



## **Feasibility Report**

**For**

**Adaptation and  
Transformation Works**

**At**

**Muswell Hill Library**

1 Queens Avenue  
Muswell Hill  
LONDON N10 3PE

Prepared by

**Frankham Consultancy Group Limited**

Frankham House  
Wootton Business Park  
Besselsleigh Road  
Wootton  
Abingdon  
Oxfordshire  
OX13 6FD

Telephone: 01865 322500

[www.frankham.com](http://www.frankham.com)

for

**Haringey Council**

Alexandra House  
10 Station Road  
Wood Green  
London  
N22 7TR

**Authors:**  
**Client PM:**  
**Client Dept:**  
**Issue Date:**  
**File Reference:**  
**Status:**  
**Version:**

T Fry, N Ford, G Janszen and E Ostrowski  
David Llewellyn  
Capital Project Team – Regeneration, Planning & Development  
February 2016  
440862  
Feasibility  
P4



FRANKHAM

---

## CONTENTS

	Page
1.00 Executive summary	2
2.00 Introduction	4
3.00 Commission and Brief	5
4.00 Existing Accommodation	6
5.00 Building Fabric Condition Overview and Recommendations	13
6.00 Building services - Electrical	16
7.00 Building services - Mechanical	21
8.00 Statutory requirements	24
9.00 Information Review	31
10.00 Initial Design Options	36
11.00 Design Development	40
12.00 Budget Cost Estimates	46
13.00 Outline Project Programme	49

### Appendices

A Existing layout	
B Initial Proposed Layout Options	
C Developed Proposed Layout options	
D Budget cost estimates	
E Client Design Brief	
F Client Information	

---

## 1.00 EXECUTIVE SUMMARY

This feasibility report has been prepared on behalf of Haringey Council Capital Projects Team. The purpose of the report is to define the scope of works and provide a budget cost estimate to refurbish the existing Muswell Hill Library building to improve existing facilities with particular emphasis on providing fully accessible accommodation as set out in the Design Brief document dated July 2015.

An initial consultation meeting with the end user took place at the library on 20<sup>th</sup> August 2015 to discuss the client brief, understand the end user priorities, observe the building in use and carry out an initial survey.

Given clearly evident pedestrian access constraints to use of the existing side street (Ave Mews) to access the rear of the library, it was agreed that development to the rear of the existing library on vacant land would not negate the need for automated level access at the front of the library, so it would simply be an overprovision of unnecessary accommodation in line with the requirements of the client brief.

It was agreed that the design team would prepare 3 initial layout options based primarily on alterations and adaptations of the existing building accommodation and these were presented to the end user on 2<sup>nd</sup> September 2015.

The initial layout options were reviewed by the feasibility team at a design review meeting on 14<sup>th</sup> September 2015, at which time it was acknowledged that there was no suitable solution to provide level access to and within the library without the use of automatic platform lifts. It was agreed that two options, based on an amalgamation of the initial layout options, should be taken forward for more in depth design development.

Option 1 is based on internal accommodation re-modelling and refurbishment with very minimal external improvement works.

Option 2 is based on a combination of internal accommodation remodelling re-modelling with a courtyard extension providing secondary entrance and lift facility.

Both developed options 1 and 2 meet the objective requirements of the client design brief and supplementary client requests agreed during the design development process, and have been used to form the basis of our budget cost plans.

The budget cost estimates for the options have been separated into works packages and summarized in section 12.00.

The budget cost estimates identify that the proposed cost to undertake either of the agreed developed scheme options far exceed the indicative construction budget available.

---

There is potential to reduce the estimated budget costs by reducing the scope of works, however, this would have to be further investigated with the client to agree which elements should be omitted.

To ensure that all options have been explored, Frankham were requested to undertake a desktop review to assess whether it would be a viable option to develop the land to the south of the building, by extending the library on the ground floor into the car park, and converting the first floor into flats.

Option 3 provides a high level review of the potential for extending the building to meet the requirements of the client brief. As clearly identified, pedestrian access restrictions to the side of the library make this proposal an unviable solution for providing full accessibility, and again, potential development costs far exceed the indicative construction budget availability.

Our feasibility study does not include any options to find an alternative location for the library within the borough.

## 2.00 INTRODUCTION

The information contained within this report has been developed in response to the briefing documents and other information provided by LBH along with client and stakeholder meetings which were attended by: Haringey Council’s Project Managers, LBH’s Library Services Managers and LBH IT Consultant.

These meetings occurred on:

20.08.2015 – Kick Off Meeting

14.09.2015 – Design Review Meeting

Haringey Council have asked Frankham Consultancy Group to undertake a feasibility study, with options to establish the following:

1. How the library infrastructure can be improved to give inclusive access to staff and wider community users.
2. How the space can be configured functionally to provide a dynamic approach to developing the library and other associated customer service delivery.

This report investigates the constraints and opportunities to adapt and transform the existing library within the confines of the existing site boundary, to provide a fully accessible modern facility which will serve the Council’s future needs.

This document has been prepared in conjunction with all design team members.

The developed feasibility proposals will ensure workplace regulations are adhered to and this will be progressed throughout all stages of the project.

The feasibility stage project design team is as follows:-

	Joanna Heard	LBH Senior Project Manager
	David Llewellyn	LBH Project Manager
	Bernadette Brewster	LBH Acting Head of Libraries
	Anup Patel	LBH
	Andrew Kelly	LBH ICT
	Matthew Beech	Frankham Associate Building Surveyor
	Tom Fry	Frankham Building Surveyor
	Gertjan Janszen	Frankham Electrical Engineer
	Nick Ford	Frankham Mechanical Engineer
	Eric Ostrowski	Frankham QS

---

### 3.00 COMMISSION AND BRIEF

Frankham Consultancy Group received the commission from London Borough of Haringey in August 2015 to provide lead designer services including M&E, Structural and Quantity Surveying for feasibility stage (RIBA 0 & 1).

The client project brief identified the need to undertake a feasibility study, with options to establish the following:

1. How the library infrastructure can be improved to give inclusive access to staff and wider community users.
2. How the space can be configured functionally to provide a dynamic approach to developing the library and other associated customer service delivery.

The Client and stakeholders have together developed the Brief Matrix with requirements for 'Face to Face Services' and 'Back of House Staff' which was issued prior to the Kick Off meeting.

At the Kick Off meeting points additional to the brief were raised which include:

- Lift access and accessible toilets are the main issue.
- There is the opportunity to use the toy library area for other functions.
- It is worth considering putting children's / youth on the ground and adults on the first.
- Building energy performance needs to be considered (LED lighting, secondary glazing etc).
- Feasibility and recommendations done in 2005 need to be considered.

Additional information provided by LBH to the design team for review as part of the feasibility is as follows:

- Asset Management Site Plan 1:500 (12<sup>th</sup> August 2015)
- Asbestos Survey by ARG Surveys Ltd (4<sup>th</sup> April 2005)
- Redevelopment Feasibility Study by John Miller & Partners (October 2005)

Following the mid stage design review meeting the client updated the Brief Matrix and provided additional service information on visitor statistics.

#### 4.00 EXISTING ACCOMMODATION

Muswell Hill Library is located on Queens Avenue (A504). The Library was constructed in 1931 and has an English Heritage Grade II Listed status.

Muswell Hill is not directly served by a tube station, with the nearest stations being East Finchley and Highgate, although there are several bus services connecting the library with other areas of Haringey, West End and the City, with Muswell Hill, Muswell Hill Broadway and Queens Avenue stops all in very close proximity.

The Library opening times are:

Monday to Friday: 9am to 7pm  
Saturday: 9am to 5pm  
Sunday: Closed

The Library has on average 6,500 to 9,500 visitors per month.

The library building is a predominantly two storey building (with small single storey extension and basement) of traditional construction consisting of red and brown brick walls with stone dressings, complete with metal framed decorative glazed windows and timber door sets.

The building is covered by split level flat roofs, with higher level roofs within parapet upstand walls, incorporating original large metal framed decorative glazed roof lights with modern lantern coverings above.

The Library accommodation and facilities are split across multiple levels as follows:

Basement: Plant services and storage

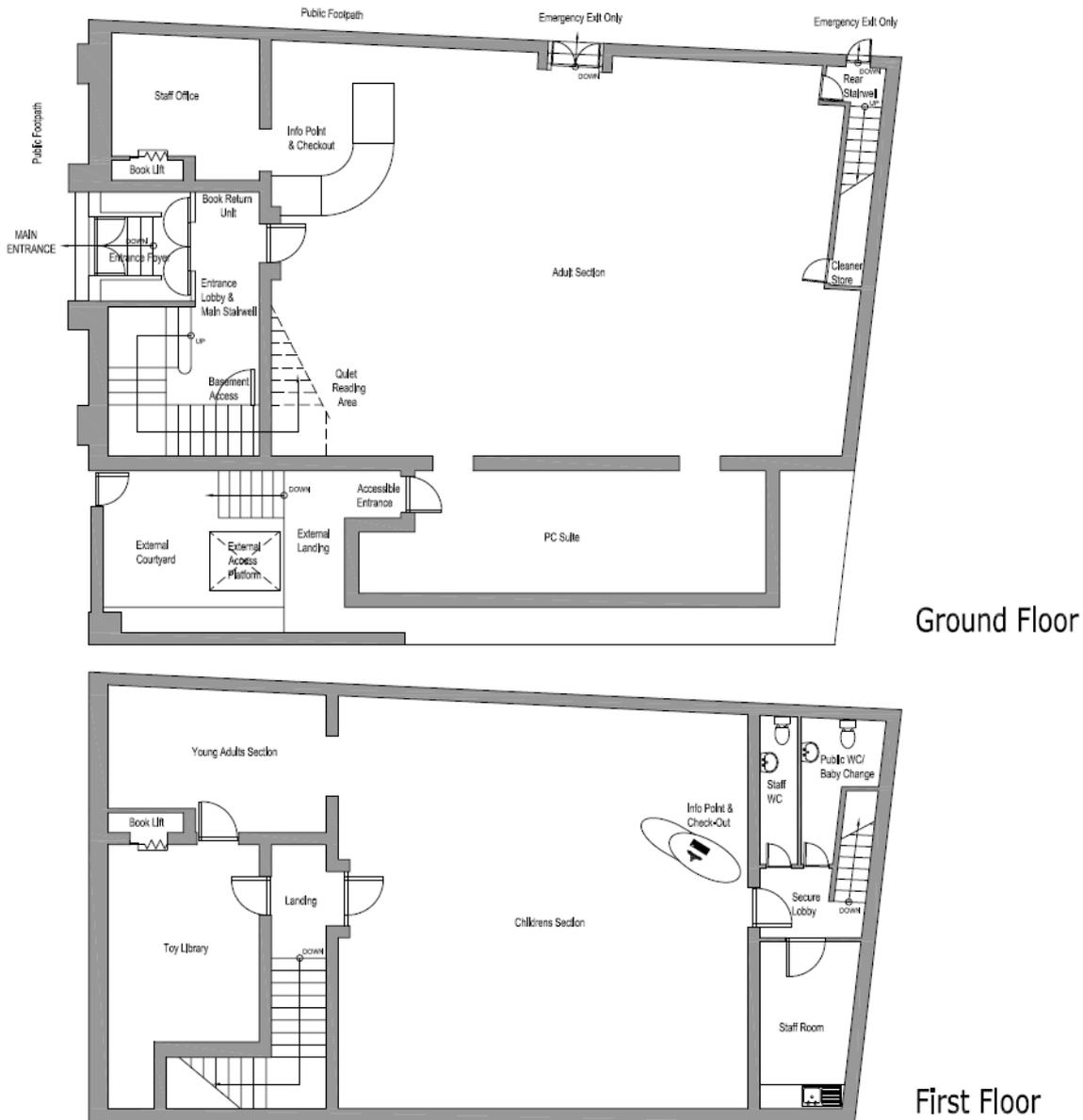
Ground Floor: Reception, staff office, adult stock and IT

