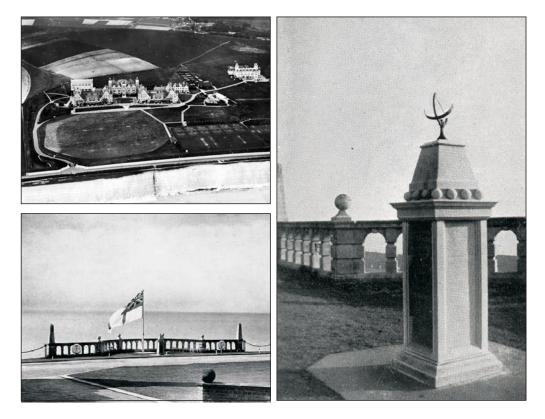


HB Archaeology & Conservation Ltd

ROEDEAN SCHOOL, ROEDEAN WAY, BRIGHTON, EAST SUSSEX, BN2 5RQ

(NGR TQ 350 031)

THE SUNDIAL



COMMISSIONED BY ROEDEAN SCHOOL

REPORT NO. 2023517/1 AUGUST 2023

Prepared by Maggie Henderson & Philippa Whitehill With contributions from the Old Roedeanians' Association

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Abstract

Roedean School have commissioned the preparation of a series of short heritage statements and impact assessment reports to accompany applications for the repair and conservation of a series of fixtures and fittings that contribute strongly to the special character and significance of the school as a whole. This report focuses upon the sundial and astrolabe that occupies a particularly prominent position directly in front of the school entrance, close to the southern boundary of the terrace where it is embellished by a semi-circular balcony.

The sundial and astrolabe were a gift to the school from their architect Sir John Simpson and his daughter Clara who had been educated at the school. Simpson had been involved from the outset in the vision for the school site, forging a strong collaborative and creative relationship with the Lawrence sisters that resulted in much of Roedean School that survives to date. The success of the collaborative endeavour is well illustrated by the success of the school and the near-intact survival of the buildings and their immediate landscape setting at its historic core.

The monument forms a focal point at the principal entrance to the school, emphasising the importance placed on the relationship by both parties in addition to providing a personal touch, a symbolic signature to Simpson's work. There is little doubt that the sundial is significant in its own right, although it is abundantly clear that it has played an important part in the setting of the listed and curtilage-listed buildings in addition to the early planned landscape of the school site as a whole.

The communal value of the sundial is clearly demonstrated by the fact that it is the Old Roedeanians' Association that have initiated and driven the proposals to repair and reinstate the sundial, recognising the interest of the monument and its contribution to the special character and significance of the school as it continues to evolve.

The importance of the monument is certainly sufficient to warrant the well-considered, heritage-led and evidence-based scheme provided by Cliveden Conservation Workshop and discussed in this report. The scheme focuses upon retaining and consolidating as much of the monument as possible, where this is not possible it is proposed that replicas are made on a like-for-like basis using Portland stone to match the original work and including the original inscription. The scheme includes a methodology for protecting the parts, old and new, and a strategy for future maintenance intended to ensure the survival of the sundial and astrolabe for future generations.

1.0 INTRODUCTION

- 1.1 HB Archaeology & Conservation Ltd was commissioned by Roedean School to prepare a series of heritage statement and impact assessments to accompany applications involving their proposed repair strategies.
- 1.2 2023 is the 125th anniversary of the school at its current site and to mark this significant milestone, the Old Roedeanians' Association has chosen to support the restoration/ conservation of a number of iconic objects in and around the school for the future, these comprise:
 - The Sundial/Astrolabe (the focus of this statement)
 - Restoration of three wall paintings by Sylvia Lawrence in Houses 1, 2 and 3
 - Restoration of the astrolabe
 - Restoration of glazed and intaglio tiles in the Art Room
 - Restoration of the marble fountain adjacent to the chapel and cloisters
 - Restoration of five ensigns
- 1.3 This report focuses upon the Sundial/ Astrolabe, drawing upon the previous heritage statement issued by HBAC in 2014, in addition to a series of short publications provided by the Old Roedeanians' Association and a search of the East Sussex Record Office.
- 1.4 The proposals for the Sundial/Astrolabe have been prepared by Cliveden Conservation on behalf of Roedean School, designed in close consultation with The Old Roedeanians' Association Heritage Projects.

Previous Work

- 1.5 HBAC was commissioned to prepare a Heritage Assessment covering the entirety of the school site at Roedean School, Roedean Way, Brighton, East Sussex, henceforth termed 'the Site' (Figure 1). The resultant report, issued in September 2014, was intended to provide an understanding of the origin and development of the school as a whole, its significance and the extent of survival of original and historic features. The 2014 report has been drawn upon to inform a series of further studies into individual buildings at the school site to accompany applications for alterations and repairs.
- 1.6 An archaeological desk-based assessment was issued in January 2016; the work was carried out to assess archaeological potential within the school site to inform the future construction of new sports pitches. The archaeological assessment covered the known archaeological resource within a 1 km radius of the property.

