BARCLAY SCHOOL STEVENAGE HERTFORDSHIRE

HISTORIC BUILDING ASSESSMENT

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Compiled by	Checked by	Approved by
Christiane Meckseper	Joe Abrams	Hester Cooper-Reade

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All photographs Albion Archaeology

Preface

Every effort has been made in the preparation of this document to provide as complete a report as possible, within the terms of the specification. All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.

This report has been prepared by Christiane Meckseper (Project Officer), checked by Joe Abrams (Project Manager) and approved by Hester Cooper-Reade (Business Manager).

Acknowledgements

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Albion Archaeology St Mary's Church St Mary's Street Bedford, MK42 OAS ☎: 01234 294001

Fax: 01234 294001

e-mail: office@albion-arch.com Website: www.albion-arch.com

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Structure of this report

This report presents the results of an historic building assessment of The Barclay School. After an introductory section and sufficient historical background to place the building in context, the results of the assessment are described. A selection of photographs and plans are included to illustrate the text. A synthesis of the results and the conclusions of the assessment are presented. Section 4 contains recommendations for further work.

Plans are based on photographic copies of original architectural drawings and site plans provided by Hertfordshire County Council's Terrier Department.

Non-Technical Summary

Mace Ltd. are gathering baseline information on several schools involved in the Hertfordshire Building Schools for the Future programme. Under the BSF plans the Grade II-listed Barclay School will be considerably extended with new purpose built teaching and learning facilities. The existing school buildings will also be refurbished. In addition, the school will take over part of the adjacent Thomas Alleyne School site.

As part of this programme, Albion Archaeology produced a desk-based assessment (2008) which identified the need for an assessment of the buildings at Barclay School. Albion carried out this assessment in January 2009 and produced this report describes the results. Its purpose is to characterise the nature, condition and development of the standing buildings and architectural setting of Barclay School and its campus. It also advises on the most suitable techniques to record the buildings and their setting prior to the re-development of the site.

The Barclay School was built between 1947 and 1951. It was part of the large-scale postwar school building programme that had led to the development of pioneering techniques of prefabricated construction, in which Hertfordshire County Council played a leading role. The school was initially of a non-standard design but construction plans were adapted to apply the 8'3" prefabricated grid system that was adopted in Hertfordshire at that time. The school was designed by the architectural practice of F.R.S Yorke. Despite later additions, Barclay School is a good example of the early 8'3" grid system.

Not only was Barclay School the first school to be built in Stevenage after the war, it was also the first co-educational school and represents an exemplar of the architectural and educational philosophy being developed and applied by the new educationalists at the time.

These ideas emphasised the importance of the architectural space in the creation of open, progressive and creative learning environments. As a result the design and layout of those schools included a relaxed grouping of classrooms, the provision of community spaces and shared halls, to foster a community-based approach to learning. All this is expressed in the layout of Barclay School and given emphasis by the double use of the assembly hall and associated facilities as a community centre.

The provision of modern art as part of the enhanced learning environment is particularly prominent at Barclay School with the setting of a Henry Moore sculpture in front of its main entrance and a Kenneth Rowntree mural in its entrance hall.

The purpose built science and craft facilities at Barclay School reflect the post-war move towards the teaching of new secondary school subjects like arts and crafts, engineering and domestic science.

The report recommends that the school buildings and their architectural landscape settings should be recorded to English Heritage Level 3/4 standard prior to the development of the school.

1. INTRODUCTION

1.1 Planning Background

Building Schools for the Future (BSF) is a large government initiative to rebuild or refurbish every secondary school in England within the next decade. Funding for this programme will be introduced in a number of phases or waves. Within Hertfordshire the total number of secondary schools, secondary deemed middle schools and all-age special schools have been split into seven phases. Stevenage, which incorporates seven secondary schools and three special schools, has been chosen as the first area in Hertfordshire to implement the BSF programme.

Mace Ltd. are gathering baseline information on several schools involved in the Hertfordshire Building Schools for the Future programme. The importance of school buildings has recently been highlighted by an English Heritage policy paper (English Heritage 2005) which urges the consideration of schools of historical and architectural significance as part of the planning process.