GIA = 221m<sup>2</sup>                      NIA = 186.5m<sup>2</sup>

First Floor: Children and young adults stock, toy library, staff room/kitchenette and toilet facilities

GIA = 189.6m<sup>2</sup>                      NIA = 163.6m<sup>2</sup>

Overleaf is a copy of the existing ground and first floor plan layouts for the Library, prepared using the historic electronic drawing files provided by Haringey Council for use in the study. The basement is not shown on the plan layouts but is located directly below the main entrance lobby and staff office.



Ground Floor

First Floor

Accessibility to and within the building has been identified as a major problem in the library. There is no natural point of external level access to the building at the current time, with the main entrance access route via a set of six internal steps from pavement level, however, an external automated low rise access platform is provided in the small courtyard to the right of the main entrance which provides non sheltered level access to the single storey section of the building. Internally there are no accessible WC facilities and no level access to the first floor accommodation.

To the south elevation of the building there is a generous sized plot of land with rough hard stand finish which is also owned by LBH, currently used sparingly for non-formal staff parking, with vehicle access via Avenue Mews. See Section 9.01.



Photo 01 – North (Main) elevation & main entrance



Photo 02 – North/West side elevation & Accessible entrance



Photo 03  
Stepped Main Entrance



Photo 04  
Stepped entrance lobby access



Photo 05  
External stepped side  
Entrance & access platform



Photo 06 – East (side) elevation, narrow footpath  
Stepped access/emergency exits



Photo 07 – South (Rear) elevation & hard  
standing parking



Photo 08 – Stepped approach to main entrance lobby



Photo 09 – Main Entrance Lobby & Book Drop



Photo 10 – Basement Access & main staircase to 1F



Photo 11 – Adult Section & Main Entrance



Photo 12 – Main Information & Checkout Counter with rear access to Staff Office

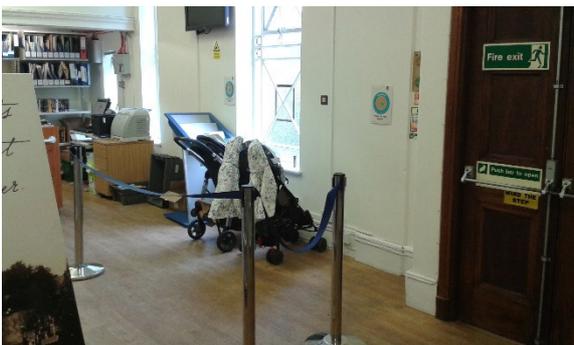


Photo 12 – Temporary Buggy Store Area



Photo 13 – Adult Storage & Side Exit



Photo 14 – Adult Section Book Storage & Entrance to Public IT Suite



Photo 15 – Quiet Reading Area Soft Seating



Photo 16 – Public IT Suite



Photo 17 – Public IT Suite & Automated accessible entrance



Photo 18 – Accessible egress route to pavement level



Photo 19 – Staff Office work Station desk



Photo 20 – Staff Office dumb waiter type book lift



Photo 21 – Staff Office IT server & book drop storage



Photo 22 – Stairwell Landing



Photo 23 – Toy Store

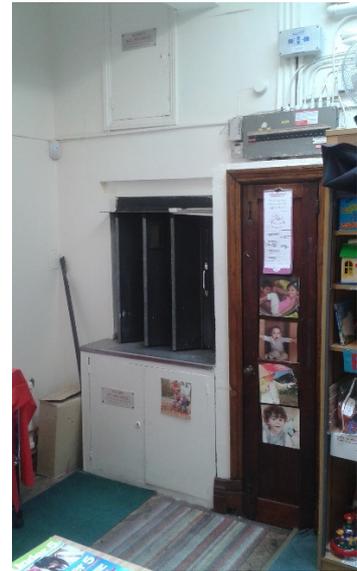


Photo 24 – Toy Store Book Lift



Photo 25 – Childrens Section Reading/Seating Area & main stairwell access to rear



Photo 26 – Childrens Section general free standing and fitted wall storage



Photo 27 – Childrens Section Info & Checkout Point with toilet access door (hidden)



Photo 28 – Free standing Info & Checkout counter



Photo 29 – Ornate glazing to ceiling



Photo 30 – Young Adults Section



Photo 31  
Staff Kitchenette facilities

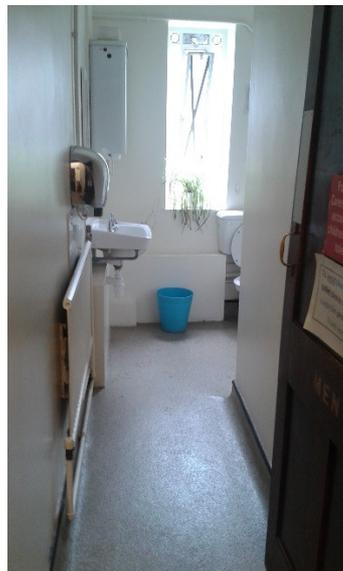


Photo 32 Unisex Public  
Toilet & Baby change facility



Photo 33 – Rear staff /  
emergency exit staircase

---

## **5.00 BUILDING FABRIC CONDITION OVERVIEW AND RECOMMENDATIONS**

### **5.01 Walls**

Generally the external brickwork and decorative stonework appears to be in a fair condition. We have noted that there is some brick face deterioration in isolation areas and significant deterioration to the stone string course to the front face of the single storey section of the building.

As part of the proposed re-model and extension scheme option damaged bricks would be replaced on a like for like basis and the deteriorated sections of stone would be removed to form an opening between the new entrance and IT suite, however, where internal re-modelling is proposed only, then we would advise that repairs are undertaken to prevent further deterioration of the stone.

### **5.02 Roofs**

The building is covered by various flat roofs. At the time of inspection there was no access to the flat roofs above the two storey section of the building, however, it is our understanding that these roofs were re-covered within the past 5 years, complete with new double glazed roof light lanterns fitted above ornate glazing, which we would advise will have a useful lifespan of a further 15-20 years. The flat roof covering above the single storey section of the building appears to be an older installation and shows of deterioration. We would recommend that any works undertaken which affect this roof should include replacement of the existing coverings.

### **5.03 External Windows and Doors**

Generally all windows throughout are painted critall type metal frame systems with ornate lead lined single glazing. A majority of the windows appear to still be operational and provide the building with natural ventilation.

As part of a full refurbishment scheme with upgrades to mechanical services installation meaning the windows were no longer needed to provide natural ventilation, we would recommend that all painted frames (internally and externally) are included as part of a full redecoration programme, and in addition secondary glazing be installed to improve the current poor thermal capacity of the window installations.

### **5.04 Rainwater Goods**

The visible rainwater goods are primarily located on the east elevation and are painted cast iron down pipes which are generally in a poor decorative condition. To the west face of the single storey extension there is a run of upvc guttering which appears to be in a fair condition.

As part of a full refurbishment we would advise that redecoration of the painted cast iron rainwater goods be included as part of full redecoration programme. Unless affected by the re-modelling the upvc rainwater goods could stay as existing, however, if

affected, then we would recommend that they are replaced with a pre-finished aluminium system with style more suited to the building.

### **5.05 Floors**

The floors throughout the main general use areas are finished with anti-slip vinyl sheet. The flooring within the IT suite, adult, children's and young adult sections is a high quality timber effect product, which appears relatively new and in a fair condition, exhibiting a minimal level of wear in high traffic areas. The flooring to stairs and toilet areas is an older and lesser quality product generally exhibiting increased level of dirt, staining and wear.

The ground floor entrance steps, lobby and staff office are finished with exposed stone tiling, which although showing signs of wear, are generally in sound condition, with isolated cracks and minimal deterioration of joints.

The first floor staff room and Toy Store are finished with wood block and sheet carpet respectively, both of which are worn, but generally sound and free from damage.

As part of a re-modelling and refurbishment scheme we would recommend that all floor coverings are removed and replaced. If budget constraints dictated savings had to be made then the floor coverings in general use areas would be suitable for continued use for a number of years, however sections may need patching in as part of the re-modelling which would be unsightly in a newly refurbished building.

### **5.06 Walls and Ceilings**

All of the walls and ceilings are painted plaster. Generally throughout the library the condition of the walls and ceilings is good. There is a general level of wear and marking to walls which you would expect in a public building and there is an isolated stain at high level within the adult section which is from a historical leak which has been resolved.

As part a refurbishment scheme we would advise that all walls and ceilings should be redecorated as part of full redecoration programme.

### **5.07 Internal doors and Glazed Screens**

Generally the doors, frames and glazed screens throughout the centre are treated timber which are in a good condition.

All items which are not removed or replaced as part of the re-modelling should be retained, provided general maintenance and included as part of full redecoration programme.

---

## 5.08 Toilets

All of the toilets are located on the first floor in the rear stair landing lobby. The sanitary ware is all operational, but dated.

As part of a full building refurbishment scheme we would recommend that any location where existing toilets are not due to be replaced as part of a re-modelling scheme, then they are replaced to bring up to a modern standard.

## 5.09 Fixtures and Fittings

Generally all items such fixed worktops, desks, shelving etc are in a fair condition.

It would be advised that all fixed worktops and desks be replaced as part of a refurbishment scheme to suit new layouts and current requirements, however, fitted shelving should be altered and refurbished.

Free standing furniture including book shelving, desking and seating is all generally in a fair condition. We would advise that soft furniture and tables be replaced to suit alternative layouts and end user needs, however, shelving units could be re-used, and as such have been used as the basis to preparation of feasibility layout Options 1 and 2.