2.0 SCOPE & METHODOLOGY

2.1 This heritage statement and impact assessment draws upon the work previously prepared by HBAC for Roedean School in order to place the sundial in its wider context. The focus of this report is the origin and significance of the sundial/astrolabe and an assessment of the proposed repair strategy. Documents and research undertaken by members of the Old Roedeanian's Association have been drawn upon extensively, with all due acknowledgement, supplemented by targeted research undertaken by Philippa Whitehill

3.0 LOCATION AND SETTING

- 3.0 Roedean School (Figure. 1) is situated to the northeast of Brighton Marina and southwest of the village of Ovingdean. In its original form, access was via a driveway leading directly from Marine Drive (A259). The present access is via Roedean Way, situated north of and parallel to Marine Drive and forming the southern boundary of the settlement that has grown to the northwest of the school since its construction in the closing years of the 19th century.
- 3.1 The topography rises up from Marine Drive which is cut into the slope of the hillside forming the southern boundary of the site, separated from it by a tall wire fence.

3.2 *The Sundial/Astrolabe*

3.3 The entrance to the school is set back to the rear of a courtyard or quadrangle flanked by the domestic accommodation (Nos. 1 – 4 School House). The group is bordered by a terrace that is embellished in line with the entrance to the school by a semi-circular projection, a balcony and viewpoint labelled 'the bastion' on the original plans, defined by a stone balustrade (Figure 2). The sundial/astrolabe (henceforth referred to as the sundial for clarity) is located to the rear (north) of the bastion (Figure 2).

4.0 **DESIGNATIONS**

- 4.1 The site falls within the confines of the South Downs National Park Authority. Roedean School was listed as Grade II on the 26th of August 1999 (List entry number: 1380831 – Appendix 1) under the name 'Roedean Main School Buildings'.
- 4.2 The initial school buildings were designed by the architect John W. Simpson with others added to the site also by Simpson, working with Maxwell Ayrton. The specific buildings noted in the List description comprise school house, art, music and library wing, headmistress' house and chapel.
- 4.3 Although not mentioned in their own right, many more of the buildings on the school site may be afforded the same level of protection as part of the curtilage of those that are specifically mentioned. In general curtilage is defined as:

'any object or structure fixed to a listed building or buildings and any object or structure within the curtilage of the building, which although not fixed to the building, forms part of the land and has done so since before the 1st of July 1948' Planning (Listed Buildings and Conservation Areas) Act 1990.

4.4 The sundial was placed in its current position on the terrace in the Spring of 1899 (ESRO BH701247) and was therefore located within the curtilage of 'Roedean Main School Buildings' at the time of the 1999 listing.

5.0 HISTORIC BACKGROUND AND MAP REGRESSION EXERCISE

5.1 Introduction

5.1.1 The following background has been extracted and summarised from the detailed heritage assessment, 'Historic Background and Map Regression Exercise' produced for the initial Heritage Assessment in 2014, the Keswick House Heritage Statement issued in 2016 and other sources, referenced where relevant.

5.2 Foundation

- 5.2.1 Three sisters, Penelope, Dorothy and Millicent Lawrence ('The Firm') established their school for girls, with the intention to prepare them for entrance to Girton and Newnham Colleges at Cambridge University (established in 1869 and 1871 respectively).
- 5.2.2 In 1881, due to financial constraints exacerbated by an accident incurred by their father that left him an invalid, Mrs Lawrence, Dorothy and Millicent began to teach the neighbours' children and take in boarders at Fearegg House, Wimbledon Park.
- 5.2.3 By 1885 Dorothy and Millicent had recruited Penelope in preparation of starting a new school based in Brighton. Together, the sister's set up business at 25 Lewes Crescent but due to success and expansion, the school soon relocated to a series of buildings at Sussex Square, calling on five additional siblings to assist in the teaching.
- 5.2.4 Further rapid expansion at Sussex Square led to the decision to find a new site in order to construct a purpose-built school to the specifications of the Lawrence sisters and, in 1891 and 1895, friend Leslie Cope Cornford, local architect, sometimes teacher and eventually brother-in-law to the sisters, suggested his mentor, architect Mr John W Simpson, A.R.I.B.A (afterwards Sir John Simpson, K.B.E. from 1924), for the task.
- 5.2.5 The site chosen (c. 18 acres initially) is situated to the southwest of Ovingdean in what was once open-farmland (Figure 3).The foundation stone of the new school was laid on the 26th of July 1897. A drawing of how the school would look by Simpson was reproduced in the 1897 winter term entry of the school magazine (Figure 4 The Vision, 1897).
- 5.2.6 Despite a series of delays to construction, the original group of buildings forming Roedean School (and comprising House numbers 1 4 etc.), were fully opened and functioning as intended by the Lawrence's by the autumn of 1899. Penelope Lawrence wrote:

... for the first time the whole school has lived and worked in its new and beautiful home. This home has proved to be even more completely suited to its purpose and to the needs of its inhabitants than we believed would be the case, and we are all most deeply grateful to the Architect who has spared neither time nor trouble to bring about this result. (ESRO BH701247).

5.2.7 John Simpson continued to design for the Lawrence's, creating a new chapel (added to the northwest corner of the original group) in 1906, (in partnership with Maxwell Ayrton, 1905 - 1928) the Junior School (now Keswick House) and the sanatorium (the first wing of Lawrence House) in 1908.