Under the BSF plans the Grade II-listed Barclay School will be considerably extended with new purpose built buildings and teaching and learning facilities. The existing school buildings will also be refurbished. In addition, the school will absorb part of the adjacent Thomas Alleyne School site.

As part of this programme, Albion Archaeology produced a desk-based assessment (2008) which identified the need for an assessment of the buildings at Barclay School. Albion carried out this assessment in January 2009 and this report outlines the results. The purpose of the assessment was to characterise the nature, condition and development of the standing buildings and architectural setting of Barclay School and its campus. It also advises on the most suitable techniques to record the buildings and their setting prior to the re-development of the site.

1.2 Site Location and Description

The Barclay School campus is located in the centre of Old Stevenage to the south of Martins Way. It lies adjacent to the Thomas Alleyne School and has its main access off Walkern Road. It is centred on (NGR) TL 2368 2569 (Figure 1).

1.3 Aims and Objectives

The purpose of the work was to provide an assessment of the significance of the buildings and to recommend an appropriate level of pre-development mitigation. In order to achieve this, the following objectives were set:

- Understand the historical context and development of the building through rapid overview of documentary sources
- Describe the structure and development of the buildings through a walkover survey
- Provide illustrative material for the report in the form of low-level jpeg format photographs.
- Produce a suitably illustrated report to describe the results of the work.

Note: the digital photographs taken as part of this survey are for illustrative purposes and do not represent a full archival quality photographic survey.

2. ARCHITECTURAL AND HISTORICAL BACKGROUND

2.1 Post-war school building and "The Hertfordshire System"

In 1944 the Education Act (Butler Act) increased the school leaving age to 15 and gave force to pre-war policy guidelines which had not only set out the separation of primary and secondary education, but also the sub-division of secondary education into grammar, technical and modern schools. This, together with the rising influx of population moving from London out into the neighbouring counties and predominantly into Hertfordshire, put pressure on the authorities to provide increased educational facilities.

Hertfordshire County Council became one of the first counties to come under the chief education officer, John Newsom, and had its own County Architectural Department by 1946. The team responsible for building primary schools in Hertfordshire throughout the 1950s also included a number of people who went on to become influential figures in the 'new school building movement' (e.g. Bruce Martin, Mary Cowley, David Medd).

In order to combine the vision of the new educationalists with the need to provide a structural system with great flexibility, and on an economical scale adaptable to the post-war shortage of labour and raw materials, Hertfordshire took the pioneering decision very early on to adopt a "Meccano" style system of prefabricated parts which could be constructed in factories and assembled on site (Aslin 1949). This consisted of a light steel frame based on a standard module to which other structural elements such as walls, doors and windows were merely bolted on.

The advantages of this approach were that it was very flexible and allowed the informal approach to the planning of new schools that was so favoured by the new educationalists.

The first system of prefabricated parts consisted of a steel frame, set out on an 8'3" grid, and became known as the "Hertfordshire System". Initially devised for primary schools the use of the system was soon expanded to include colleges, police stations and municipal buildings. To allow the greater flexibility in design that was needed for the requirements of many secondary schools, a 3'4" grid system was developed in 1951 and was further adapted to an even more flexible 2'8" grid. From 1962 onwards the 2'8" grid was used almost exclusively in school buildings in Hertfordshire (School Planning Laboratory 1962).

In 1963 Hertfordshire joined with Kent and Essex to form the South-Eastern Architects' Collaboration (SEAC). The Hertfordshire Systems, in amended form, continued to form the basis for subsequent school construction but a terminology of various "Marks" of SEAC was now being used, rather than the previous grid system (Saint 1987). Thus after 1965 the HCC Terrier Department lists all schools as being built using a MK. 2, 2A or 3 brick or steel type construction.

2.2 School Building in Stevenage

The small town of Stevenage, with its medieval core and small-scale Georgian and Victorian development, was designated as the site of the first New Town to be created after the Second World War. The New Towns were part of a vision to create a series of satellite towns around London that were able to house London's increasing and overflowing population. It was first developed by Patrick Abercrombie in 1944 and the New Town Committee was formed in 1945 (Thomson 2005).

