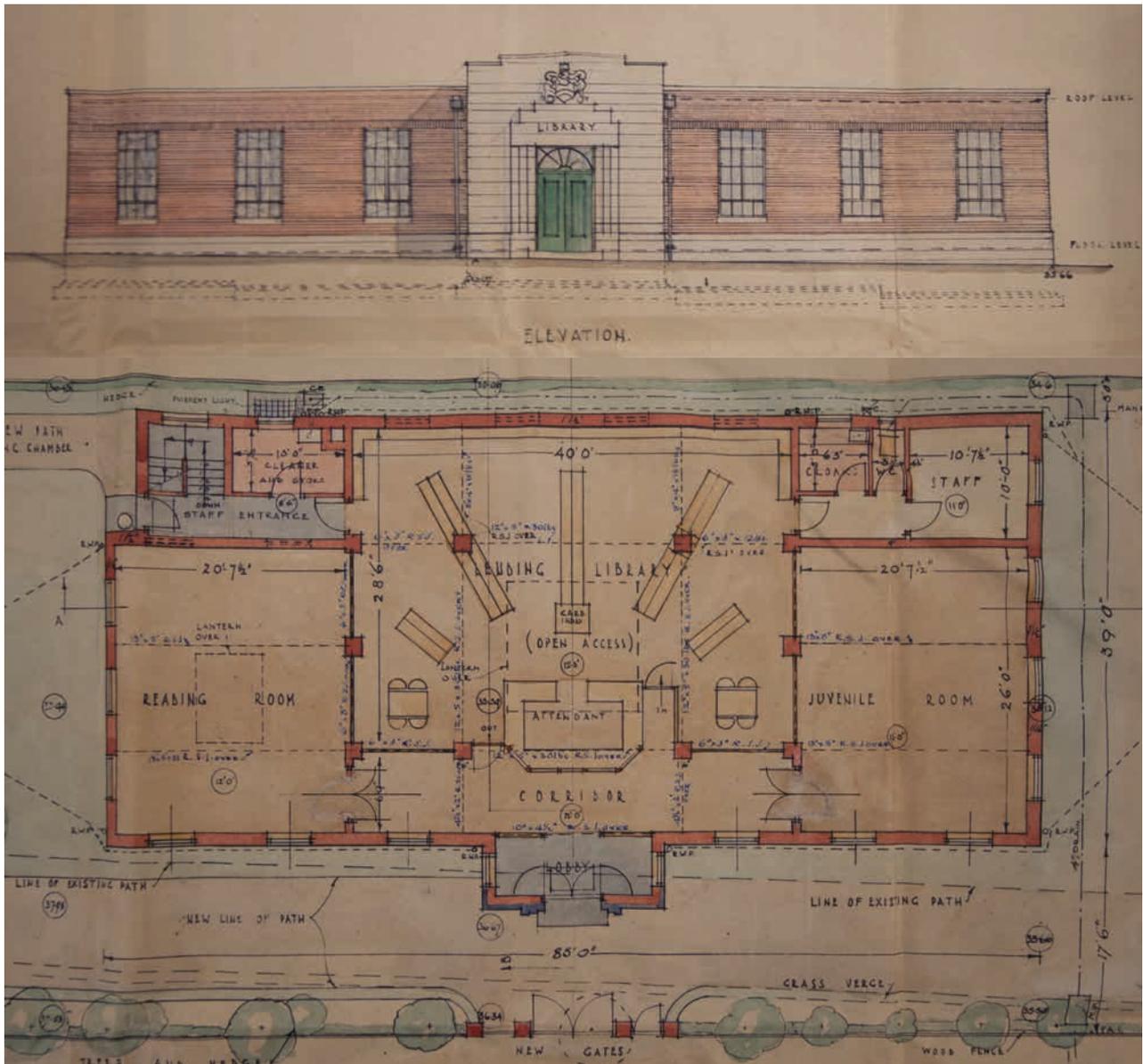


# Milton Road Library, Cambridge

## Historic Building Recording



Richard Newman

# **Milton Road Library, Cambridge**

## **Historic Building Recording**

**Richard Newman**

With photography by Dave Webb  
and graphics by Bryan Crossan

© **Cambridge Archaeological Unit**  
University of Cambridge  
Department of Archaeology  
October 2017

**Report No. 1379**  
**ECB5197**

## **Summary**

*Milton Road Library was constructed in 1936-37, at the peak of popularity for public libraries across Britain. It was designed by the Borough Engineer and Surveyor for Cambridge, G. W. Teasdale, in the then prevalent Art Deco style. Although small, its layout reflected many of the prevailing library design ideas of the period. Public space was subdivided by function and class/gender into three principal rooms – the main Lending Library, a Reading Room and a Juvenile Room – access to which was closely supervised. Functional spaces in the form of a staffroom, cloakroom, toilet and storeroom were also provided, along with a small basement that housed a boiler and coal store. Overall, the building represents a good, if somewhat unremarkable, example of its type.*

## **Introduction**

This report presents the results of a historic building survey that was conducted by the Cambridge Archaeological Unit (CAU) at Milton Road Library, Cambridge – TL 4553 5990 – on the 19th of September 2017. It is proposed that the current building, which has served as a branch library for 80 years, be demolished and replaced by an enlarged structure containing a new branch library and community facility with seven residential flats above; the original entrance portico is to be retained. In response to a brief issued by the Cambridge Historic Environment Team (Stewart 2017), a written scheme of investigation was prepared (Dickens 2017). This specified that a Level 2 building survey was required. A Level 2 survey consists of an illustrated record in which both the exterior and interior will be viewed, described and illustrated; conclusions will be presented, but detailed descriptions will not be provided (Mengue 2016, 14; Bedford and Papworth 2010, 31). Throughout the following account, architectural terminology follows the standard dictionary of Lever and Harris (1993).