5.3 By 1911

- 5.3.1 By the issue of the second revision Ordnance Survey map in 1911 (Figure 5) the school is shown *in situ*, the buildings already on-site include most of the maintenance group comprising at this stage engine house, stables and swimming pool (1907). A tennis court is shown immediately east of House 4. Of the main school group, the original reception with flanking houses arranged round the quad is shown, in addition to the contemporary hall and music wing to the rear. The chapel, cloister and cloister garth are also already on the site at this stage (having been completed in 1906). The sundial, in situ by 1899 is also shown, *S. D.*
- 5.3.2 A rectangular plan building is shown to the north of the maintenance group labelled as a store room on a site survey drawing dating to 1917. To the rear of this building a rectangular enclosure has been laid out with an elongated L-plan building to the east: this is the site of the gardens noted above, elements of which remain *in situ* to date.
- 5.3.3 Keswick House (Junior School 1908) is shown in its original form with two open courtyards incorporated in the floor plan. At the eastern end of the site the earliest range of Lawrence House (also by 1908) is *in situ* with a small structure to the rear (by 1917, marked as Nursing Cottages and Laundry).
- 5.3.4 To the south of the school buildings the playing fields are not marked but the one associated with the pavilion has already been laid out. The original school access from the coast road is clearly marked including the turning circle at the entrance.
- 5.3.5 The art studio was designed by Simpson in 1910, with construction in 1911, but apparently too late in the year for inclusion in the second revision Ordnance Survey map of that date.

5.4 By 1930

- 5.4.1 Within the school site, the first self contained science block has been added (foundation stone dated 1927), a carpenters shop is situated to the east of it with the art studio adjacent (present reference library and arts).
- 5.4.2 To the east of the studio the irregular footprint of the headmistress' house can be seen, construction completed in 1925. As noted above, the series of regular enclosures is already on the site with glass houses replacing the long L-plan building of the 1911 map. The site survey of 1917 (not reproduced) labels this area 'ladders'.
- 5.4.3 Some changes have been made to the maintenance group with a new rectangular plan store and inverted L-plan wing to the east replacing the earlier stable block: the engine house and swimming pool with fountain to the south remain unchanged.
- 5.4.4 To the south of the site the playing fields have been added, with the pavilion shown *in situ* to the west of the field already laid out on the earlier map (1911 Figure 4). Two new tennis courts are shown, one to the east of Keswick House and the other to the south of Lawrence House (above the new playing field). The new east wing of Lawrence House, labelled *Sanatorium* is shown *in situ* by this stage (Figure 4). A small electricity sub-station was added to the west of the carpentry building (to the rear of House 3); this was *in situ* by 1925.

5.5 Between 1930 and 1952

- 5.5.1 During the Second World War, Roedean School was evacuated to Keswick in the Lake District. The School premises were partially occupied by army regiments including a contingent of the Argyll and Sutherland Highlanders, the Queen's Royal Regiment, four Canadian regiments and the London Scottish (in turn, not at the same time). By May 1941 the school had became the home of HMS Vernon, the Royal Navy's torpedo, mining and electrical training facilities, providing accommodation for over 30 000 sailors over the period that HMS Vernon was in occupation¹.
- 5.5.2 Plans held in the school archive show the planned layout of the site to meet the needs of the Navy and additions were made to the site in the form of sheds, garages, tanks and water storage facilities. In particular, a rectangular plan building was added to the west of the maintenance group (the present clubhouse). The additional building was constructed of reinforced concrete with a flat blast-proof roof concealed behind rough-cast rendered finishes consistent with the pre-existing buildings on the site. The building retains the reinforced construction and as a result the interior has rather low and claustrophobic storey heights. The building was constructed to serve as an Air Raid Precautions Headquarters.
- 5.5.3 Those evacuated to Keswick returned in 1946 and the former Junior School was renamed at a later date Keswick House, in memory of the evacuation. By 1952 the formalisation of part of the school grounds at the west end of the Site and the expansion of the playing fields at the southeast corner of the site had taken place (Figure 6).

5.6 Between 1952 and 1974

- 5.6.1 The school site continued to develop into the third quarter of the 20th century (Figure 6) with a new class room added within the open courtyard of houses 1 and 2, a counterpart was added in the same location within Houses 3 and 4 by 1957 (Bursary) but is not shown on the Ordnance Survey map. A new dining block added to the west of the main group was designed by Sir Hubert Worthington and his associate T. W. Sutcliffe and completed on site by 1964.
- 5.6.2 Extensions were made to the science block (subsequently rebuilt) and to the east of the maintenance group the indoor swimming pool was built (1969), superseding the original one to the west that was in situ by 1907. A playroom was added to the west of Keswick House, linked to the main building and a series of garages are shown to the rear of Lawrence House. The northern of the two groups of tennis courts is shown in situ to the south of Lawrence House.

5.7 *c*.1990 - 2000

- 5.7.1 In the 1990s saw the construction of new staff accommodation (Vernon House), a new Theatre facility, added to the existing music wing and additions made to the library and science buildings, the latter comprising the Design and Technology group.
- 5.7.2 By the year 2000, a new sports hall was built and Keswick House received a new wing, followed by a series of alterations c. 2016. (Figure 6).