The Stevenage Development Corporation was formed in 1946 and the first Master Plan setting out the design of the New Town was formulated in 1949. This envisaged six neighbourhoods or 'units', which were based on existing hamlets, and a new pedestrianised town centre. Each neighbourhood was to have its own focal point, public amenities and facilities such as churches, primary schools and community centres.

The Master Plan began to be implemented immediately but due to the exponential population growth of Stevenage it was revised first in 1955 and several times thereafter until 1978 in order to accommodate further residential and employment areas, roads, educational facilities and other much needed services (*ibid* 2005).

Schools were a much needed part of the development of Stevenage and the building programme benefited from the progressive vision implemented by Hertfordshire County Council's Educational and Architecture Departments and the Stevenage Development Corporation.

The "Hertfordshire System" and successive prefabricated building systems are clearly in evidence in the school buildings of Stevenage's secondary schools. Barclay, the first school to be built in Stevenage in the post-war era was initially conceived as part of a non-standard design but the plans were altered and adapted to the 8'3" Hertfordshire System before construction began in 1947 (Miller 2008). Heathcote, another early school, built between 1953 and 1955 also conforms to the 8'3" system. From 1962 onwards most prefabricated schools in Hertfordshire were built almost exclusively using the more adaptable 2'8" grid (School Planning Laboratory 1962).

2.3 Barclay School

The history and development of Barclay School and the character of its buildings have been extensively discussed (Miller 2008).

Barclay School was part of the 1948/1949 Secondary Schools Programme for Hertfordshire. However, Miller points out that the site had been purchased for the purpose of a potential school building by the County Council as early as 1939, even before Stevenage had been mooted as a site for a potential post-war New Town. (Miller 2008).

The school was designed by the architectural practice of F. R. S. Yorke who began detailed designs for the school in the winter of 1944-45. The school was built between 1947 and 1951.

The school was initially designed using a non-standard method of construction. However, in the wake of the Hertfordshire's push towards the new methods of prefabricated construction the design was changed and adapted to accommodate the 8'3" Hertfordshire System grid (Miller 2008).

The original school consisted of an "H"-shaped plan with the assembly hall, dining room and communal areas being part of the eastern, vertical ascender of the "H". An elongated corridor housing classrooms and an open play area provided the cross beam of the "H" and connected to the western ascender that housed the further classrooms, a medical room and specialised science, arts and crafts facilities.

Significant changes to the school occurred in 1960s when a swimming pool was added within the courtyard adjacent to the assembly hall. A new science block and sixth form centre were built between 1968 and 1969 and a music block was added in 1976 in the main courtyard of the school. A freestanding new CDT block to the east of the school was built in the late 1990s.

Barclay School was listed Grade II in 1993.

3. ASSESSMENT

3.1 Methodology

Throughout the IFA Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings and Structures and English Heritage's Understanding Historic Buildings (2006) have been used for guidance. Albion Archaeology is a registered organisation with the Institute for Archaeologists (IfA). All work has been done in accordance with the IfA Code of Conduct.

The site survey comprised an examination of the buildings and a low-level photographic survey. A selection of the photographs and reproductions of one of the original architectural plans have been reproduced to illustrate the text.

3.2 General Description of Site and Buildings

Approaching the school from the west the visitor is greeted by a low, curved concrete screen that provides the backdrop for the Henry Moore sculpture "The Family Group". The screen partially protects the main entrance to the school, which is behind the screen and set in a see-through façade of vertical glass panels.

The layout of the school is on an "H"-shaped ground plan that encloses an open school yard in the north and the science block and sixth form centre in the south. The assembly hall, a craft block and swimming pool are forming a complex of buildings in the western part of the school that also includes the dining hall in the ascender of the "H". The gymnasium is attached to the eastern ascender of the "H" and forms a partial enclosure to the northern school yard.