Purchasing of new free standing furniture would be advised, particularly within the main ground floor adult stock area where the changes will make the greatest impact on floor space and layout, to provide opportunities for alternate methods of stock storage, improved user movement routes and integrated IT facilities.

## **6.00 BUILDING SERVICES - ELECTRICAL**

### **6.01 Introduction**

This section of the feasibility report has been compiled following a visit to site on Thursday 14 September 2015 to evaluate both the suitability and capability of the existing electrical services systems to support the proposed internal alterations and extension at Muswell Hill Library, Muswell Hill, London.

The proposals contained in this report concerning the electrical services have been compiled following a visual, non-obtrusive survey. No record information with regards to the electrical services was available at the time of the survey. The original building was constructed in 1931.

The existing electrical incoming supply is located in the basement at the front (south side) of the building.

### **6.02 Recommendations and Comments**

The electrical services to be installed within the internal alterations and extension will comply with current and future known standards relevant to general internal and external lighting, emergency escape lighting, small power, fire and intruder alarms, Equality Act requirements, etc. The provision of telephone and data facilities will be carried out to meet the intended usage of the spaces and user requirements.

The electrical services associated with the proposed internal alterations and extension will be designed in accordance with all relevant British Standards and CIBSE Design Guides.

### **6.03 Electrical Supply**

Muswell Hill Library is served by a UK Power Networks underground supply. The underground supply to the building is rated at 56kVA. The incoming supply terminates in an 80A three phase and neutral fused cut out located in the basement at the front of the building.

The main fuse cut out, rated at 80A, is mounted inside on the external south wall in the far corner of the basement next to the boiler plant room. From here a sub-main cable runs across the ceiling to a distribution board at the top of the stairs into the basement. Two more sub-main cables run up to the top floor. One supplies a distribution board in the Toy Store and the other supplies a small 7-way Wylex consumer unit.

It is estimated that the existing electrical load is in the order of 13kVA given the internal area of the existing Library building. With an anticipated additional load of 10kVA we don't deem it necessary that the existing incoming electrical supply is upgraded. All electrical loads associated with the refurbishment will be subject to review as the detailed design process is developed.

## **6.04 LV Distribution**

The Muswell Hill Library's electrical installation consists of a District Network Operator (DNO) cut out and 3 phase meter. The 3 Phase fused cut out is rated at 80A.

There are 2 main distribution boards and a small 7-way consumer unit located within the building. The first distribution board is located at the top of the stairs going down into the basement. This is a 17-way Single Phase distribution board manufactured by Dorman Smith and has 3 spare ways. The second distribution board is located next to the book lift within the Toy Store on the first floor. This is a 17-way Single Phase distribution board manufactured by Dorman Smith and has 1 spare way.

It is proposed to replace the 2 Dorman Smith Single Phase 17-way distribution boards with new Single Phase MCB distribution boards to cater for the final circuits associated with the refurbishment of the building.

## **6.05 General Lighting Installation**

'Pop Pack' style luminaires are fixed direct to ceilings or walls. These luminaires are very energy inefficient and several luminaires in the building have discoloured diffusers which are affecting the efficiency of the luminaires further.

A complete internal lighting installation will be provided in the internal alterations and extension areas. The existing lighting installation in the areas where internal alterations will take place will be modified and altered as necessary to suit the re-modelling of the space.

Good quality lighting is an important feature both for functional reasons and to enhance the building form. Lighting equipment will be selected to harmonise with the architecture visually creating a bright, interesting and pleasant environment.

For lighting to function well and be flexible and energy efficient, automatic controls and dimming facilities will be incorporated wherever appropriate to do so. All fluorescent luminaires will incorporate high frequency or dimmable high frequency control gear as standard.

Consideration shall also be given to utilising new LED lamp technology to further increase energy efficiency and decrease maintenance requirements whilst reducing energy costs and CO2 emissions. LED luminaires are recommended where ceiling heights are of such a height that lamp replacement requires specialist equipment to reach the luminaire.

## **6.06 External Lighting**

The existing external lighting installation will be upgraded and adapted as necessary to suit the imposition of the new extensions.

External lighting facilities will be installed on the new extensions, affixed to the building, to provide safe and secure movement externally around the library building especially at the location of the external platform lift.

The locations of the new and repositioned external luminaires will be carefully selected to avoid light trespass being a nuisance to the environment and any neighbouring properties.

### **6.07 Emergency Lighting**

Because of the recommendation of upgrading the existing lighting system emergency lighting will be provided by self-contained nickel cadmium battery, charger and inverter facilities integrated within the general lighting luminaires where possible. Stand-alone LED emergency luminaires with nickel cadmium battery, charger and inverter facilities will be provided where emergency lighting can't be integrated within the general lighting luminaires or where it is more practical. Emergency luminaires and shall each have manufacturer's stand-alone self-test facility.

The emergency lighting installation will be installed in compliance with BS5266.

Emergency luminaires shall be manufactured to ICEL Standards and provide a 3-hour standby facility in the event of local or complete building power failure. In addition to the internal areas, emergency lighting shall also be provided both, above and directly outside, all external emergency exit doors and along escape routes immediately adjacent the building.

### **6.08 Small Power Installation**

A system of 13 amp socket outlets, fused connection units, isolating switches, etc. will be provided throughout the internal alterations and extension for general purpose, cleaning and maintenance purposes serving portable and fixed appliances and ancillary services.

Appropriate power supplies will be provided to serve electrical appliances and items of fixed equipment as required.

Multi-compartment PVC perimeter trunking will be utilised in areas where a high density of accessories are required.

Small power accessories will generally be recessed and wall mounted, having white or contrasting moulded faceplates depending on the paint colours on the walls. Where socket outlets are mounted on perimeter trunking they shall have contrasting cover plates. In plant rooms accessories will be surface mounted with a metalclad finish.

Generally, socket outlets will be wired on ring circuits which will be protected by residual current circuit breakers.

---

## 6.09 Data and Telephony Services

### Current situation

The Muswell Hill Library IT infrastructure is currently based around two small wall-mounted IT equipment cabinets located in the ground floor staff office. These house the active network equipment, terminating equipment for incoming circuits and the cabling infrastructure to work areas around the Library.

The IT infrastructure was originally contained within one of these cabinets located in the front desk but over the years the IT requirements have become more complex and we are now at a stage where the two equipment cabinets make it difficult to manage moves and changes, and offer little scope for growth should new technologies require it.

The internal cabling that provides the means to deliver IT services to work areas (corporate and public) is Category 5e and about 15 years old. This can cope with the current network bandwidth requirements but new technologies are pushing this grade of cabling to its limits and it is likely they will surpass it within the next five years.

### Preferred configuration

Consolidate the contents of the two cabinets into one IT equipment cabinet in the proposed staff area on the first floor. The new cabinet will be floor standing, 800mm wide x 600mm deep x 1400mm high. The cabinet will require working access clearance of 1000mm to the front and one of the sides.

The new equipment cabinet will house all of the IT active network equipment (switches, routers, etc) that provide IT services to the library, as well as the cabling to connect work area devices to the LAN switches.

The existing Category 5e cabling will be removed and new Category 6A cabling will be installed. Haringey is moving towards a wireless environment to deliver IT services to work areas. With new wireless access points (WAPs) planned to utilise bandwidths in excess of 1GB/s, the old Category 5e cabling will not be able to transport these bandwidths whereas Category 6A cabling is capable of transporting bandwidths up to 10GB/s.

To mitigate the effects of alien crosstalk, the Category 6A cables will be shielded. Therefore, the new IT equipment cabinet must have a suitably sized earth bonding connection to the building's main earth terminal.

Voice services are currently provided as Centrex lines from Virginmedia. It is anticipated that these will be migrated to IP, utilising the LAN. However, it is good practice to include a voice grade link from the incoming voice services demarcation point to the new IT equipment cabinet.

To ensure that adequate wi-fi coverage is achieved for corporate users and the public, the existing WAPs will be re-sited and new WAPs installed to complement them.

---

The Library is connected to the Haringey network via a Virgin Media LES 10 circuit and a Virgin Media cable broadband circuit. These circuits will need to be relocated to the new IT equipment cabinet.

### **6.10 Fire Alarm System**

The existing fire alarm system consists of a fire alarm panel situated near the reception desk on the ground floor. All rooms have smoke/heat detectors installed apart from the individual toilets. The existing fire alarm appears to be recently installed and in good condition.

The fire alarm system protecting the existing building is an analogue addressable system and can support automatic fire alarm detectors that would be required to protect the building to meet current standards.

The existing fire alarm system will be modified/updated and altered as necessary to suit the remodelling of the spaces. New fire alarm services will also be provided in the internal alterations and extension areas where necessary.

### **6.11 Security Systems**

The existing intruder detection and alarm installation in the internal alterations and extension will be adapted to suit the layouts. The existing intruder alarm appears to be recently installed and in good condition.

Generally, the adapted intruder alarm system will comprise of door contacts and strategically located PIR movement detectors. The intruder alarm wiring will be installed flush within the fabric of the building, wherever possible, for a concealed installation.

The end user has stated that the existing CCTV installation is not currently operational. It is recommended that a new CCTV installation be installed to cover the entrances and re-configured building layouts.

New perimeter based detection systems will be installed to replace the old system which is not working. The new systems will be placed at the entrance, from the main stairwell, into the Adult section on the ground floor, both entrances into the Children's Section, from the landings, on the first floor and the accessible entrance door.

## **7.00 BUILDING SERVICES - MECHANICAL**

### **7.01 Introduction**

This section of the feasibility report has been compiled following a visit to site on Thursday 14 September 2015 to evaluate both the suitability and capability of the existing mechanical services systems to support the proposed internal alterations and extension at Muswell Hill Library, Muswell Hill, London.

The proposals contained in this report concerning the mechanical services have been compiled following a visual, non-obtrusive survey. No record information was available at the time of the survey.

### **7.02 Standards**

The mechanical services to be installed within the internal alterations and extension will comply with current standards as recommended by the Chartered Institution of Building Services Engineers (CIBSE), the Water Regulations Advisory Scheme (WRAS) and Building Regulations.

### **7.03 Gas Service**

A natural gas service enters the building at basement level and supplies the central heating boiler only via a U16 meter installed in 2011 that has the capacity to serve a boiler rated at up to 135 kW output. This will be more than sufficient to serve the building even if extended as proposed.

The room containing the gas meter is unventilated and we recommend that high and low level ventilation of at least 2% of floor area should be provided as outlined in the Gas Safety (Installation and Use) Regulations.

Part of the steel gas service pipe is unpainted and we recommend that this should be painted to protect against corrosion. Redundant branches should be removed.

