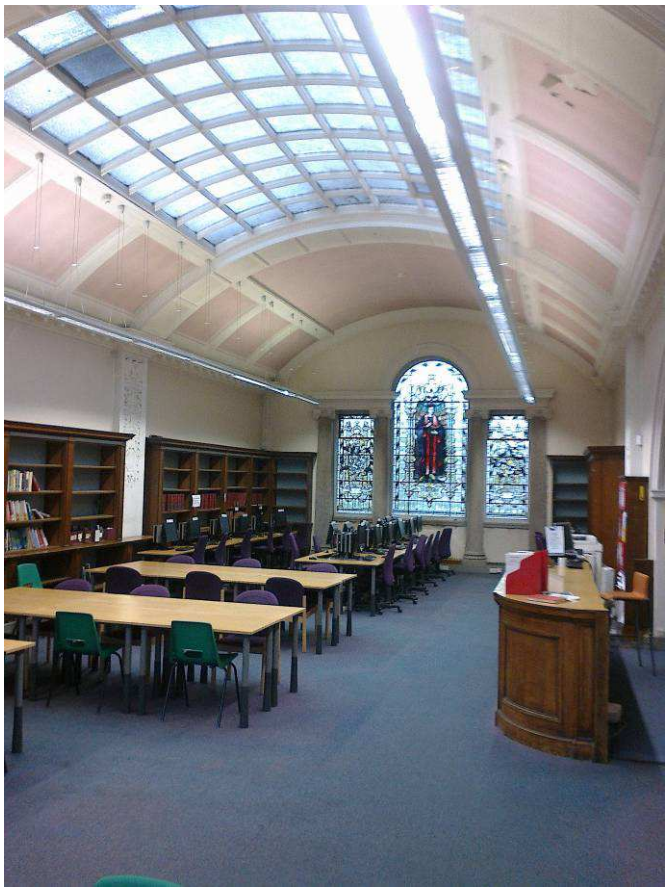

Photo 10. Reference library on first floor

Photo 11. Public entrance to the library

Photo 12. Cracking to soffit of staircase