All original buildings of the Barclay School are of a two-storey construction, utilising a steel frame, with flat roofs. The exterior of the building is a well-balanced mixture of yellow brick panels and concrete cladding. The concrete cladding consists of horizontal panels fitted into the 8'3" modular grid and is characteristic of the early components of the Hertfordshire System. A contrast to the concrete panelling is provided by isolated wall panels clad in a horizontally slatted, dark brown stained wood.

The "I" shaped columns and lattice beams typical for the Hertfordshire System are in evidence throughout the school. A low walkway that is open towards the main northern courtyard of the school runs along the full length of the central cross wing. Here the "I" shaped columns are particularly prominent as they are freestanding and in an open and easily accessible part of the school.

Natural light is provided by windows which are running through the façade either in long horizontal panels, gridded by metal frames or in regularly spaced double casement windows. The gymnasium, assembly hall and entrance hall have large window façades that reach from floor to ceiling.

The new science and sixth form block that replaced the southern garden, as well as the new classrooms added to the west and south of the school in 1967 are visually clearly distinguishable from the original buildings of the school. They were designed by architects Twist & Whitley and built according to the SEAC Mark 2 system that had replaced the Hertfordshire grid denominations (see above).

The buildings are of a one storey construction utilising a lightweight steel frame with flat roofs. Their facades are almost entirely made up of large windows above low metal panels. Occasional vertical metal panels, reaching from floor to ceiling as well as isolated yellow brick panels provide supportive and protecting wall sections. A fascia of white painted board runs along the flat roof line of each building.

The music block that was inserted in the northern courtyard of the school in 1976 is of a markedly different construction. It does not conform to any of the Hertfordshire grid systems but is of an independent design. Its plans bear the name of Jack Digby, County Architect of Hertfordshire at the time. It consists of an arrangement of rectangular blocks with a one-sided diagonal roof line that slopes of the high vertical façade of the building.

The building utilises yellow brick which is in-keeping with the materials employed in the surrounding buildings, but the structure still stands in visual contrast to the rest of the school.

The CDT block to the east of the school is of a one-storey yellow brick construction with regularly spaced, large windows that are subdivided into a grid of PVC framed smaller panels. It has a flat roof with a centrally protruding, gabled skylight, providing additional light.

Two units of temporary classrooms are standing at the northern edge of the main central school yard. They consist of low grey prefabricated bungalows with flat roofs.

The interior of the school was not inspected in detail. However, of note is the Kenneth Rowntree mural in the entrance hall. Miller notes that this was

reported as having been repainted during the 1970s, and is now superficially damaged, but it is still recognisable as part of the design concept for this space (Miller 2008, p. 23).

The William Morris wallpaper that originally was a feature of the dining hall did not survive. Also of note in the entrance hall are the walls built of thick glass bricks with curvilinear lines and inset glass mosaics (Figure 5).

The landscape setting of the school today is fairly simple with mature trees in the northern school yard and close to the sixth form block and science building. The latter have replaced the landscaped garden of the southern courtyard. The trees may have originated from old field boundaries and were retained for the landscape setting of the school (Morris 2008). The areas around the school are a mixture of grass and paving. The school lies on level ground.

3.3 Development and Phasing

The original plans for the Barclay School by F.R.S. Yorke were to a non-standard design. However, in the wake of Hertfordshire's push for prefabricated methods of construction the school was redesigned to fit the 8'3" grid of the Hertfordshire System (Miller 2008).

The original layout of the school was in the form of an irregular "H"-shaped plan. The "H" had a low crossbeam that allowed the top ascenders to form a large courtyard. The main access to the school was from the west and led directly into a large entrance, or "exhibition" hall. The entrance lay behind a curved screen that provided the backdrop for the Henry Moore sculpture *The Family Group*.

All communal facilities of the school were concentrated in the western ascender of the "H" and consisted of the dining hall, kitchens and common rooms. The assembly hall extended outwards from the "H" and together with additional workshops formed a separate "U"-shaped complex which enclosed a separate smaller courtyard.

The main teaching block was located in the crossbeam of the "H" and consisted of a string of classrooms along a main corridor. Further teaching facilities and a medical room were housed in the eastern ascender of the "H". The gymnasium extends from the north-eastern top of the "H" into the main courtyard and serves to partially enclose the yard from that end.