¹ http://www.royalnavyresearcharchive.org.uk/Vernon_1.htm#.VAXwpmO0y_I

6.0 THE SUNDIAL

6.1 Origin and Development

- 6.1.1 The sundial, a gift to the school from Simpson and his daughter Clara, was presented in 1899 the same year as the completion of the main school buildings. The sundial, comprises a Portland Stone pedestal, in four pieces, surmounted by a brass version of an armillary sphere (an ancient astronomical device, representing the celestial globe²), a replica donated by Laurie Keen in 2013.
- 6.1.2 The pedestal base sits on an octagonal four-piece paver sitting flush with the 'grass'. Above the cyma moulded base the pedestal is square in section, each side comprising a sunken panel all of which are surmounted by a moulded cornice. The cornice is capped by a short pyramidal obelisk-like stone that had includes a series of 12 carved balls at its base where it meets the cornice (Plate 1).



Plate 1: The west side of the sundial

- 6.1.3 Although much weathered now, the north panel carried a Latin inscription and the southern panel also has fixed upon it a brass plate Equation Table.
- 6.1.4 The sundial was described as follows in the Roedean School magazine of Lent 1899 as:

A munificent gift from the school's architect Mr John Simpson and his daughter Clara:... to commemorate the residence among us of his daughter, Clara, who is now about to leave us after having held the position of Senior Prefect in the School. We are glad to think that her name will be permanently connected with her father's beautiful building, though it needed no outward memorial to keep it in remembrance among those who knew her ...

² Britannica.com

The sun-dial is placed on the Terrace in front of the quadrangle on a stone pillar bearing the following inscription...

HUJUS SCHOLAE OLIM ALUMNA ARCHTI ETIAM FILIA CLARA CARRICK SIMPSON ME POSUIT AD MDCCCXC1X On the other side is a brass plate engraved with the equation table for correcting the solar time, at the base of which is the following legend.... Me statuit manus ipsa patris Claraeque voluntas Et docuit certum dicere solis iter Mane velut soles renovata luce resurgunt Usque tibi comitum Clara resurget amor * (the authorship was attributed to Penelope Lawrence in the Roedean School Magazine, Reference: ESRO BH701247)

6.1.5 The inscription translates to:

A father's hand, a daughter's pietie, Have fixed my dyal that you the houre may see; As each new sun revives the light so we, Dear Clara, renew our love and think of thee (ESRO BH701247).

6.1.6 The sundial/astrolabe was clearly a much loved and appreciated gift, placed in a location that allowed the inscription's author, Penelope Lawrence, to view the activities of the school: '*her favourite place to stand, with grass. She missed NOTHING!*' (Winifred Russell in ORA Heritage Projects 'The Sundial / Astrolabe').

By 1927

6.1.7 In Leslie Cope Cornford's 1927 book documenting Roedean in photographs, the sundial is only mentioned in passing but we are informed that it was a gift from both John Simpson and his daughter Clara. Although there is no photographic image of the object, Cope Cornford had provided a drawing which gives a clear idea as to its appearance twenty six years after installation (Figure 7 – Cope Cornford, 1927:15).

By 1941

6.1.8 By May 1941 the school had become the home of HMS Vernon, the Royal Navy's torpedo, mining and electrical training facilities. Reminiscences describe how the Quad and Terrace were used during their occupation:

'the area of the balustrade was referred to by the navy as the 'Quarterdeck', a revered area within a shore establishment, the site of the flagstaff flying the Naval Ensign - the Quarterdeck must be saluted by naval personnel when passing as a mark of respect. The school's quadrangle doubled as a parade ground, the site of Sunday divisions (parade of ship's company before church) at which the men and women of HMS VERNON would be addressed by the Captain and inspected. (royalnavyresearcharchive.org.uk) 6.1.9 Although the sundial/astrolabe is not mentioned, it was clearly present on the terrace throughout this time, as evidenced by a photograph of the no.1 White Ensign flying from the quarterdeck flagstaff (Plate 2).

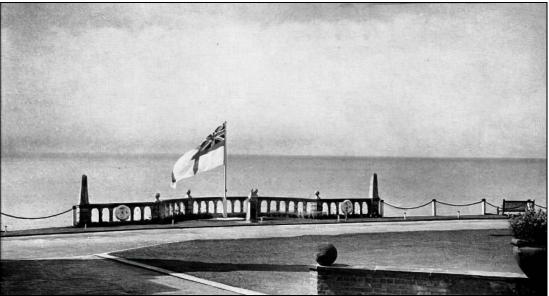


Plate 2: The 'Quarterdeck', 1940s by Lt Cdr. Rob Hoole RN

6.1.10 A later photograph of the sundial taken in c. 1951 *by S H Hodgson* (Sylvia Hassall Hodgson (Roedean student 1946 – 1953)), shows the stonework still crisp half a century after its installation (Plate 3).