### *Landscape context, topography and geology*

Milton Road Library (MCB21931) is located in West Chesterton, on the corner of Milton Road and Ascham Road (Figure 1). Formerly part of the agricultural hinterland of the town, this area was incorporated into its expanding suburban fringe following the enclosure of the open fields in the early 19th century. Today, the surrounding buildings are predominately residential in character. Notable exceptions to this pattern include Roger Ascham School to the north; constructed in the late 1920s to a design by the same architect as Milton Road Library, this open-air school incorporates a number of Grade II-listed structures (DCB7199, DCB7662, DCB7667 and DCB7533). Subsequently, in the 1950s the land around the site also became the location for the new church, parish hall and presbytery of St. Laurence the Martyr (CB14848). Topographically, the PDA is broadly rectangular in form and extends over an area of approximately 0.08 hectares. It is relatively flat and lies at an elevation of c. 11m AOD. Geologically, the PDA is situated upon river terrace gravels overlying Gault clay.

## **Historic building record**

As specified for a Level 2 survey, the record is primarily illustrative; it consists of measured plans and elevations (both historic, Figures 2-4, and current, Figures 6-7) plus a detailed photographic archive (from which Figures 8-19 have been selected). The following text provides an overview of the most salient points of interest.

### *Historical background*

Milton Road was the fifth public library to be established in Cambridge, and the third constructed within a seven-year period of intensive foundation activity during the 1930s. The first and largest library in the city was the Central Library (1862; Grade II listed), which was

followed by smaller branch libraries at Mill Road (1897; Grade II listed), Sawston (1930) and Rock Road (1936). The latter building was also designed by the same individual as Milton Road Library – George William Teasdale, Borough Engineer and Surveyor for Cambridge from 1924 to 1944 – and built by the same construction company (Kidman & Sons, Ltd.). Consequently, it shares a great number of similarities with the present building. Indeed, the principal differences between the two, which pertain to their layout and orientation, can be attributed to differences in the natures of the sites upon which they were built. Whilst the plot at Rock Road was constrained by the presence of neighbouring structures, that at Milton Road was open, thereby allowing a more harmonious, symmetrical form to be achieved.

Perhaps the most notable event in the library's history occurred in 1963. In that year a 10-year-old schoolboy named Andrew Wiles read in a book borrowed from the library of a famous, unsolved mathematical problem; Fermat's Last Theorem (Singh 1997, 6). Inspired by this, he entered upon a career in mathematics and 30 years later finally completed the elusive proof.

#### *Original construction, layout, fixtures and fittings*

Milton Road Library is a rectangular Art Deco building, its long axis oriented northwest-southeast (Figure 2). Externally it measures 25.9m by 11.8m in extent, excluding the lobby, and it covers an area of circa 310 square metres. It is predominately constructed of red brick with a flat roof. The principal decorative feature comprises a stone-built portico with a stepped parapet that houses the entrance lobby (Figures 3 and 8); it is intended that this distinctive structure be retained in the rebuilt library. Its decoration includes a relief carving of the Cambridge coat of arms – a shield flanked by seahorses with a bridge above, first granted in 1575 – above an inscription reading *1936 MILTON ROAD BRANCH LIBRARY*. The remainder of the exterior is plain brick, with a vertically set string course running at the height of the window heads (Figures 3 and 8). There is a low brick parapet surmounted by flat coping and symmetrical fenestration in the form of steel-framed Crittall windows.

Internally, an important record of the original layout is provided by the blueprints contained in the Cambridgeshire Archives (Figures 2-4). When it first opened, a visitor would have first arrived in a corridor directly opposite the attendant's desk. They were then presented with three choices. Turning to the left, they could enter the Reading Room (7.9m by 5.5m) via a pair of double-swing doors. Turning to the right, they could enter the Juvenile Room (7.9m by 5.5m) via an identical arrangement. Finally, proceeding straight on they could enter the main Lending Library (12.1m by 8.7m). The latter was a large open area with four support columns and a centrally-located skylight (Figure 10). It was divided from the corridor by glass panelled screens. The large spans were made possible by the use of rolled steel joists (RSJs); a 19th century industrial invention that was widely employed in early 20th century public buildings. The RSJs were encased in plaster and then decorated with a simple cornice (Figure 11). Bookcases were laid out across this space in a radial, fan-like arrangement so as to permit the attendant to supervise the maximum possible area from a single point (Figure 2).

Flanking this central space to the northwest and southeast were the Reading Room and Juvenile Room. These were of identical size (43.5 square metres), the sole architectural distinction between them being the inclusion of a skylight in the Reading Room that was not replicated in its counterpart. Both were well lit, with radiators inset below the large windows, and were originally separated from the Lending Library by glass panelled screens that still partially survive (Figures 12 and 13). The remaining spaces in the building were functional in nature. In the first instance, the staff entrance was located in the northwest corner of the building. Here there was a cleaner's storeroom (3.0m by 1.7m) situated beside a flight of stairs providing access to the basement. The latter was 'L-shaped' in form, measuring a maximum of 6.2m by 5.8m in extent. It housed a boiler – since replaced, although the chimney remains extant – and a coal store with associated chute (Figure 14). Broadly mirroring the ground floor arrangement, to the southeast was a Staff Room measuring 3.2m by 3.0m (Figure 15), which was flanked by a cloakroom and separate toilet (Figure 16).