A gas solenoid valve is provided for emergency shut down.

### **7.04 Water Services**

A 1/2" incoming mains water service enters the building at the rear staircase in a lead pipe. The system should be checked to ensure that no lead pipework occurs downstream of any copper pipes because this could lead to galvanic corrosion and premature failure.

The cold water service supplies sanitary ware, point of use electric hot water heaters, and the heating system, via a pressurisation unit. If funds permit we recommend the replacement of water heaters with new units as it is likely that the existing units will be lime scaled to an extent.

It will be straightforward to reconfigure the domestic water services to suit the proposed new layouts and we propose that new point of use water heaters will be provided to serve the new WCs and staff facilities.

## **7.05 Heating**

Space heating is provided by a single Broag Remeha Gas 210 Eco Pro boiler, rated at 120 kW at 80°/60°C flow and return, which is located in the basement. A single wall stainless steel flue pipe connects to an existing masonry chimney – it is not known if the chimney is lined.

The boiler is a type that is still manufactured and has a sectional cast aluminium heat exchanger giving high efficiency with low NOx emissions (class 5). The boiler provides low temperature hot water via a single pumped circuit to fan convectors in the large rooms and radiators in the smaller rooms.

The heating system is sealed and an automatic pressurisation unit and an expansion vessel are provided.

A duplex Grundfos Magna variable speed pump set is provided (run and standby).

A simple control panel has a surface mounted analogue time switch and a manual pump changeover switch. The central controls are rudimentary but acceptable for a building of this size and simplicity.

No dosing pot is provided which we would recommend to facilitate maintaining the correct concentration of water treatment chemicals.

The boiler room has high level ventilation only for combustion air supply and temperature control and we recommend that additional low level ventilation is provided to comply with gas regulations.

Fan convectors are controlled by appear to be quite elderly and dirty and should be replaced to ensure continuing trouble free use and improved energy efficiency. Wall mounted thermostats are provided.

Radiators appear to be in satisfactory condition and should continue to remain so for many years to come provided the water treatment regime is maintained properly. Radiators are fitted with thermostatic valves and we recommend that the valves and heads should be replaced to ensure continuing satisfactory performance.

The boiler will be more than sufficient to serve the building even if extended as proposed and it will be straightforward to reconfigure the heating system to suit the proposed new layouts.

## **7.06 Ventilation**

Limited local extract ventilation is provided but the occupied spaces are generally ventilated via opening doors and windows. This will become untenable if secondary glazing is applied and a mechanical ventilation system will be required.

We propose that a small air handling unit should be installed on the roof to provide mechanical ventilation with heat recovery by plate heat exchanger recuperator. The air handling unit would contain air filters and a low temperature hot water heating coil served from the existing boiler which has more than enough spare capacity. The supply and extract duct connections to the building would be provided with attenuators to control noise levels within the building to the required standard for a library building.

Ductwork would be routed through risers to serve the ground floor areas.

The air handling unit would need to be accessed at least quarterly for inspection and filter changes and access to the roof should be improved to ensure that access can be safely and easily achieved.

## **7.07 Comfort Cooling**

Presently there are no cooling systems in the building. If secondary glazing is fitted we recommend that comfort cooling should be provided in the form of an energy efficient Variable Refrigerant Volume (VRF) system.

The VRF cooling system would comprise one or more floor standing outdoor heat rejection condensing units that would be positioned at the rear of the building connected to approximately 9 no. indoor units that would probably be wall mounted.

## 8.00 STATUTORY REQUIREMENTS

### 8.01 Accessibility & Equality

#### 8.01.01 Building Entrances

Access to the building is primarily via Queens Avenue which is generally a busy road with a footpath running directly adjacent to the front of the library. The footpath is 3 metres wide and set on a gently graded slope, with two designated disabled parking spaces located directly in front of the library.



Photo 34 – Disabled Parking & Pedestrian Footpath located on Queens Ave

It should be noted that whilst 2 designated disabled spaces have been provided, these are not compliant under current legislation due to lack of set down and safe access zones.

The existing stepped main entrance is non-compliant and based on its layout and the listed nature of the building, has no scope to make accessible.

An automated platform lift has been installed in the external courtyard to the side of the building which is compliant, however, this lift has no shelter from the weather and should be deemed sub-standard.

There are two side entrances / exits from library (located in the main adult section and at bottom of emergency escape stair case), which both incorporate steps down to footpath level on Ave Mews, which is a narrow side street which runs alongside the library (see item 8.01.03).

#### 8.01.02 Internal Areas

Within the building, access from ground to first floor for visitors is via the main staircase, and there is a second narrow staircase at the rear of the library which can only be accessed by staff. There is currently no level access between ground and first floor. Potential for a rising stair platform lift has been considered, however, the high level of traffic on the stair case would make this option unviable for regular daily use.

The large difference in levels between pavement and internal floors mean that there is no possibility to form external ramped access which would be compliant with current legislation.

As a very minimum consideration, our recommendation would be to form a new external entrance at ground floor level which is compliant with current legislation, and to install a new canopy to provide a sheltered approach and use of the existing platform lift.

Within the building an internal platform lift should be installed to provide automated level access between floors for staff and visitors.

### 8.01.03 Ave Mews Access Review

Ave Mews is a side street which runs alongside the library, which connects Queens Ave and Princes. This route provides vehicular and pedestrian access to;

- the side of the library;
- vacant land to the rear of the library;
- the rear of all business premises located on Muswell Hill Broadway; and
- a small number of business premises actually situated on Ave Mews.



Photo 35 – Ave Mews at access point via Queens Ave

The pedestrian footpath (shown on left hand side of road in photo above), is generally 1.8 metres wide, but has a number of drop kerb sections for access to the gated rear driveways and courtyards of the Muswell Hill Broadway properties. It has been observed that this footpath is largely obstructed by numerous large wheeled waste collection bins, which prohibits safe pedestrian use.

The pedestrian footpath (shown on right hand side of road in photo above) has a maximum width of 1.2 metres, reducing to between 1-1.1 metres wide where stone column details are located at regular 3 metre centres. There is a drop of between 30-80mm between the footpath and road surfaces. The surface level of the footpath raises by approximately 800mm over the full length of the side elevation, which equates to a gradient of lesser than 1:20, which is satisfactory under current legislation.

The single lane vehicular access road is 3.5 metre wide and is used for vehicles going in both directions. The road widens slightly in line with the vacant land to the rear of the library. It has been observed that there is insufficient width for vehicles to pass one another which therefore means that in the event of two cars meeting, it is necessary for one to mount the pedestrian footpath or vacant land to enable the other to pass. This again prohibits safe pedestrian use.



Photo 36 – Ave Mews at rear of library

We have reviewed the use of the pedestrian footpath running directly alongside the library in line with current British Standards legislation document BS8300:2009+A1:2010 Design of buildings and their approaches to meet the needs of disabled people - Code of practice, and in particular, Section 5 Access routes to and around buildings, Item 5.2 Width and height of an access route.

This section states that to be accessible, the minimum unobstructed width of an access route should be:

- a) at least 1800 mm, if there is intense simultaneous use in both directions by the population at large, including people in wheelchairs;
- b) at least 1500 mm, if the route is less busy and passing places are provided for wheelchair users;
- c) at least 1200 mm, in exceptional circumstances, e.g. for rarely used access routes;

It is clear that the footpath running directly alongside the library barely complies with the current legislation for use in 'exceptional circumstances'. It would not be suitable for general access by wheelchair users and persons with prams or push chairs.

If in future Ave Mews could be pedestrianised, then access to the library from its side elevation or a potential extension to the rear on the existing vacant land could be considered. However, given the need for vehicles to be able to access rear driveways of the business premises located on Muswell Hill Broadway for deliveries and collections, it is highly unlikely this would ever happen.

---

## 8.02 Sanitary Installations

The library is currently served by two toilets, both of which are located on the first floor. One of the toilets is designated for staff use and the second is designated for public use and has been fitted with a small wall mounted fold down baby changing unit.

Neither of the toilets is fitted with any accessibility equipment or of sufficient size to be converted to a fully accessible toilet to meet current accessibility regulations.

The fact that there is no sanitary provision on the ground floor, and that the only public toilet available for use by adult visitors is via the children's section, is deemed highly unsatisfactory.

The end user has advised that the staff numbers at the library are generally 3 regular staff members, with an additional 2 staff members at peak times. In line with the British Standards 6465-1 document for Sanitary Installations, a single toilet for staff use only would satisfy the minimum provision required for the workplace.

Based on the library's opening hours and the visitor numbers provided by the end user (103,516 year 2014/15), we have calculated that the library has an average of 34 visitors per hour. In line with the British Standards 6465-1 document for Sanitary Installations, a single toilet for visitor use would not comply with the minimum standards for an assembly building where the WC is not concentrated in intervals. A minimum number of toilets required to comply with this legislation would be 3 if toilets are gender segregated or 2 if unisex.

The lack of any accessible toilet facilities within the building contravenes all current accessibility and sanitary provision legislation.

In order to meet current legislation for both accessibility and sanitary installations, we would advise that as a minimum the library should have 1 staff toilet and 2 unisex visitor toilets. If level access is provided between floors, then a minimum of one of the visitor toilets should be fully accessible, however, in line with equality recommendations and to avoid unsatisfactorily long travel distances and mixing of age groups within the library, we would recommend that a fully accessible toilet be provided for visitors on each floor.

We do not recommend that a shower facility is essential, but this could be further reviewed if a specific need is identified as part of a staff travel survey.

Nappy changing facilities should be provided in areas where young children are likely to be present, so accessible toilet facilities in close proximity to the children's section should include this as a minimum.

Premises over 100m<sup>2</sup> should be provided with a cleaner's room with suitable cleaners sink facility. Options should include for this as a minimum, but we would recommend that the sink facility could be incorporated as part of the new sanitary accommodations

within a lockable cupboard, as the sinks would only be expected to be used outside of opening hours.

### **8.03 Fire precautions**

The library is currently served by a relatively new fire alarm system, which is fully compliant and would simply require modification to suit proposed re-modelling options.

The proposed designs do not affect the buildings existing fire strategy in terms of means of escape, but a few items are noteworthy:

- The proposed internal lift would not be identified as an emergency escape route.
- The proposed lift shaft would need to include for fire separation between floors.
- The proposed glazed extension would need to consider fire separation between floors and fire rating for glass enclosure where in close proximity to existing single glazed windows.
- New accessible entrances with secure door entry systems would require connection to the fire alarm system to fail safe upon activation of the alarm.

The existing and proposed plan layout options were issued to the Fire Officer for consultation, who advised that both options would be acceptable, subject to fire alarm and emergency lighting amendments.