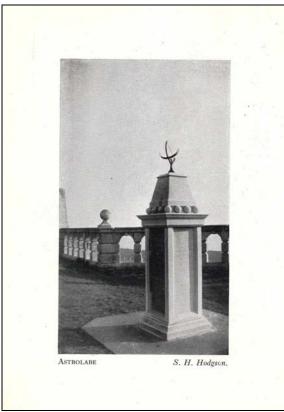


Plate 3: Astrolabe by S. H. Hodgson. 1951

By 2013

6.1.11 In 2013, a replacement metal armillary sphere (very much like that of 1899 original) was gifted to the school by local historian Laurie Keen, the original having been lost some time ago (ORA pers.com).

Mason or Sculptor?

6.1.12 The sundial bears no makers mark or externally visible mason's mark. Plans prepared by Simpson, dating to 1897 and 1899 show the bastion and the sundial *in situ* and as such, it is probable that the design was Simpson's from the outset (De Zouche 1955: 70; Plates 4 and 5).

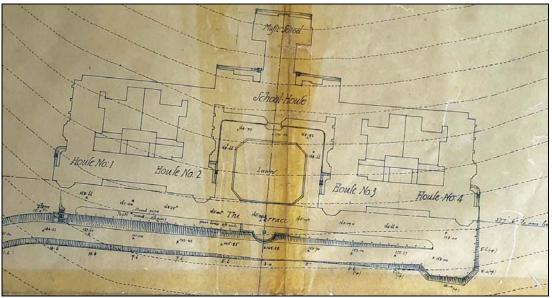


Plate 4: Detail of Simpson's original plan of the main school dating to 1897 showing the terrace, bastion and sundial (Plan No. 38/T/1897) held in the school archive

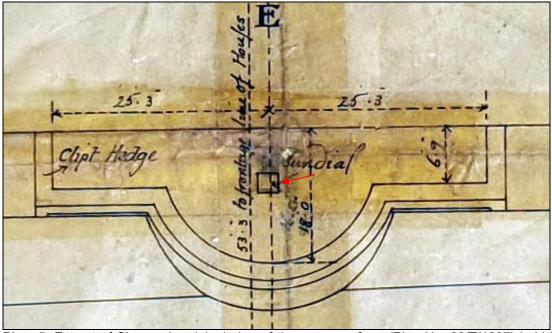


Plate 5: Extract of Simpson's original plan of the entrance front (Plan No. 39/T/1897) held in the school archive, the sundial labelled (arrow)

- 6.1.13 Two possible sources for the monument are derived from suggestions made by Leslie Cope Cornford and mentioned in a review of the laying of the foundation stone in 1897 (ESRO BH701246).
- 6.1.14 The two suggested options are as follows:
- 6.1.15 The monument may have been the work of the master mason (un-named but present at the ceremony), who worked for the initial contractors Messrs. Peter Peters and Son builders, presumably until 1899, when the contractors went bankrupt (Brighton Gazette, April 1899 and May 1902).
- 6.1.16 An alternative option is sculptor Albert Hemstock Hodge derived from his working relationship with the architect. Hodge (1875 1917) worked for Simpson on several projects, one of his first being the ornate stonework present within and without the main Roedean School buildings (i.e., above the entrances to the Houses and the principal fireplaces etc.) (Cornford, 1927).
- 6.1.17 To the viewer of Hodge's work at the school, the contrast between the ornate carvings and the simplicity of the sundial may reduce the possibility of his involvement. However, if the commission came with strict specifications from Simpson, then it is expected that Hodge was required to follow his instructions to the letter.

6.2 Setting

- 6.2.1 The sundial has occupied the same position since installation in 1899, the same date as that recorded for the completion of the main school group. An image of 1906 (Plate 6) and another dating to 1920 (Plate 7), demonstrate the enduring landscape character of the school, particularly to its principal entrance front, the focal point of the group and its public 'face' as encountered by all visitors, staff and students since first built.
- 6.2.2 The entrance area with its courtyard comprises a central octagonal area laid to lawn: this is defined by paths that border the buildings and lead towards the main central entrance to the School House. The terrace with its semi-circular balcony or bastion, situated directly opposite the entrance, was the chosen location for the sundial, clearly intended to create a focal point on the approach to the school from each side in addition to a key feature when viewed from the School House on departure.
- 6.2.3 The courtyard area referred to in the parlance of the school as the quadrangle or more commonly 'the quad' was undoubtedly an integral part of the design for the school's main entrance, recognised in the List description:

The original building is set out almost symmetrically with a central schoolhouse flanked by boarding houses set forward on either side, thus creating an open quadrangle in the centre

6.2.4 Dorothy E de Zouche, a former member of staff at Roedean School, recorded in 1955 the success of the endeavour: In its proportions and its combination of solidarity and elegance it appears exactly right for the focal position it occupies and the finish of its details exemplifies the standards customary in Sir John's work (de Zouche, 1955)