Of the original fixtures and fittings, a small number remain extant. This includes the Crittall windows, each of twenty panes (Figure 17), and the radiators inset beneath them. Also present are a number of doors, many retaining their original handles of typically streamlined Art Deco style (Figure 18). In addition, the original attendant's desk survives in part (Figure 19). It has been moved from its initial central position and cut down to fit into the corner of the room, blocking the former access to the Juvenile Room. The top has also been altered, removing the original shelf to render it more suitable for modern use. Of the original bookcases, reading desks and card index, however, few if any traces remain; they have been replaced during repeated episodes of updating and modernisation, to reflect changing fashions in library design during the 80 years of the building's existence.

### *Later alterations*

A number of changes have been made to the building since its initial construction. These alterations have arisen from two principal stimuli. The first is physical, pertaining to the fabric of the building itself, the second functional, pertaining to the way in which it is used. Physically, a long-standing challenge has been the structural integrity of the building. Cracks began to appear almost immediately after its construction, and remedial works have since been undertaken on a number of occasions. Evidence of this was noted during the survey, and includes the presence of structural ties in the front façade (Figure 9) and brick-built buttresses associated with a programme of underpinning undertaken in 1998 to the rear (Figure 9). Cracks, both current and repaired, were also noted internally. In addition, the skylights in both the Lending Room and Reading Room have been replaced with more modern, energy efficient versions.

Functionally, the changes have predominately related to opening up the previously restrictive space. Originally, there were single points of access into the three principal rooms, each of

which was closely monitored (Figure 2). By the 1950s, additional doors leading from the Lending Library into both the Reading Room and Juvenile Room had been installed (visible in Figure 5). Then, during the later 20th century, the glass panel divisions that had screened off the Lending Library from the access corridor were removed and the attendant's desk moved from the centre to the right side of the central atrium. Doors were also removed at some point from the two side rooms, permitting much freer access; in the Reading Room the double swing doors were moved from their original position to the centre, (Figure 12) while in the Juvenile Room they were left in place and the central partition opened up (Figure 13). Other functional changes have comprised an increase in toilet facilities, with the original cloakroom and toilet being combined into a single room with a new access via the central atrium and the former cleaner's storeroom also being converted for similar use (Figure 16). Finally, the replacement of the coal-fired boiler with a gas version means that the basement with its coal store is largely redundant.

## Discussion

This structure was purpose-built to serve as a public branch library. As such, its initial layout incorporated a series of design ideas that had been developed over the course of the preceding eighty years. Beginning with the passing of the Public Libraries Act in 1850, such institutions became increasingly common across Britain. This pattern of expansion took place within a context of national enthusiasm for public libraries that reached its peak in the 1930s (Taylor *et al.* 2016, 4); a trend that is well-reflected in Cambridge by the establishment of three branch libraries during that decade (at Sawston, Rock Road and Milton Road).

Notably, the history of libraries during this formative period has been the subject of significant study (*e.g.* Berriman & Harrison 1966; Kelly 1977; Black 1996; Black *et al.* 2009); of particular relevance to the present project is the attention that has been paid to their architectural development (Pepper 2006; Taylor *et al.* 2016). Early library design was significantly influenced by the panopticon model first developed by Jeremy Bentham in the late 18th century; this was predicated on the principal of central observation, with the architecture so designed that the maximum possible area could be viewed from a single central point. Employed to great success in the Reading Room of the British Museum, the panopticon model was widely adopted in many early public libraries (Pepper 2006, 594-6). In addition to maintaining the security of the libraries' holdings, a range of other factors also had to be considered by their architects. For example, the designers were "required to prepare a layout which allowed supervised segregation by function, sex and class, but which also met librarians' expressed practical wishes and reservations regarding fires, lighting and ventilation" (Taylor *et al.* 2016, 7).

A number of significant and long-lasting design developments occurred during the boom construction years of 1890-1914 (see Champneys 1907). Public access to books, for instance – which was initially tightly controlled, with the majority being fetched from stacks by staff –

A number of significant and long-lasting design developments occurred during the boom construction years of 1890-1914 (see Champneys 1907). Public access to books, for instance – which was initially tightly controlled, with the majority being fetched from stacks by staff – was improved via the wide adoption of open shelves. Nevertheless, even by 1937 in Milton Road Library elements of the restrictive panopticon design persisted (see Figure 2); as did the hierarchical subdivision of space along lines of function and class. Although stylistically modern, therefore, this building's design was in many ways quite conservative. Subsequent changes in British society during the mid to late 20th century, allied with developments in the nature, type and availability of different media, have presented new challenges to which libraries' designs have had to adapt (Dewe 2006). Once again, these adaptations are apparent at Milton Road Library. Previously separate and tightly controlled spaces, such as the Juvenile Room and Reading Room, have been opened up by the removal of earlier partitions, while restrictions on the freedom of movement around the building have been significantly reduced. This is because modern libraries are permeable, free-flowing spaces that encourage as opposed to restrict open browsing.

#### *Acknowledgements*

This project was commissioned by Northmores project management consultants in advance of redevelopment. It was managed for the CAU by Alison Dickens, while the on-site recording was undertaken by Richard Newman. A detailed photographic archive was compiled by Dave Webb and the graphics for this report were prepared by Bryan Crossan. We are grateful to Jaimie Saunders of Northmores and to the staff of the County Records Office and Cambridgeshire Collection for their friendly and helpful co-operation.