It is anticipated that given there is no change to the existing emergency exit strategies that there would be no objection to either proposal, however, consultation and approval would be sought at an early stage in the detailed design process if either of the options were approved to progress.

### **8.04 Asbestos**

Refer to section 7.

A historical type 2 asbestos survey report is available, however, it is 10 years old, and it is believed that items included within the report have now been removed.

In advance of any proposed re-modelling works a new refurbishment and pre-demolition survey would be required.

Given the age of the building, it should be anticipated that some asbestos containing materials may still be present in the building and would require removal prior to undertaking re-modelling and refurbishment works.

---

## 8.05 Planning and Listed Building Consent

Given the Grade II listed nature of the building, we would advise that the proposed works included within either of the two options that have been developed would require a formal application for listed building consent.

The works within Option 1 are predominately internal (with exception of a canopy shelter) and we would not anticipate objection to approval of the application.

The works within Option 2 are far more extensive and by adding an extension will clearly have a major impact on the appearance of the external envelope of the building. Close consultation with the local planning and conservation team would be essential to achieving a design that would be deemed acceptable. If a scheme is agreed with the local planning team, it would be anticipated that there would be no objection by English Heritage, however, there is always a risk that if there were objections submitted by the general public during the application process this could occur, and the application would not be approved.

## 8.06 Building regulations

The proposed works will require a full plans application to be submitted to the local authority.

An access statement will be required to address the items that require dispensation to Approved Document M and the Equality Act as detailed in section 8.01 Access for wheelchair users.

Other key factors relating to building regulations will include ventilation strategy for the building in accordance with Approved Document F and drainage installations for new sanitary accommodation in accordance with Approved Document H, for which it should also be expected it will be necessary to make an application to Thames Water for connection to public sewers.

The existing and proposed plan layout options have been issued to the building control team for consultation, and confirmation has been received that the options are acceptable.

---

## 8.07 CDM Regulations 2015

The construction period would be more than 30 days on site therefore the project is notifiable. The CDM Regulations will apply in full to this project.

A CDM Co-ordinator has not been appointed at the current time.

Haringey Council would be strongly advised to appoint a lead designer for this scheme as early as possible.

Given the level of refurbishment works included within the scheme we would strongly advise that the library is de-canted and closed for the duration the works. The main issues with attempting to carry out the works in occupation are as follows:

- Interruption of services;
- Noise levels;
- Potential conflict at interface with public;
- Risk of tools, plant and machinery being left unattended would need to be closely managed, possibly requiring additional site management;
- Disruption of emergency escape routes;
- Protracted construction programme;
- Increased construction costs

**9.00 INFORMATION REVIEW**

**9.01 Asset Management Site Plan 1:500 (12th August 2015)**



The land owned by Haringey Council is clearly defined by the red line. The Library building is located in the northern section of the plot with direct access onto both Queens Avenue and Avenue Mews.

The remainder of the plot, which is approximately 400m<sup>2</sup> in size, is a concrete hard standing, slightly raised up from road level which is currently used sparingly as a car parking facility. It is our expectancy that the section of land to the south of the Library would be much sought after for development given its central location within the Muswell Hill area.

## 9.02 Asbestos Survey by ARG Surveys Ltd (4th April 2005)

### *Asbestos Survey at*

*Muswell Hill Library  
Queens Avenue  
London  
N10 3PE*



*ARG Surveys Ltd*

SiteID:	0270-001
Survey Ref:	0270-001
Last Survey:	14 March 2005
Printed on:	04 April 2005
Title Section:	Page 1 of 2

Printed using ENVACDS

The report provided is based on a Type 2 survey, which is a standard sampling, identification and assessment survey.

The asbestos survey identified that asbestos containing panels were present in five locations within the building, predominantly to the rear of doors, to provide 30 minute fire integrity on emergency escape and lift shaft routes.

The asbestos types identified in the boarding are Chrysotile, and all of the identified items were scored as minor or low risk.

It is our belief that all of the identified boards have now been removed and replaced with non-asbestos containing fire rated boarding.

Both of the proposed options to re-model the existing library involve significant alterations, opening up and refurbishment of the existing

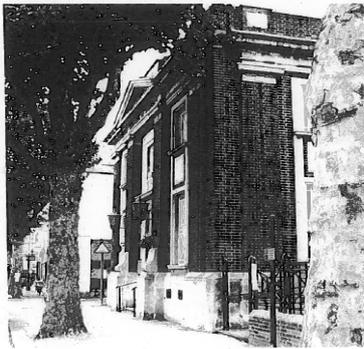
building structure, therefore we advise that a new refurbishment/pre-demolition survey would be required, which is an intrusive survey, which would identify any potential hidden asbestos which had previously been covered and wouldn't have been identified on the original Type 2 survey.

Further to our site inspection, we would not anticipate finding significant amounts of asbestos, however, given the age of the building and services installation, there is a significant risk that there may be services lagging and gaskets still present in the building which contain asbestos and would need to be removed under controlled conditions by a specialist licensed asbestos removal contractor.

### 9.03 Redevelopment Feasibility Study by John Miller & Partners (October 2005)

Feasibility Study Commissioned by  
Haringey Libraries

Muswell Hill Library Redevelopment



John Miller + Partners LLP Architects

The feasibility study undertaken by John Miller & Partners in 2005 similarly included general refurbishment and new toilet and lift facilities, but as part of a various scheme options, all of which would significantly change the internal building layout and increase the size of the library building by extending on the east and south elevations, to provide accommodation for art exhibition and restaurant facilities.

Following an outline review of the options provided we would advise that even the most minimal option included to provide accessibility improvements would far exceed the current advised indicative budget of £200,000.

Given the existing library building has a grade II listing, any extension to the building would require listed building consent, and it should be anticipated that any extension which affects either of the 3 elevations which are of architectural significance may be strongly opposed.



However, if the only suitable way to improve accessibility to and within the existing building is to form an external structure to house automated level access facilities, then we fully agree with the illustrated proposals to include a modern glazed modular type extension and canopy on the west elevation in the location of the external courtyard and single storey section of the building, which would provide a sheltered level access entrance and weather tight lobby, with lift facilities to ground and first floor. We would expect

English Heritage to favour this contrasting modern style of development, which as glazed would leave existing elevation walls within the development fully visible from street level, rather than trying to design an extension of similar materials and style, which would inevitably still fail to blend in with the existing external envelope.

We have based the proposed extension to the existing library building that we have provided for Option 2 on the illustration above which was included within the original feasibility study.

## 9.04 Client Brief Matrix

Version 1 of the Client Brief Matrix was provided on 18<sup>th</sup> August 2015 as an addition to the project brief documentation.

The first version of the document was used for reference in production of the initial 3 internal alteration options.

As one of the key criteria in the client matrix is to retain a similar level of book storage within the building, Frankham undertook an outline measured survey of the book shelving storage units, and found the linear meterage stated in the client brief to be comparable to that recorded on site.

During the design review meeting a number of the items included in version 1 were discounted as being unnecessary for inclusion within the Muswell Hill scheme.

The matrix was updated by the client to clarify the revised key requirements as agreed by the design team, and to identify the provisions that could be achieved as part of the initial 3 options, and the developed options.

A copy of the V.03 matrix is included overleaf.

Generally the updated matrix identifies that a majority of the end user requirements can be met via both options 1 or 2, however, with the inclusion of new door openings and automated lift facilities there is an associated reduction in floor area which is unavoidable, and in turn reduces stock shelving capacity in both adult and children sections.

Muswell Hill Library Brief (V0.3)

Face to Face Services									
Item	Space	Library	Total Units	Option 1	Option 2	Option 3	Option 1	Option 2	Comments
6	People's Network PCs	10-20	20	11	11	16	14	14	Minimum 10. Wide desks to enable two people to sit at each PC
7	Children's Lib. PC's Young Adult Section PC's	5	5	3	3	2	3	2	Young Adult Section Needs adequate power and data
8	Totum issue / return	2	2	2	2	2	2	2	2 x New - 1 upstairs, 1 downstairs Position close to the entrance
9	Book sorter	1	1	1	1	1	1	1	As existing
11	Reception Focal Point	2	2	2	2	2	2	2	As existing 1 no. Downstairs for 2 staff 1 no. Upstairs for 1 person
15	Public multifunction machines (printer,scanner,fax,copier)	1	1	1	1	1	1	1	1 per floor if split PC's for adults
17	Pubic WCs	Yes - number 1	TBC	2	2	2	2	2	Accessible toilet required downstairs
18	Talis Terminal	2	2	2	2	2	2	2	1 each floor located at each
19	Notice Boards	4	4	4	4	4	4	4	As existing
22	Public Study Space	10 Desks (min)	10	-	-	-	5	5	6 existing
23	Quiet Reading seating	6	8	6	8	6	8	8	
24	Children's library Seating	20 - 30	30	30	30	30	30	30	As existing
25	Linear metre of books - Adults	267.7	267.7	-	-	-	231.6	238.2	Based on re-use of existing shelving units
26	Linear metre of books - Junior	142.34	142.34	-	-	-	130	137.1	Based on re-use of existing shelving units
27	Book Storage	0	0	-	-	-	0	0	
28	Dynamic Display Screens AND Plasma Information screens	3	3	3	3	3	3	3	At entrance & adjacent PC's
30	Hard of hearing induction loops	2	2	2	2	2	2	2	To each reception desks / areas
34	Meeting Room	1 (for 8 people)	1	1	1	1	1	1	Flexible space for staff meeting / and or local community (Back of House)

Back of House Staff									
Item	Space	Customer Service	Total Units	Option 1	Option 2	Option 3	Option 1a	Option 1b	Comments
35	Number of Staff	3	3	3	3	3	3	3	3 staff at any one time, on rota basis
36	Staff WCs (based upon BS6465)	1 (architect to check)	1	2	2	1	1	1	Dedicated secure access facility
37	Lockers	10	10	10	10	10	10	10	
38	Staff multifunction machines (printer,scanner,fax,copier)	1	1	1	1	1	1	1	
39	Back of house desk workstations	Space for 2 people	2	2	2	2	2	2	
40	Water Dispensers	1	1	1	1	1	1	1	
42	Breakout Spaces / kitchen	1	1	1	1	1	1	1	For minimum 3 people
46	Fire extinguishers	Yes (architect to check)	TBC	-	-	-	-	-	
47	Comms Room		1	1	1	1	1	1	New room created
48	Cleaners Store		1	1	1	1	1	1	Option 1 creates new store Option 2 utilizes existing

## 10.00 INITIAL DESIGN OPTIONS

At the initial project kick off meeting, it was agreed that an initial 3 options should be provided for client review and comment, following which a preferred design option would be further developed and the potential for an extension option if required could be further discussed.