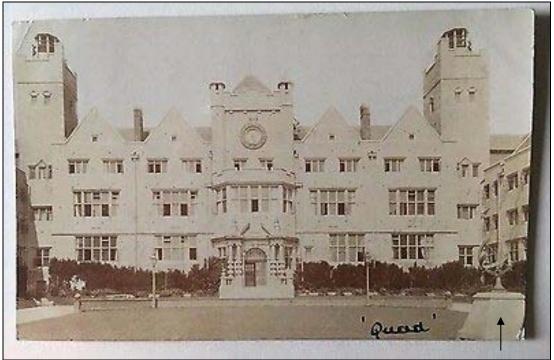
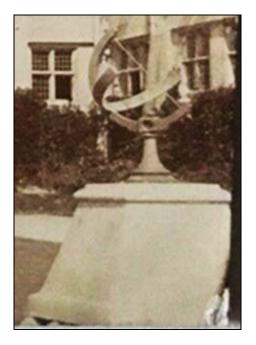


Plate 6: The Quadrangle in 1906 (sundial indicated by arrow), detail below



- 6.2.5 De Zouche goes on to describe that the architect's plan included the planting of *two hundred* Sycamore trees, most of which fared badly in the exposed areas of the school estate. However, some of what does survive on the quad may be the relict of Mademoiselle Renou (former assistant tutor), who, in 1899 planted many shrubs and plants.
- 6.2.6 The significance of this space had been, and remains, one of the visitor's first experience of the school on arrival, as intended by the architect: a successful endeavour that has resulted in the quad being one of the most photographed parts of the school.

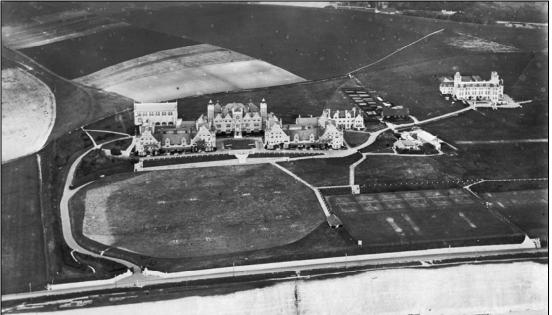


Plate 7: Aerial image of the Main Roedean School site and detail below (Britain from Above, 1920)



7.0 STATEMENT OF SIGNIFICANCE

7.1 Introduction

7.1.1 The following assessment of significance comprises a consideration of the school as a whole prior to focussing upon the role played in that significance by the sundial.

7.2 The School

- 7.2.1 As identified in 2014 master heritage statement, the Roedean School site was carefully chosen, planned and laid out to provide grouped areas of activity: the school approach to the west; sports and recreation to the south and the core of the school group to the north, supplemented by the self-contained, stand-alone junior school (Keswick House) to the east and the Sanatorium, both early additions to the site (by 1908).
- 7.2.2 The planned layout of the school provides an insight into the idea behind the facility at its inception in the late 19th century; indicating clearly the well-informed and progressive character of the Lawrence family in the establishment of their school. The teaching facilities were balanced from the outset with provision for the study of science (laboratories and class rooms specifically designed as such were included in the 1897 designs for School House) in addition to the more traditional female pursuits represented by the music school at the rear of the original group.
- 7.2.3 The academic life was off-set by the inclusion of sports facilities: a gymnasium was included in the original school house in addition to the early establishment of the school playing fields to the south of the site, the first tennis courts and an outdoor swimming pool (by 1907). The sports provisions clearly indicate the awareness of the Lawrence sisters of the current thinking in the contemporary boys schools offering a similar standard of education at that date, that had (and still have) an emphasis on sports and games.
- 7.2.4 Many of the original buildings and early additions to the school site survive almost intact of external fabric, footprint, floor plans and function including a high degree of service features that were integral to the design of the buildings such as the basement plant rooms and the water towers. The accompanying survival within the archive of the original plans and those of the subsequent additions and alterations provide evidence of the origin and development of the school as a whole: a facility that was set out to meet the needs of those attending it and one that could and did adapt to changes in living conditions and education over time.

7.3 Sir John William Simpson and Roedean

- 7.3.1 Simpson had been introduced to the Lawrences by their friend and sometimes architect and teacher, Leslie Cope Cornford (who had trained under Simpson before setting up his own practice in 1891), for the purposes of designing a new school that would eventually be constructed at Rottingdean.
- 7.3.2 This friendship was such that Simpson readily and happily produced for them many plans until the Lawrence sisters were happy with 'one that fit the minutest details that the Miss Lawrences considered necessary for teaching staff, pupils and domestic staff and that a building of his conception would be convenient for carrying out the principles on which they conducted school life (de Zouche).

- 7.3.3 Simpson continued working for the Lawrence sisters as an architect (and designer of the Roedean coat of arms) up until the late 1920s, after which time he was struck down by illness in the winter of 1932 and died the following March.
- 7.3.4 Simpson was described as a man of 'unusual organising ability...To those who had penetrated the reserve which was often mistaken for aloofness, he was a delightful companion, with a subtle penetrating mind, a kind heart and a sense of humour....He was one of the few British architects of our time to appreciate the value of keeping in touch with the ideas, aims and work of men in other lands (scottisharchitects.org.uk).
- 7.3.5 Much of the significance of Roedean School lies in the survival of the concept behind the design of the school: the way that the founders and their architects worked together to create a coherent facility that retains at its heart the near-intact site plan of the late 19th and early 20th century school. The individual value of the buildings derived from the extent of surviving fabric, floor-plans, features and continuity of function is supplemented by this strong relationship, one that was cemented on a more personal level by Simpson's gift to the school of the sundial and its placement in such a prominent location.