## Bibliography

- Bedford, J. and Papworth, H. (ed's) 2010. *Measured and Drawn: Techniques and practice for the metric survey of historic buildings*. Swindon: English Heritage
- Berriman, S.G. & Harrison, K.C. 1966. *British Public Library Buildings*. London: Deutsch
- Black, A 1996. *A New History of the English Public Library: Social and Intellectual Contexts 1850-1914*. Leicester: Leicester University Press
- Black, A., Pepper, S. & Bagshaw, K. 2009. *Books, Buildings and Social Engineering: Early Public Libraries in Britain from Past to Present*. London: Routledge
- Champneys, A.L. 1907. *Libraries: A Treatise on their Design, Construction, and Fittings*. London: Batsford
- Dewe, M. 2006. *Planning Public Library Buildings: Concepts and Issues for the Librarian*. London: Routledge
- Dickens, A. 2017. *A Written Scheme of Investigation for Historic Building Recording at Milton Road Library, Cambridge, NGR: TL 4553 5990*. Unpublished Cambridge Archaeological Unit document
- Kelly, T. 1977. *History of Public Libraries in Great Britain 1845-1975* (2nd edn.). London: Library Association Publishing
- Lever, J. and Harris, J. 1993. *Illustrated Dictionary of Architecture 800-1914* (2<sup>nd</sup> edition). London: Faber & Faber
- Mengue, A. (ed) 2016. *Understanding Historic Buildings: a Guide to Good Practice (revised and updated)*. Swindon: English Heritage
- Pepper, S. 2006. 'Storehouses of knowledge: the free library movement and the birth of modern library architecture', in Black, A. & Hoare, P. (eds.) *The Cambridge History of Libraries in Britain and Ireland*. Cambridge: Cambridge University Press, 584-608
- Singh, S. 1997. *Fermat's Last Theorem*. London: Harper Collins
- Stewart, G. 2017. *Brief for Archaeological Historic Building Recording: Milton Road Library, Cambridge*. CHET Cambridgeshire County Council
- Taylor, S., Whitfield, M. & Barson, S. 2016. *The English Public Library 1850-1939*. Historic England [https://content.historicengland.org.uk/images-books/publications/iha-english-public-library-1850-1939/heag135-the-english-public-library-1850-1939-iha.pdf/]

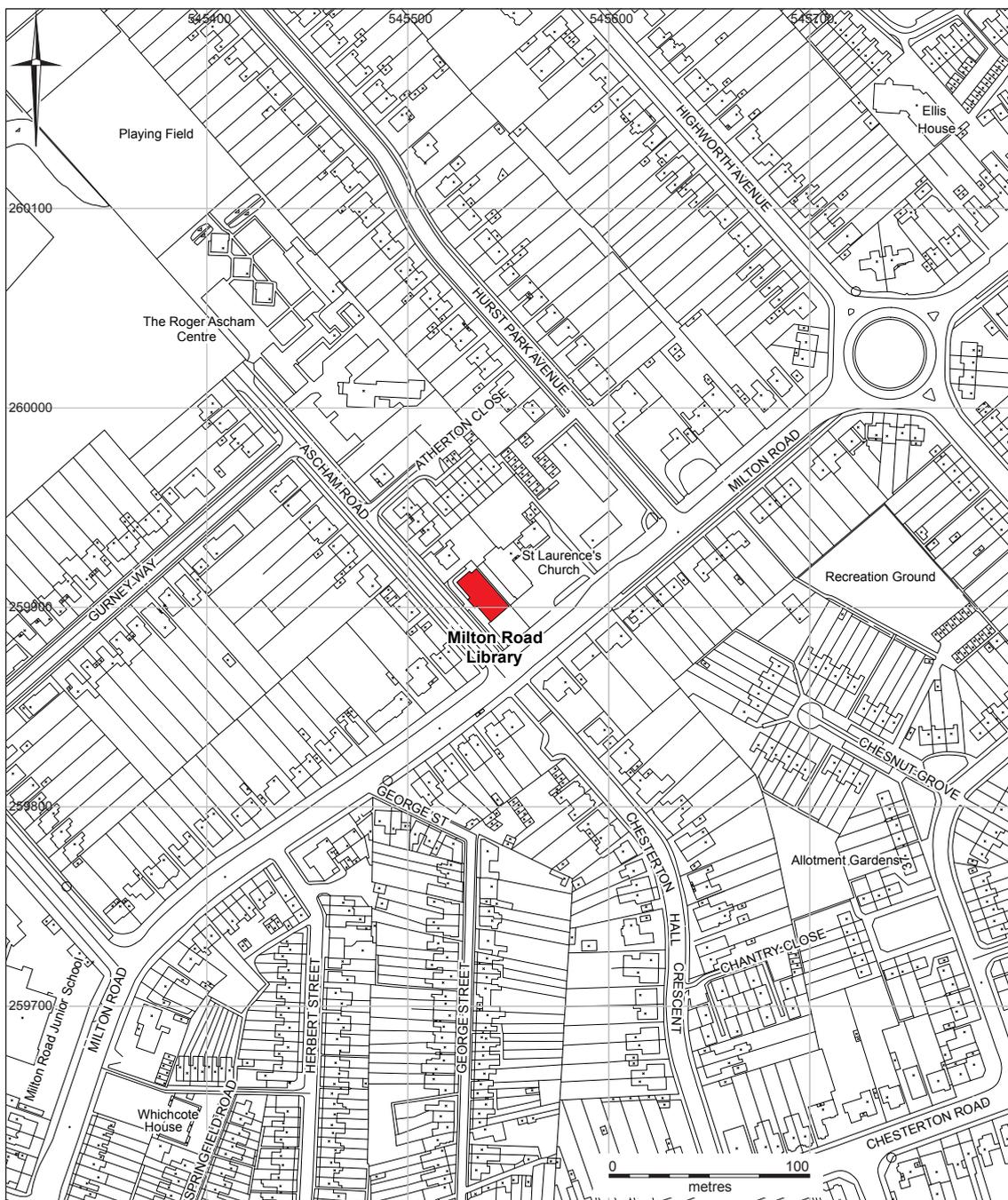
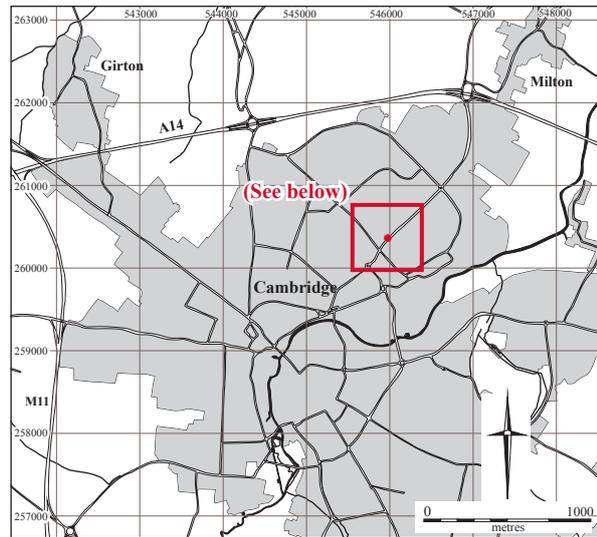
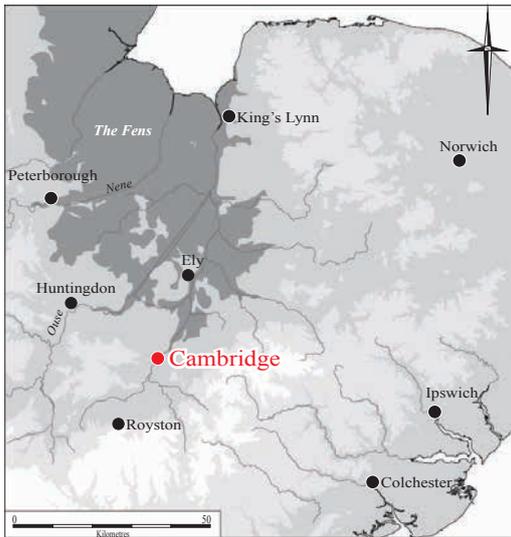