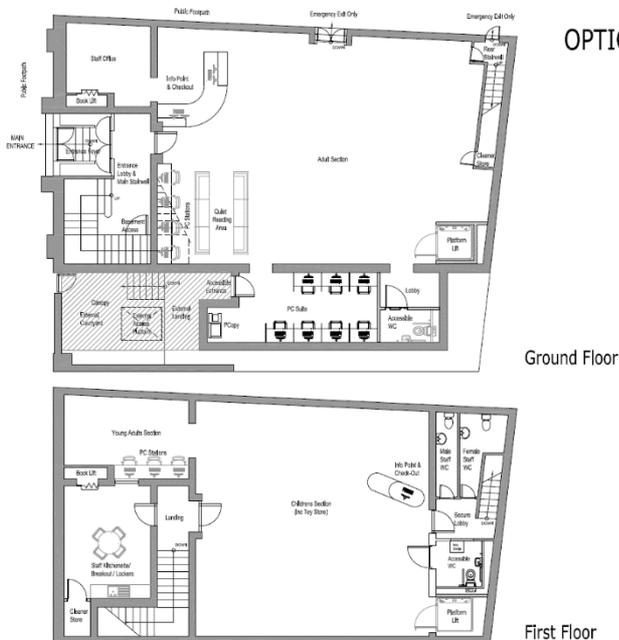
The initial building layout review and option proposals were prepared based on initial end user information, in conjunction with the following:-

- BS8300:2001 (amended) Design of Buildings and their approaches to meet the needs of disabled people
- BS 6465-1:2006 Sanitary Installations Part 1: Design of sanitary facilities and scale of provision of sanitary and associated appliances
- Approved Document M 2015 Access to and use of buildings Volume 2 Buildings other than dwellings.

Three initial options were issued for client review on 02/09/2105 and are located in Appendix A.

To follow are outline plan layouts for each option complete with outline description and design team comments recorded at the review meeting held on 14/09/2015:-

### 10.01 Option One



**OPTION 1** This option retains the existing external platform lift in its current location, but improves the facility by installing a new glazed canopy to provide the user with shelter from poor weather.

Within the ground floor a new accessible toilet would be formed at the far end of the IT suite. In association the amount of public IT workstations would be directly reduced, but offset by forming additional public IT browser stations within the main Adult Section adjacent to the reading area.

The new automated platform lift would be installed in the corner of the main

Adult Section, to maximise remaining space available for book storage and position in close proximity to the accessible toilet.

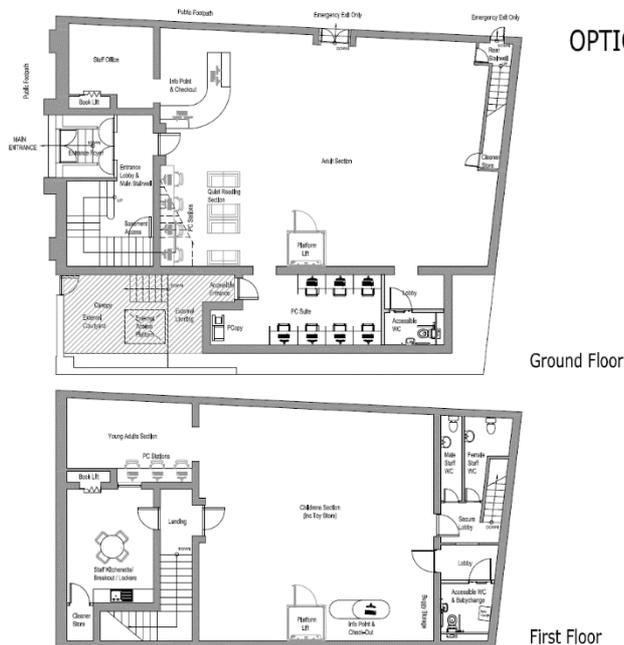
On first floor the existing staff Room/Kitchenette is to be converted to form the lift shaft and accessible toilet with baby change, both accessible directly from the Childrens Section.

The Staff Room/Kitchenette is re-located to the existing Toy Store, complete with store cupboard, and the door access to Young Adults is blocked up to provide Young Adults section additional IT work station space. The Toy Store would have to be combined as part of the Childrens Section or re-located to alternative site.

### **Design Team Review Comments**

- Liked the proposal to provide canopy shelter to external platform lift if it had to be retained.
- Liked the location of internal automated platform lift, but would prefer the accessible toilet to be located alongside the lift to mirror the proposed first floor layout.
- Liked the additional IT browser stations in Adult Section. Stations should be sufficient width (1.5mW preferable) to allow 2 people to sit at to maximise general use and provide suitable space for 1-2-1 training.
- Loss of IT workstations within public IT suite was a negative as this is a highly used section of the building. Wherever possible number of IT workstations need to be maximised. Agreed individual IT workstations to be 1metre width.
- Agreed number of staff toilets provided was excessive and that single unisex toilet was suitable for general number of staff (3 staff + 2 staff at peak times). It would be preferable to change one of the staff toilets to a cleaner's store, or find another location for cleaners store with Belfast type sink.
- Liked the re-location of the Staff Room/Kitchenette, but would prefer it if the space could be sub-divided to form a small staff meeting/training room.
- IT stated that to upgrade telecoms installation a new dedicated Comms Cupboard would be required as existing wall mounted unit in Staff office would be insufficient in size. Although slightly below preferred size for Comms Cupboard (generally 1m working space around unit) it was agreed that cupboard to corner of proposed staff room (1.4m<sup>2</sup>) would be suitable. No mechanical extract ventilation required, natural venting link to adjoining room would be sufficient.
- Liked that a section of wall had been dedicated for buggy storage.
- Would prefer Info & Check Out counter to be larger than existing.
- Liked additional space for IT work stations in Young Adults sections by blocking off door way, but agreed workstation desktop would be standard desk height so computers could be used by young adults and children.

## 10.02 Option Two



**OPTION 2** This option is very similar to option 1, with the principal difference being that the proposed platform lift is positioned centrally within the Adult Section which made it closer to the existing accessible entrance thus reducing distance for wheelchair users or parents with buggies travelling through book store areas.

To maximise the floor space for book storage in the adult section, the new accessible toilet is located in the far end of the existing IT suite within the single storey section of the building, however, in association with this the number of public IT work stations is reduced.

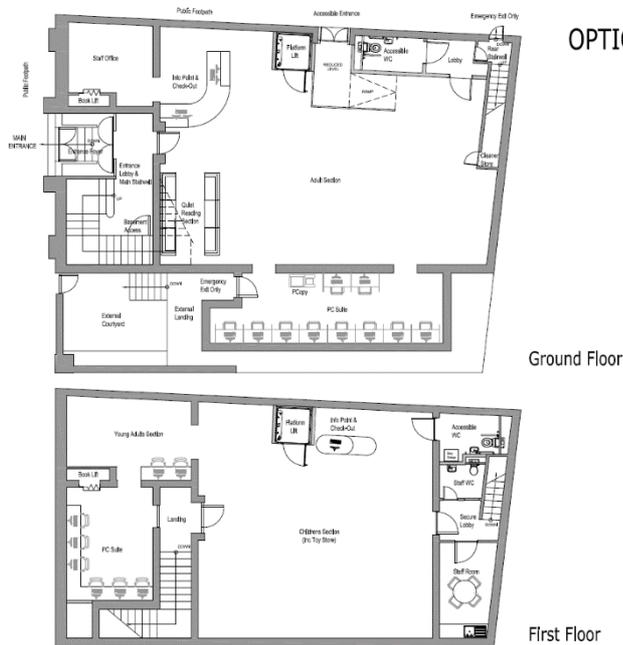
On the first floor the existing toilets remained to be refurbished for male and female staff use, with the existing staff room converted into an accessible toilet with baby change accessed directly via the Childrens Section.

The Staff Room/Kitchenette is re-located to the existing Toy Store, complete with store cupboard, and door access to Young Adults is blocked up to provide Young Adults section additional IT work station space.

### Review Comments

- Generally as comments issued for option 1.
- Didn't feel it was necessary to have lobby between main Childrens Section and accessible toilet and baby change.
- Liked that proposed lift shaft was in close proximity to accessible entrance, but concerned that providing clear space/route to access the lift and toilet would take up excessive amount of book shelving space, so lift and toilet configuration for option 1 is preferred.
- Liked the configuration for reading area seating using smaller 2 person sofas. Also that single person bucket seats may be best as visitors often prefer their own space rather than sharing a 2 person sofa.

### 10.03 Option Three



OPTION 3

This option provides a new level access entrance via the existing side access doors, by forming an internal lobby with reduced level floor slab and internal access ramp.

In association with forming the level access entrance on the side of the building, the automated platform lift and accessible toilet would be positioned on the same side of the building, so as to concentrate the work involving highest level of structural and services alterations.

On the ground floor, this option retains the existing level of IT work stations within the single storey section of the building, however, it vastly reduces the

amount of useable floor space in the main Adult Section for book storage.

On the first floor the location of the Staff Kitchenette remained the same, but the toilet accommodation is re-modelled to provide a staff toilet accessed via a secure lobby and accessible toilet with baby change accessed directly via the Childrens Section. The Young Adults section remains in the same location, but the Toy Store is replaced by additional public IT accommodation.

### Review Comments

- Liked that level access could be provided directly into ground floor area without use of platform lift, but following review of external area to side of building, it was agreed that the existing entrance would probably not be suitable due to narrow width of footpath. It was clearly evident that people with buggies were using the actual road to walk along rather than the footpath as it was very narrow (under 1m wide).
- Concerns that by forming internal access ramp a large amount of floor area needed for book storage would be lost.
- Good that all of the new sanitary services would be kept on the side of the building closest to the street with below ground combined drainage which would avoid the need to form new drainage run along rear of building.
- Liked that the number of PC workstations was maximised, but had concerns over having a second IT suite on the first floor as it would be difficult to supervise the use and security, and if the access door were locked shut as shown in the plan layout, then adults would have to walk through the Children and Young Adults sections which would be unfavourable.