7.4 The Sundial

- 7.4.1 The significance of the sundial is derived for the most part from its historic and spatial relationship with the school site, the role that it plays in the setting of the listed buildings and their connection with the architect Sir John Simpson. Simpson included the sundial in his plans for the school; it is probable that he was the designer of the monument as part of his vision for the school as a whole (Plates 4 and 5).
- 7.4.2 As outlined above, many of the original buildings, architectural features and early additions to the school site survive almost intact of external fabric, footprint, floor plans and function
- 7.4.3 In a similar vein, this high degree of survival of the original vision applies to the sundial; a monument that, as part of the original scheme for the new school, is inextricably linked to it. The relationship between school and sundial is due in the first instance to its having been designed by Simpson and presented as a gift to the school from him and his daughter, denoting a close relationship between the architect and the Lawrence family that exceeded the architectural remit. In addition, the enduring presence of the sundial on the terrace, its location unchanged since the completion of the main buildings and the installation of the sundial in 1899, has made it a feature and a focal point of the school site, as much a part of it as the Simpson designed buildings, the clock over the entrance.
- 7.4.4 There is little doubt that there had been an enduring and successful relationship between the school and their architect, a collaboration that resulted in a school site of such quality that it has survived, in terms of its historic core, in a near intact state since first built at the turn of the 20th century.
- 7.4.5 The provision of the sundial directly opposite the entrance to the School House, provides a personal touch, a metaphorical signature to Simpson's work that underlines the symbiotic relationship between the school and the architect since inception.

7.4.6 On receiving the gift in 1899, Headmistress Penelope Lawrence wrote:

The sun-dial forms a very great feature of the place, and gives the finishing touch which completes the harmonious impression made by the building (ESRO BH 701247).

7.4.7 The sundial had remained steadfast during World War 2: it is uncertain if the sundial remained untouched during the post war years when the school underwent major refurbishments and re-decoration, as plans of the monument had been prepared in 1945 (Plate 8). The production of the scaled drawings may indicate a programme of restoration intended at that time, although it is unclear if this was actually carried out. The monument remains an enduring focal point that is as much part of the school as the buildings and the specifically chosen site within which each had been placed.

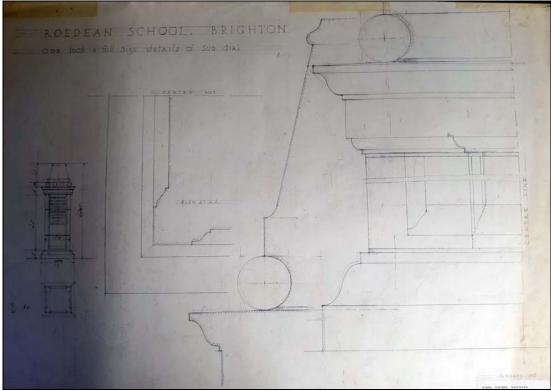


Plate 8: Detail of the drawings of the sundial prepared in 1945 (Plan No. NN/D/1945, Roedean School Archive)

Communal Interest

- 7.4.8 The survival of the sundial in its original location and near-intact form, in addition to the reinstatement of a replica astrolabe in 2013 demonstrates the ongoing importance of the sundial to the school.
- 7.4.9 The importance of the sundial is emphasised by the commitment demonstrated by the Old Roedeanians and the school itself to its survival: this is expressed in the plans to repair the monument and in so doing secure its future as an integral part of the school site and experience.
- 7.4.10 It is at the behest of the Old Roedeanians' Association, people with first-hand experience of the site and the school, that the monument be restored and conserved: this demonstrates a clear communal value, and confirms the significance of the

sundial and the part that it played in their school lives, a part that extends beyond the boundaries of their attendance.

7.4.11 It is difficult to imagine anyone more qualified to understand the significance of a particular monument to its immediate environment than those that had interacted with it and continue to do so to such an extent that it has initiated and driven a purpose-built proposal scheme to secure its future.

8.0 THE PROPOSED ALTERATIONS

8.1 Introduction

- 8.1.1 At Roedean, buildings and facilities have come and gone to some extent while those at the heart of the historic complex have endured. That the original buildings and their planned landscape setting have endured with such minimal impact to exterior and indeed interior organisation is a testament to the vision of the Lawrence family, the talents of their architect and the close collaborative relationship between the two.
- 8.1.2 The current proposal scheme focuses on a particular and significant feature that is an integral part of the historic heart of the school complex, the sundial. The significance of the sundial has been recognised and investigated by members of the Old Roedeanians' Association in the first instance, initiating and driving forward a sympathetic proposal scheme intended to inform a proposed strategy of repair and reinstatement at is original location.

8.2 The Proposal Scheme

8.2.1 In part due to the poor quality of the Portland stone forming the body of the pedestal (Ben Newman, SPAB, *pers.com*), the exposed site of the sundial has resulted in substantial degradation to it, which shows no sign of abating if the object is to remain in anything like its current state (Plate 9).