Figure 1. Location Plan

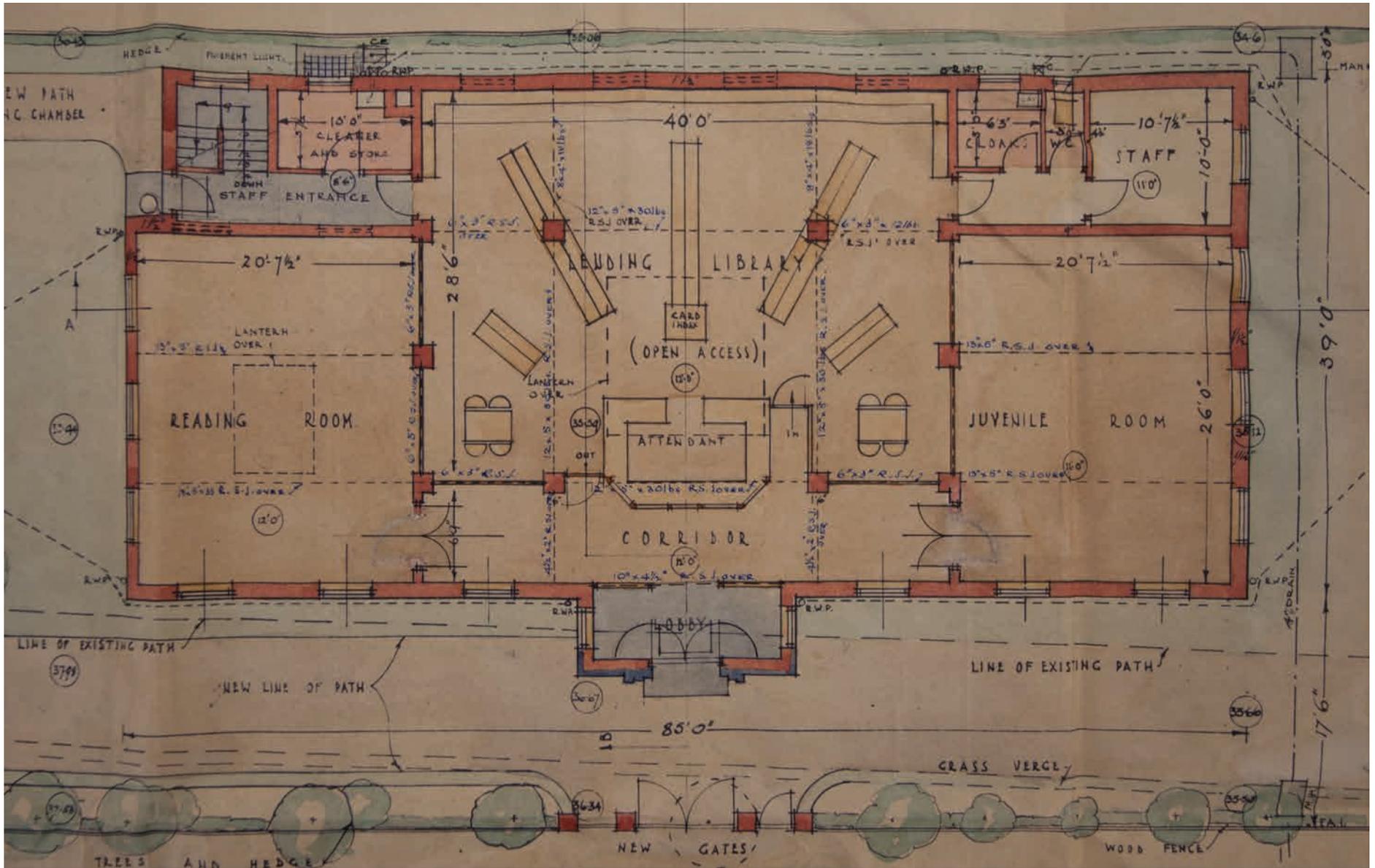


Figure 2. Ground floor plan of library, from original blueprint dated 25th of June 1936 (Cambridgeshire Archives: CB/2/SE/3/9/11767)