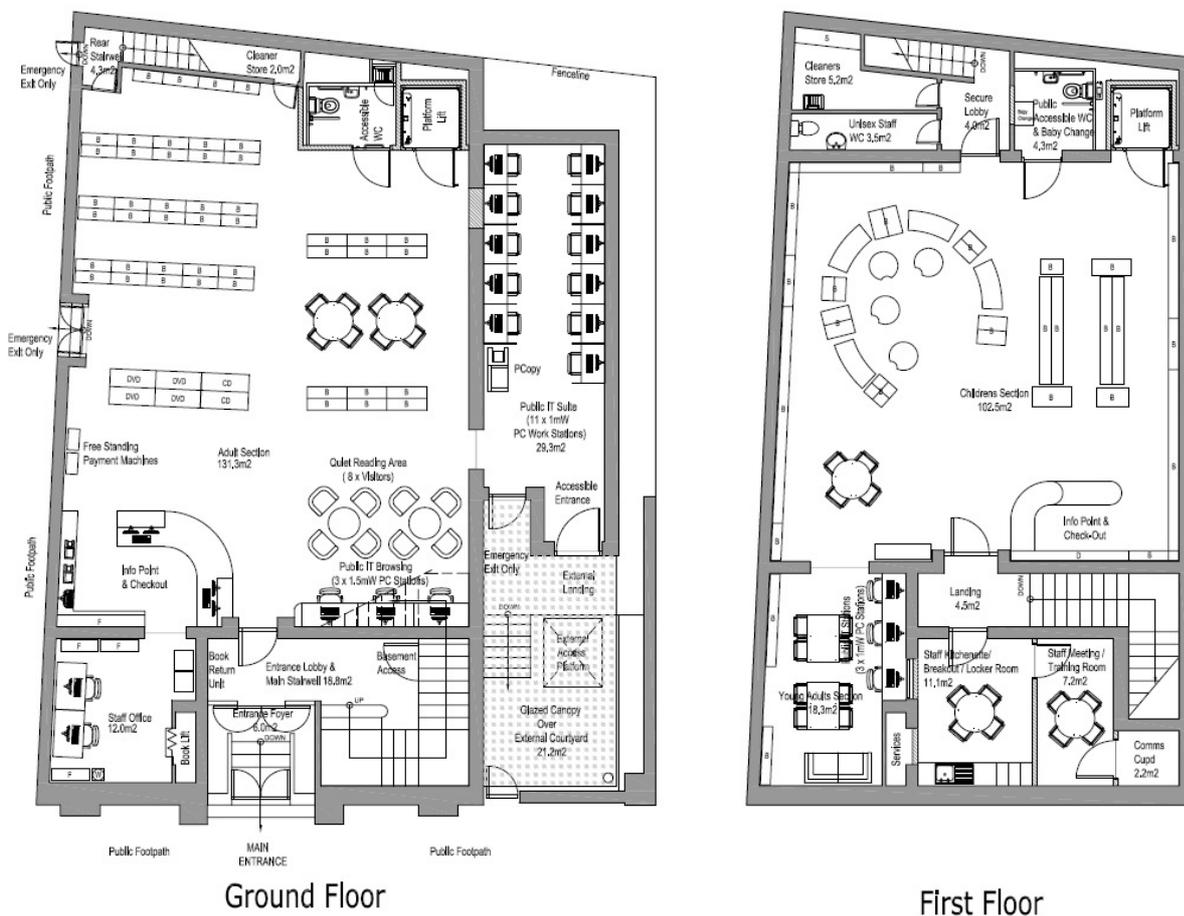
## 11.00 DESIGN DEVELOPMENT

Following the design review meeting two final designs were developed for pricing, these are as follows:-

### 11.01 Option One – Internal Re-Model

This is a revised plan layout for internal re-modelling the existing building accommodation only. It has been developed based on a combination of the 3 initial options and the comments recorded at the design review meeting.

### OPTION 1 - INTERNAL RE-MODEL



Ground Floor

First Floor

#### Ground Floor

- General allowance made for re-furbishing the existing finishes throughout and providing new fully accessible information and check-out counter facility.
- Re-modelling works internally are kept to a minimum with new accessible toilet and lift facility located adjacent to each other in far corner of main adult section.

- Significant structural works required to form opening in first floor for new automated platform lift.
- General layout of book storage in main adult section could remain as existing, however, given the floor area required to form toilet and lift clear space to their approach, there will be an unavoidable loss of book storage and general use areas which it would be difficult to replace even through use of alternative shelving facilities and layout during detailed design development.
- New glazed canopy to front of extension provides sheltered space for visitors to wait and contact staff at reception to access to building via level access entrance if increased level of security for two points of access and egress was required.
- New compliant width external accessible entrance into IT suite area located directly to front of external platform lift to improve direct external access.
- New accessible entrance route would reduce the useable size of the IT suite, however, by infilling one existing opening to main adult section, the potential wall space available for IT work stations can be maximised.
- Cleaners store below rear staircase would be maintained, with potential to locate cleaners sink facility within panelled services void in new accessible toilet which is located in close proximity.

#### First Floor

- General allowance made for re-furbishing the existing finishes throughout and providing new increased size fully accessible information and check-out counter facility, conveniently located between the two visitor entrances.
- Location of lift and accessible toilet facility directly mirroring that on ground floor reducing impact on main Childrens section.
- Formation of two new structural openings for doorways to access the main Childrens section via new accessible toilet and lift would result in a minor loss of book shelving in direct locations, however, it is anticipated that the loss could be could be offset by increased free standing book storage given the large open space available, or by replacing existing low level heat appliances to perimeter of room with shelving by changing to high level heat emitters through mechanical services upgrade works.
- Convert existing public toilet facility into generously sized cleaner's store.
- Retains Young Adults section in its entirety, with increase IT workstations across door opening to existing Toy Store.
- Re-model existing Toy Store space to form Comms cupboard, Staff meeting room and staff room / kitchenette.

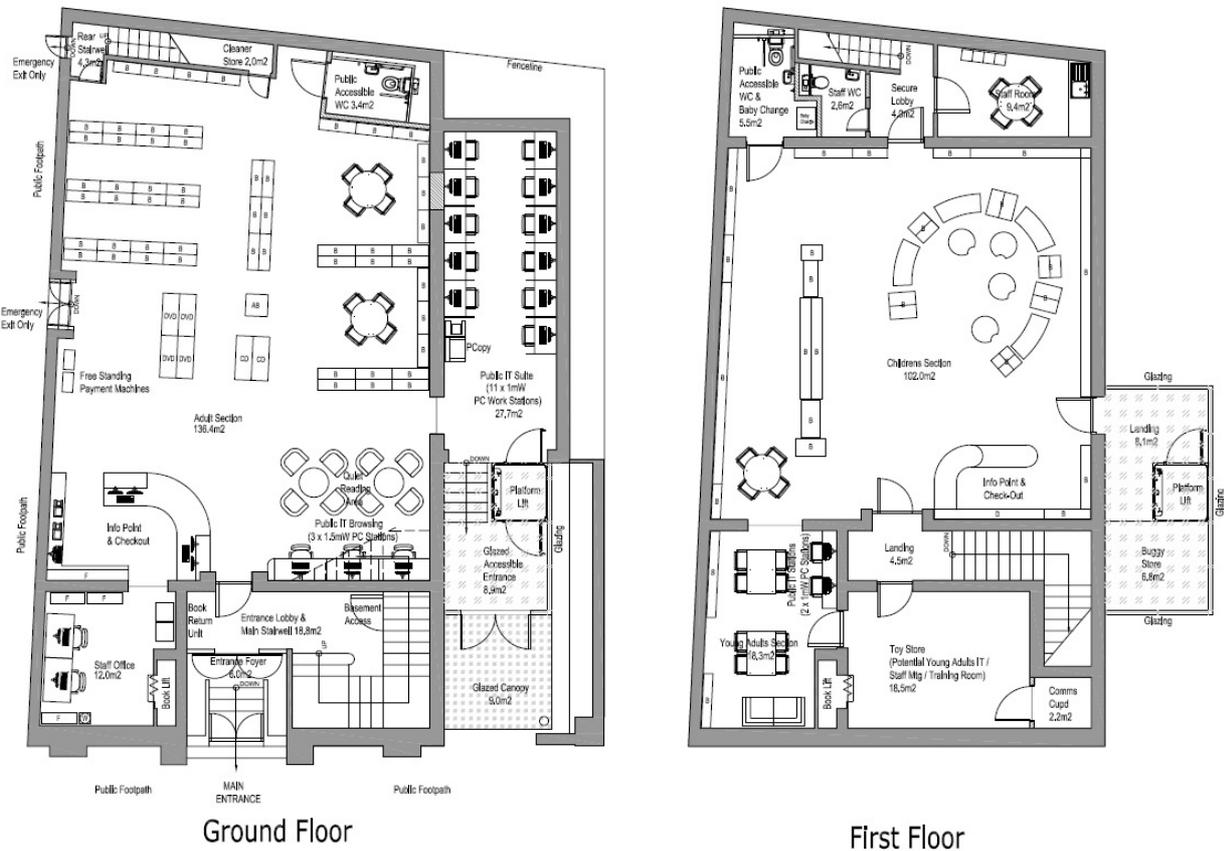
Following a review of the developed option (based on the 3 initial options), the end user commented that they were happy with all the amendments made, and liked the creation of a staff meeting room, but identified a concern of having to access the meeting room via the staff room. This has been reviewed, and a lobby could be formed to separate access to the two rooms via the stair lobby landing, however, it would significantly reduce the floor space available for the meeting room, and potentially make it an inadequate space for anything more than a 1-2-1 meeting room.

## 11.02 Option Two – Internal Re-Model & Courtyard Extension

This is a new plan layout based predominantly on the principles used in option for re-modelling the existing accommodation, but forming an extension in the existing external courtyard and IT suite location to provide automated multi-level lift access thus reducing the level of internal re-modelling required and maximising the space available for book storage and general use.

As stated in section 4.00, this extension is based on the illustrated proposal included in the previous redevelopment feasibility study by John Miller & Partners (October 2005).

### OPTION 2 - INTERNAL RE-MODEL & EXTENSION



Ground Floor

- General allowance made for re-furbishing the existing finishes throughout and providing new fully accessible information and check-out counter facility.
- Re-modelling works internally are kept to a minimum.
- Formation of new accessible toilet in far corner to avoid loss of book storage and general use areas.
- Based on existing book storage systems, there would be a minimal reduction in the amount available, but it is anticipated that this could be equalled through use

of alternative book shelving systems which could be explored further during detailed design.

- New glazed canopy to front of extension provides sheltered space for visitors to wait and contact staff at reception to access to building via level access entrance if increased level of security for two points of access and egress was required.
- New extension incorporating steps and automated platform lift would provide fully weather protected level access entrance for able and less-able users, with simple and direct access to all levels of the building.
- New extension and accessible entrance route via lift would reduce the size of the IT suite, however, by infilling one existing opening to main adult section, the potential wall space available for IT work stations can be maximised.
- Cleaners store below rear staircase would be maintained, with potential to locate cleaners sink facility within panelled services void in new accessible toilet which is located in close proximity.