The southern wings of the school housed further classrooms, including biology and geography laboratories, and enclosed a landscaped garden.

Several alterations took place at the school throughout the 1950s when increasing numbers of pupils led to the conversion of communal facilities in the in the assembly hall block into classrooms (Miller 2008). Sometime in the 1960s a swimming pool was inserted in the smaller courtyard next to the assembly hall.

The first considerable extension of the school occurred in 1967 when the landscaped garden to the south of the school had to make way for a new science block and sixth form centre. These took the form of a twin block of rectangular buildings, which were connected to the school by short corridors. At the same time additional classrooms were added to the west of the assembly hall and at the southern tip of the eastern wing of the school. A music block was inserted into the south-eastern corner of the main courtyard of the school in 1976.

Externally, the school underwent major refurbishment in the late 1980s when the original concrete cladding was renewed. The replacement panels did not precisely match the original in that they had a more pronounced "V" joint which modified the overall external impression of the building (Miller 2008).

The date of the installation of the temporary classrooms at the northern edge of the school yard is unclear.

The latest addition to Barclay School was a dedicated CDT block built in 1998. It was added after the school received Listed Building status in 1993 but as it is a freestanding building to the east of the school it does not compromise its original design.

3.4 Form and Design

The Barclay School was built between 1947 and 1951 and represents a good example of one of the first schools built in Hertfordshire in the post-war period that employed the Hertfordshire 8'3" system and also consciously sought to incorporate contemporary thoughts on progressive educational ideas.

The components of the early Hertfordshire 8'3" system are clearly visible throughout the school in the form of horizontal concrete panelling, freestanding and enclosed "I" shaped steel support beams and lattice crossbeams. The 1967 SEAC Mark 2 steel framed buildings are typical examples of this later system. Despite their different visual appearance they fit in well with the overall design of the school as both building phases visually express the grid system of construction albeit with differing materials.

The layout of the Barclay School, with its buildings arranged around two central, landscaped open areas plus its extensive communal facilities, clearly expresses the ideas of the 'new educationalists', developed in the 1920s by Henry Morris and first executed architecturally at Impington College in Cambridgeshire.

These ideas emphasised the importance of the architectural space in the creation of open, progressive and creative learning environments and also used the design and layout of schools, with a relaxed grouping of classrooms, the provision of community spaces and shared halls, to foster a community-based approach to learning (Smith 1997). Integration with the wider community was seen as central to this process and is expressed at Barclay in the double use of the assembly hall and its facilities as a community centre.

At the Architecture and Buildings Branch (A & B Branch) of the Ministry of Education after the war architects and educationalists worked actively together to further the ideas of the 'new educationalists' and develop new models of school building.

Their emphasis on a child-centred approach and move away from the monumentality of the pre-war traditional schools is also expressed in the Barclay School. For example, a welcoming, and visitor friendly approach to the school is provided by the main entrance to the school with the Henry Moor sculpture in front of a low curved wall and the entrance doors that are set in an entirely seethrough façade.

The increasing emphasis on secondary schooling from the Butler Act (1944) onwards, also sought to provide specialist classrooms for the new subjects like engineering, crafts and home economics. This is expressed in the ample provision of engineering, needlework and crafts facilities in the original and extended crafts and science blocks at Barclay School.

The provision of original artworks in order to enhance the architectural setting of schools was also first championed by Henry Morris and taken up on a large scale in Hertfordshire by John Newsom. The enthusiasm for art was also shared by the school's architect F.R.S. Yorke and the Henry Moore sculpture was acquired for the school and set in its specifically designed location at the front of the school (Miller 2008). The sculpture at Barclay School was complemented with a mural by Kenneth Rowntree in the entrance hall and William Morris wallpaper utilised in the dining hall.

4. **RECOMMENDATIONS**

It is recommended that Barclay should be recorded to the standard of an English Heritage Level 3/4 survey (EH 2006). This survey should largely comprise a full photographic survey of its exterior as well as interior views and a record of its contemporary fixtures and fittings. The photographic survey should be undertaken in medium format black and white photographs and high quality digital images in tiff format.