Figure 3. Front and side elevations of library, from original blueprint

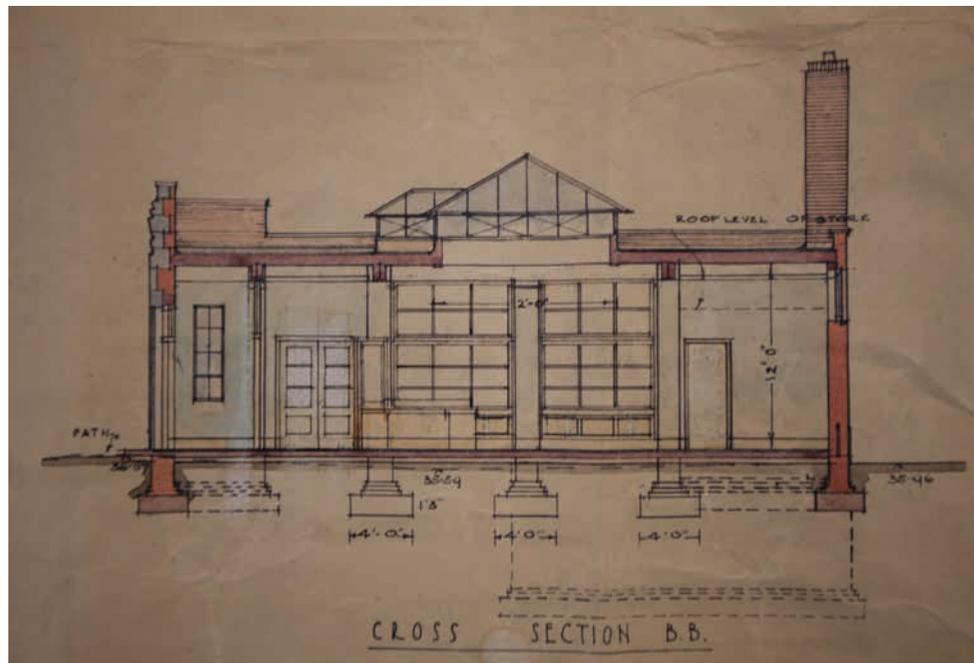
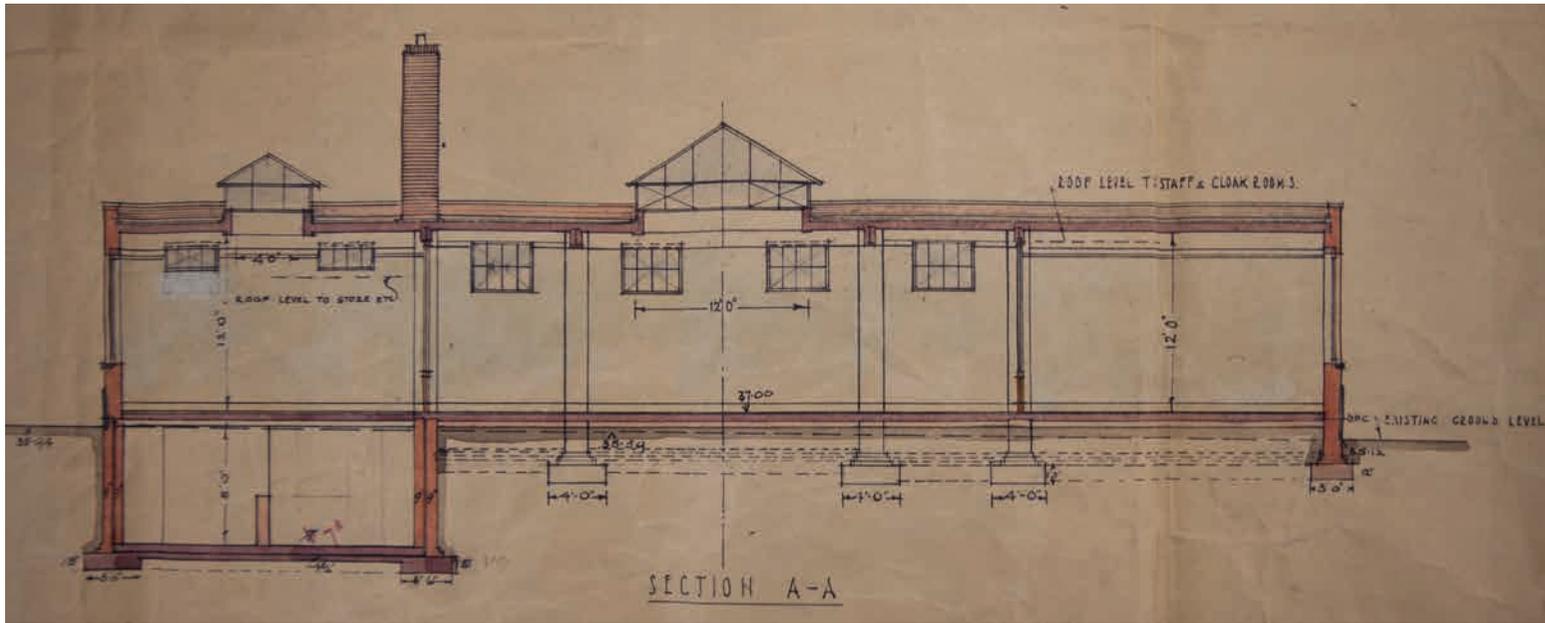
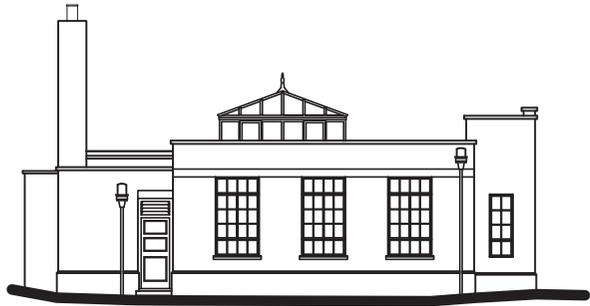