## First Floor

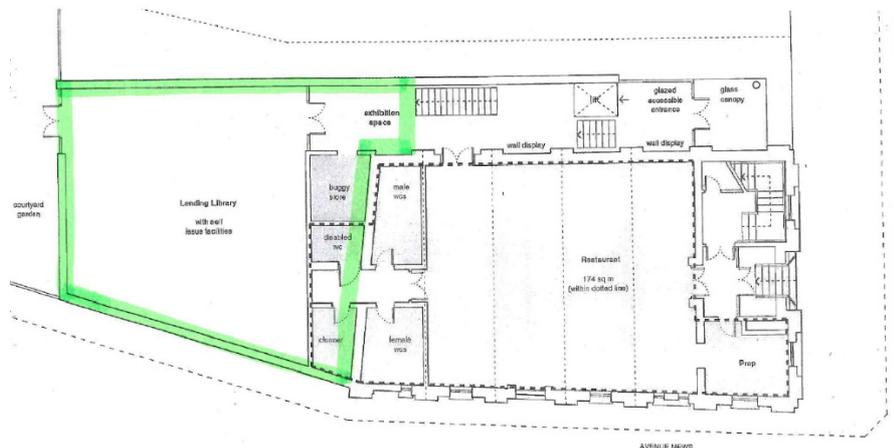
- General allowance made for re-furbishing the existing finishes throughout and providing new increased size fully accessible information and check-out counter facility, conveniently located between the two visitor entrances.
- No requirement to form structural opening internally within main library area to install automatic platform lift.
- Re-modelling within existing toilet accommodation area only. The re-modelling would be to form accessible toilet within baby change directly accessed from main children's section, with staff toilet accessed via secure staff lobby.
- Formation of two new structural openings for doorways to access the main Childrens section via new accessible toilet and glazed extension would result in a minor loss of book shelving in direct locations, however, it is anticipated that the loss could be offset by increased free standing book storage given the large open space available, or by replacing existing low level heat appliances to perimeter of room with shelving by changing to high level heat emitters through mechanical services upgrade works.
- Additional first floor space within glazed extension could be used for a variety of purposes. We have shown it as a space for buggy storage, but it could be used for displays or further reading space.
- Retains Young Adults section in its entirety, with potential to increase IT workstations across door opening, dependant on preferred use of existing Toy Store room.
- New Comms room is formed in rear alcove corner of Toy Store room which would provide adequate space for new server cabinet.
- Majority of the existing Toy Store space could be retained for use by the existing charity occupier. Alternatively it could be used as a staff training / meeting room, as an extended Young Adults section, or for an additional IT suite.

### 11.03 Option Three – Develop Vacant Land to South (Rear) of Library

To ensure that all options have been explored, Frankham were requested to undertake a desktop review to assess whether it would be a viable option to develop the land to the south of the building, by extending the library on the ground floor into the car park, and converting the first floor into flats.

The plan layout shown below was originally included as part of the feasibility study produced by John Miller & Partners in 2006.

The existing gross internal floor area of the first floor accommodation is approximately 190m<sup>2</sup>. The plan layout shown below is taken from the original feasibility study produced by John Miller & Partners in 2005. The location and layout of the proposed extension (highlighted in green), is what would be required to duplicate the existing first floor accommodation at ground floor level.



An extension would provide internal level access library facilities throughout the ground floor, however, as identified in section 8.01.03, Ave Mews does not meet current legislative requirements as a route for general pedestrian access, so it would not be a suitable location for a new accessible entrance. This means that an automated lift facility would still be required at the front building to provide access directly from Queens Avenue.

Current BCIS Rates for new build public libraries up to 500m<sup>2</sup> GFA, rebased for greater London, range from £2,487/m<sup>2</sup> (lower quartile) to £3,118/m<sup>2</sup> (upper quartile), with median rate of £2,879/m<sup>2</sup>. Based on the median rate we would advise a high level estimated construction cost for an extension to re-provide the first floor accommodation on the vacant land to the rear of the property to be in the region of £550,000.

---

Due to the existing configuration of roof lights and height of perimeter windows within the remaining first floor accommodation, there is limited opportunity to recoup any costs by conversion of the first floor space for either residential or commercial use.

Depending on how the remaining first floor accommodation was used in conjunction with an extension to the ground floor library facilities, we would advise that a majority of the works included within options 1 and 2 would still be required to meet the original project brief, including provision of level external access to the building and refurbishment the existing facilities.

With regards to the land to the rear of the Library where an extension would be located, a valuation report was commissioned in September 2015. In this report it identifies the land as being a prime location for residential apartments. Using the land to extend the ground floor of the Library would result in the Council forgoing a capital receipt of upwards of £1,750,000 (One million seven hundred and fifty thousand pounds).

## 12.00 BUDGET COST ESTIMATES

### 12.01.01 Priced Options 1 and 2

The client brief states that the project has an indicative construction budget of £200k.

We have assumed that this budget must include for construction works, ICT network installation, fixtures and fittings, contingency, surveys, statutory applications, and professional fees, but does not include for costs directly related to project management services provided directly by Haringey Council and Haringey Library Services.

The following budget estimates are based upon the developed plan layout options as detailed in section 11.00 of this report.

A full breakdown of the budget cost estimate is located at Appendix D.

The estimate has been divided into works elements.

Works Element Description	Option 1 Cost	Option 2 Cost
Enabling Works	7,000	11,000
Building Works	121,350	201,200
Public Health Works	16,000	16,000
Mechanical Services	83,300	83,300
Electrical Services	91,500	96,750
Lift Installation	20,000	25,000
General Preliminaries	45,850	61,750
<b>Total</b>	<b>385,000</b>	<b>495,000</b>

### 12.01.02 Additional surveys and fees

The table below indicates the recommended additional surveys and fees that would be necessary at design stage together with provisional sums:

Additional surveys and fees	Option 1 Cost	Option 2 Cost
Intrusive structural investigation	1,500	1,500
Topographical survey	0	1,500
Trial pit, soil analysis (option 2 only)		1,000
Utilities searches	500	500
R&D asbestos survey	2,000	2,000
Building control (plan charge and inspection)	2,000	2,500
Listed Building Consent Application	0	0
Planning Application	0	500
Building Surveying Led Multi-disciplinary (CT procurement route) Design fees (10.15%) for Stage 2 onwards based on works package cost	39,077	50,242
<b>Total</b>	<b>45,077</b>	<b>59,742</b>

### 12.01.03 Cost summary

Based on the developed plan layout options 1 and 2 essential works package, excluding any potential cost savings listed in 12.04, the table below summarises the outturn project costs, excluding Haringey Council on costs and VAT:

Cost summary	Option 1 Cost	Option2 Cost
Priced Works Package	385,000	495,000
Additional surveys and fees	45,077	59,742
Contingency sum (5% of Priced Works Package)	19,250	24,750
<b>Total</b>	<b>449,327</b>	<b>579,492</b>

At the current time we have only been provided with the initial construction budget of £200k which would have an associated design fee of £20,300 based on 10.15%, totalling £229,300.

Option 1 represents a variation of +£220k against a total indicative budget allowance of £229k.

Option 2 represents a variation of +£350k against a total indicative budget allowance of £229k.

Both costs above exclude Haringey on costs such as IT equipment, loose furniture, relocation costs and project management.

#### **12.01.04 Potential cost savings**

At this stage we have not looked in depth at ways to reduce the cost of the project as we believe that all of the works included within each option are required to provide a modern library facility suitable for future use by the council for the foreseeable future.

At the current time the estimated project costs for both options far exceed the indicative construction budget. If a reduction in the scope of works was required in an attempt to close the gap between the indicative budget and works estimate, then we would advise that the only way in which this would be possible, is to identify and omit general refurbishment and services upgrade works, to essentially reduce the project solely to an accessibility improvements scheme with no improvements to infrastructure or environment.

#### **12.02 Priced Option 3**

As stated in section 11.03, a majority of the accessibility improvements and refurbishment works included in both priced options 1 and 2 would be required in conjunction with an extension to the ground floor library facilities.

With an estimated construction value of £550,000 for the extension, we would advise a high level cost estimate in the region of £1,000,000 to construct the extension combined with refurbishment of the existing accommodation.

In addition to this we would advise an additional £100,000 (10% of estimated construction value) be allowed to cover additional surveys and fees related to the works.

Therefore, option 3 would be an estimated contract value of £1,100,000, which represents a variation of +£871k against a total indicative budget allowance of £229k.

### 13.00 OUTLINE PROJECT PROGRAMME

The client has indicated that that at the current time there are no key dates for the proposed project.

Below is a summary of the time which we advise should be allowed for key programme items, following feasibility completion, client review and approval to proceed to design development:

#### Option 1

- Design development: 4 weeks
- LBC application & approval: 12 weeks
- Technical design: 6 weeks
- Tender preparation: 4 weeks
- Tender action: 4 weeks
- Tender review: 4 weeks
- Client review & approval: 8 weeks
- De-canting & construction lead-in: 4 weeks
- Construction programme: 14 weeks
- Re-occupation & training: 2 weeks
- Defects management: 52 weeks

#### Option 2

- Design development: 8 weeks
- LBC application & approval: 12 weeks
- Technical design: 10 weeks
- Tender preparation: 4 weeks
- Tender action: 4 weeks
- Tender review: 4 weeks
- Client review & approval: 8 weeks
- De-canting & construction lead-in: 4 weeks
- Construction programme: 20 weeks
- Re-occupation & training: 2 weeks
- Defects management: 52 weeks

### Option 3

- Design development: 10 weeks
- LBC application & approval: 12 weeks
- Technical design: 16 weeks
- Tender preparation: 4 weeks
- Tender action: 4 weeks
- Tender review: 4 weeks
- Client review & approval: 8 weeks
- Construction lead-in: 4 weeks
- Construction programme: 32 weeks
  - (Inc Ground Floor De-canting & Refurb: 12 weeks)
  - (Inc First Floor De-canting & Refurb: 8 weeks)
- Re-occupation & training: 2 weeks
- Defects management: 52 weeks

All of the programmes are based on full library closure for de-canting and works directly affecting the existing building so that the contractor has complete control of the site.

If it were essential that the library provide a continued service, it may be possible to carry out the works on a phased basis. However, any space made available would be vastly reduced to that which is currently available, construction noise and disruption would be unavoidable, and project timescales and associated costs would inevitably rise.

### **End of feasibility report**

## **APPENDICES**

**Appendix A**  
**Existing layout**

**Appendix B**  
**Initial Proposed Layout Options**

**Appendix C**  
**Developed Proposed Layout Options**

**Appendix D**  
**Budget Cost Estimates**

**Appendix E**  
**Client Design Brief**

**Appendix F**  
**Client Information**

## **Appendix G**

### **Asset Management Site Plan MHL Asbestos Survey 2005 MHL Feasibility Study 2006**