The drawn record should make use of existing plans with the record of elevations and architectural detail largely covered by the photographic survey. The report should include documentary and cartographic research and an analysis of existing archive plans. Much of this work has already been undertaken in a previous assessment for Hertfordshire County Council (Miller 2008) and this report should be used to complement any work undertaken as part of the English Heritage Level 3/4 survey.

Barclay School should also be set in a descriptive context with other contemporary secondary schools in Stevenage. In terms of form, function, use of space and social history it forms part of a group of buildings that were part of the post-war educational building programme in Hertfordshire.

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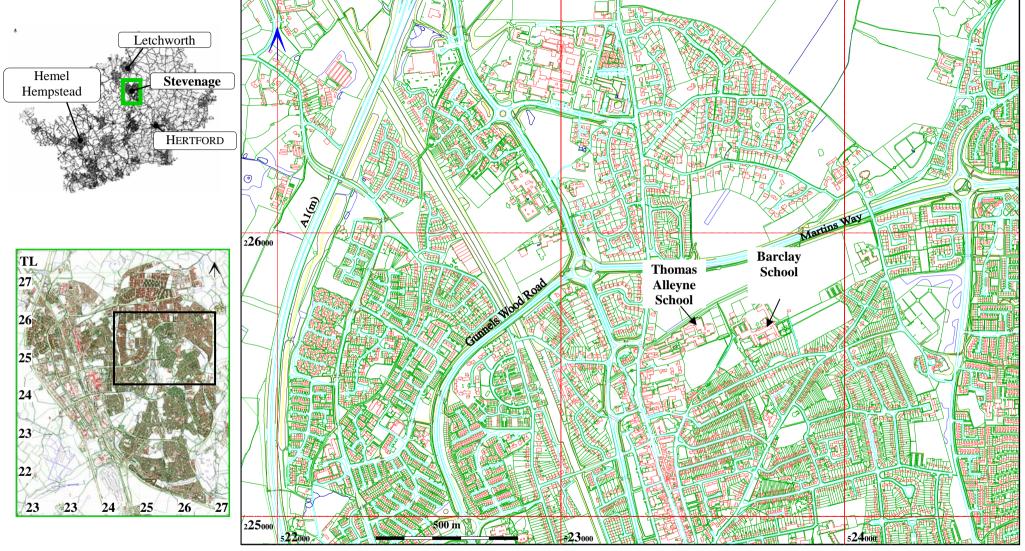


Figure 1: Site location

Base map reproduced from the Ordnance Survey Land-line Map (2004), with the permission of the Controller of Her Majesty's Stationery Office, by Bedfordshire County Council, County Hall, Bedford. OS



Figure 2: Barclay School phasing (based on document ref: 804.MW.188)



Figure 3: South-eastern elevation with Henry Moore sculpture in front of main entrance to the left. Note concrete cladding typical of the Hertfordshire 8'3" System



Figure 4: North-eastern elevation showing assembly hall and original 1947 brick and concrete clad classrooms. 1967 SEAC Mark 2 building to the left.

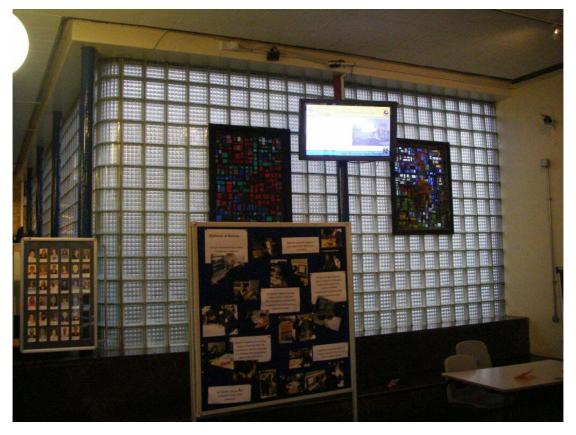


Figure 5: Entrance hall with glass bricks and inset mosaics.