Figure 4. Cross-sections of library, from original blueprint



Figure 5. Historic images of the library interior from the Cambridgeshire Collection, showing: top, Les Horsepool, librarian, serving a customer at the issue desk circa 1955 (F.H. K55 5098); bottom, interior view of the library circa 1955 (F.H. K55 586)

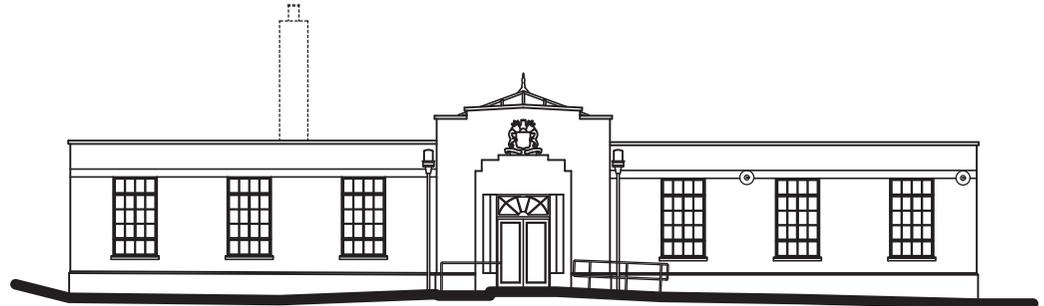




NORTH WEST ELEVATION

Datum Line = 5.000m

---



SOUTH WEST ELEVATION

Datum Line = 5.000m

---



SOUTH EAST ELEVATION

Datum Line = 5.000m

---



NORTH EAST ELEVATION

Datum Line = 5.000m

---

Figure 7. Modern elevation



Figure 8. Exterior views of the library, from the front (top) facing northeast and from the side (bottom) facing northwest



Figure 9. Exterior views of the library, from the rear (top) facing northwest and a detail showing a structural tie on the front façade (bottom) facing north



Figure 10. Interior views of the library, showing the main room facing northeast (top) and east (bottom)



Figure 11. Detail of the cornice decoration in the main room, facing east



Figure 12. Interior views of the library, showing the Reading Room facing north (top) and southeast (bottom)



Figure 13. Interior views of the library, showing the Juvenile Room facing southeast (top) and northwest (bottom)



Figure 14. Interior views of the library, showing the basement facing northeast (top) and northwest (bottom)



Figure 15. Interior views of the library, showing the staffroom facing southeast (left) and northwest (right)

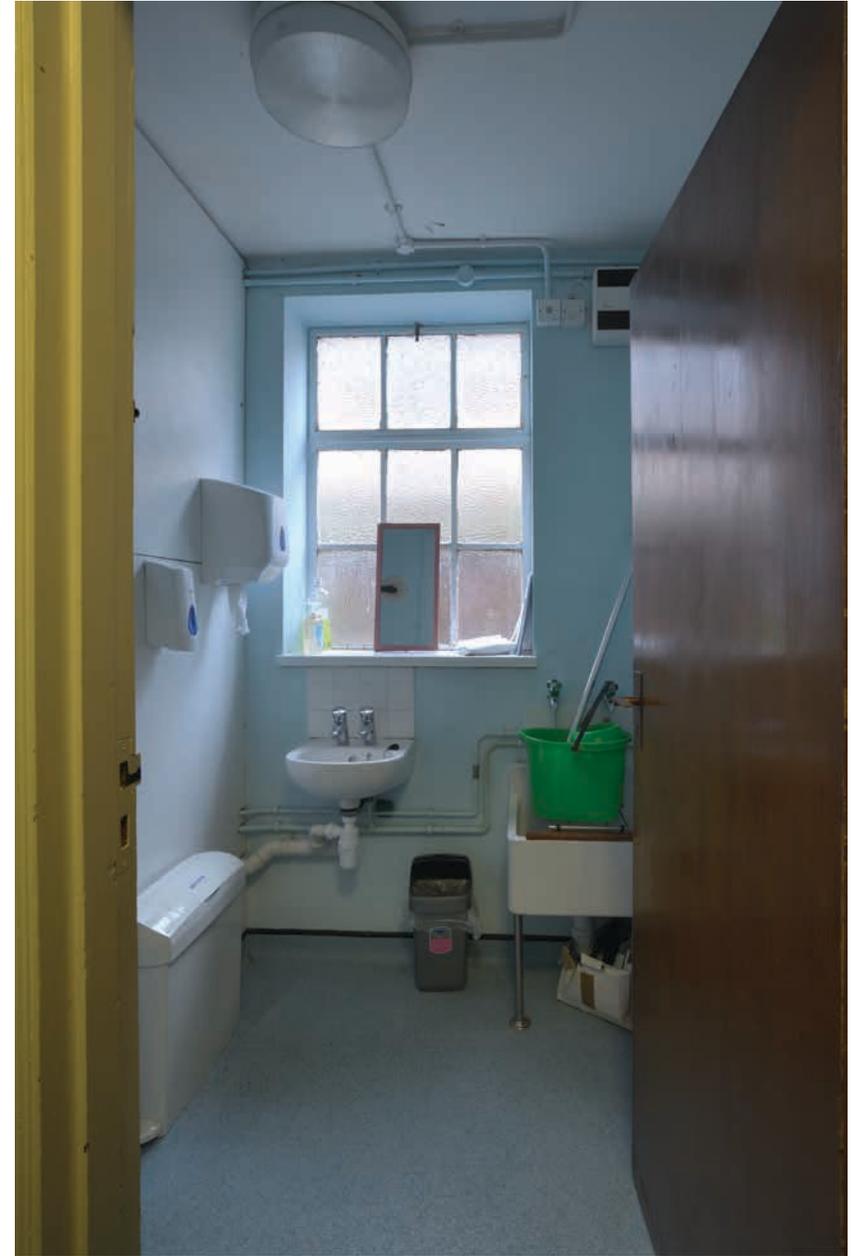


Figure 16. Interior views of the library, showing the eastern bathroom facing southeast (left) and the western bathroom facing northeast (right)



Figure 17. Details depicting a Crittall window in the Reading Room, facing northwest (left) and a close-up facing west (right)



Figure 18. Details depicting original door handles in the Reading Room, facing north (left) and staff area, facing northwest (right)



Figure 19. Detail of the reception desk, which employs elements reused from the original issue desk and perhaps also a reading table, facing southeast

## Oasis Form

<b>OASIS ID: cambridg3-299082</b>	
<b>Project details</b>	
Project name	Milton Road Library
Short description of the project	Milton Road Library was constructed in 1936-37, at the peak of popularity for public libraries across Britain. It was designed by the Borough Engineer and Surveyor for Cambridge, G. W. Teasdale, in the then prevalent Art Deco style. Although small, its layout reflected many of the prevailing library design ideas of the period. Public space was subdivided by function and class/gender into three principal rooms - the main Lending Library, a Reading Room and a Juvenile Room - access to which was closely supervised. Functional spaces in the form of a staffroom, cloakroom, toilet and storeroom were also provided, along with a small basement that housed a boiler and coal store. Overall, the building represents a good, if somewhat unremarkable, example of its type.
Project dates	Start: 19-09-2017 End: 19-09-2017
Previous/future work	No / Not known
Any associated project reference codes	ECB5197 - HER event no.
Any associated project reference codes	MRL17 - Sitecode
Type of project	Building Recording
Site status	None
Current Land use	Community Service 2 - Leisure and recreational buildings
Monument type	BUILDING Modern
Significant Finds	NONE None
Methods & techniques	"Annotated Sketch", "Photographic Survey", "Survey/Recording Of Fabric/Structure"
Prompt	Direction from Local Planning Authority - PPS
<b>Project location</b>	
Country	England
Site location	CAMBRIDGESHIRE CAMBRIDGE CAMBRIDGE Milton Road Library
Postcode	CB4 2BD
Study area	0.08 Hectares
Site coordinates	TL 4553 5990 52.217637291928 0.130541319043 52 13 03 N 000 07 49 E Point
<b>Project creators</b>	
Name of Organisation	Cambridge Archaeological Unit

Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Alison Dickens
Project director/manager	Alison Dickens
Project supervisor	Richard Newman
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Northmores project management consultants
<b>Project archives</b>	
Physical Archive Exists?	No
Digital Archive recipient	Cambridgeshire County Archaeology Store
Digital Contents	"Survey"
Digital Media available	"Images raster / digital photography", "Survey", "Text"
Paper Archive recipient	Cambridgeshire County Archaeology Store
Paper Contents	"Survey"
Paper Media available	"Photograph", "Plan", "Survey "
<b>Project bibliography</b>	
Publication type	Grey literature (unpublished document/manuscript)
Title	Milton Road Library, Cambridge: Historic Building Recording
Author(s)/Editor(s)	Newman, R.
Other bibliographic details	Cambridge Archaeological Unit Report No. 1379
Date	2017
Issuer or publisher	Cambridge Archaeological Unit
Place of issue or publication	Cambridge
Description	An A4 wire bound document with a plastic laminate cover. It is 29 pages long and has 19 illustrations. Also a PDF file.
Entered by	Richard Newman (rn276@cam.ac.uk)
Entered on	23 October 2017