Plate 9: The current condition of the sundial

8.2.2 Cliveden Conservation Workshop Limited (CCW) were invited, at the request of Noëlle Chase (Old Roedeanians' Association), to survey the sundial at Roedean

School, to assess the current condition of the monument and to provide recommendations for its repair (no. 21537 - 1st March, 2022).

Condition

8.2.3 The following details are extracted from the subsequent survey and report by Ben Newman, SPAB fellow, with thirty two years' experience in stone masonry:

Although structurally sound much of the surface of the Portland stone is heavily eroded due to the driving winds and salt spray. The sea salts in solution are being absorbed by the porous limestone and will periodically re crystalize within the surface of the stone. This cycle of expansion from soluble state to crystalized state will cause the stone to gradually break down and is the mechanism of the current state of erosion.

This has resulted in the inscriptions to the pedestal faces having all but disappeared and the form of the obelisk is unreadable; the ball feature at its base has "melted away" with erosion.

The brass plate on the south face of the stone pedestal engraved with an equation table for correcting the solar time is pitted with surface loss of the weathered vert de gris patina impacting on its legibility and surface integrity.

The astrolabe has a less weathered patina due to its relatively young age i.e. not being part of the original.

8.3 Strategy

- 8.3.1 The following approach, developed by CCW has been proposed:
 - Replacement of the pedestal in Portland Stone (like-for-like)
 - The inscriptions to be included, hand-engraved in Roman upper-case
 - Replacement of the top obelisk in Portland stone (like-for-like)
- 8.3.2 The stone base and partial eroded pedestal capstone can be dismantled, cleaned and re-installed.
- 8.3.3 The conservation philosophy places an emphasis on retaining as much of the original monument as possible, with treatment as follows to secure its future:
 - Consolidation of the retained elements of the monument, protection coat of casein bound limewash
 - Retain brass components protection wax coating as a minimum against the elements and to inhibit staining of the stone through water run-off
 - Precise orientation of the reinstated replica astrolabe to enable it to function accurately
- 8.3.4 The proposed strategy suggested for the retained elements of the monument have been specifically designed to protect them from the harsh marine environment and to improve the legibility of their inscriptions where included.
- 8.3.5 On completion of the works, the sundial and the astrolabe will be returned to its original place on the terrace and as a consequence will continue to be exposed to the

corrosive effects of the weather. As such, it is proposed that a programme of maintenance intended to ensure the sundial's survival is initiated comprising the following:

- re application of microcrystalline wax on an equivalent 2-3 year timescale
- Bird guano should be removed with water and plastic scraper of brush as this can be damaging because of the acid present
- the object should be allowed to age naturally and no specific cleaning regime is required (Newman, 2022).

8.4 Impact of the Proposed Alterations

- 8.4.1 The proposal scheme requires replacement of more than 50% of the masonry elements of the monument. The severe degradation of the Portland stone and the loss of the inscriptions on the panels means that there is no viable alternative to their replacement. Without intervention the monument will fall into further disrepair resulting in its eventual loss: this would have a substantial impact on the setting of the listed buildings retained within the school site.
- 8.4.2 The value of the sundial, although a historic monument in its own right, is for the most part derived from its historic interest as a gift of the architect to the school, a gift that symbolised their close collaborative and personal relationships, the latter as established through the education of Clara Simpson, the daughter of the architect at Roedean School.
- 8.4.3 The installation of the sundial occurred in the same year (1899) as the completion of construction of the main school group, emphasising the close relationship and creating a focal point in the carefully considered landscape setting of the buildings. The sundial has remained in situ since installation, as much a part of the school site as its buildings.
- 8.4.4 The role played by the sundial in the significance of the school site as a whole, and as a key element in the setting of the listed and curtilage-listed buildings has been taken into account in the proposal scheme as assessed here.
- 8.4.5 From the outset, it has been considered essential that the sundial is repaired and reinstated in its original position to retain the relationship between the buildings and their immediate setting, in addition to that important connection and symbiotic relationship between the school as first built and the architect responsible for bringing the vision to life.
- 8.4.6 The intention to protect, enhance and better reveal the retained elements of the monument demonstrates a heritage-led approach to the survival of the sundial. Whilst it is unfortunate that replacement of the pedestal and obelisk is required, the intention to replace on a like-for-like basis matching materials and inscriptions is considered an entirely appropriate response in this instance.
- 8.4.7 The clear understanding of the fabric of the monument demonstrated by Cliveden, the factors that contribute to its deterioration and the approach necessary to prolong its life has resulted in an undoubtedly heritage-led, evidence-based approach to repair, replacement and maintenance to secure the future of the sundial, and in so doing preserve its character and significance in addition to the clear contribution made by the monument to the setting of the listed and curtilage-listed buildings.

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11.0 ACKNOWLEDGMENTS

The author would like to thank Roedean School for commissioning the work and to Glenn Hawkes, Head of Estates for providing an introduction to the sundial and the other monuments that will form part of a series of heritage statements and impact assessments. Thanks are also due to the Old Roedeanians' Association members Mary Henderson and Noëlle Chase, Roedean School archivist Jackie Sullivan and Parker Dann.

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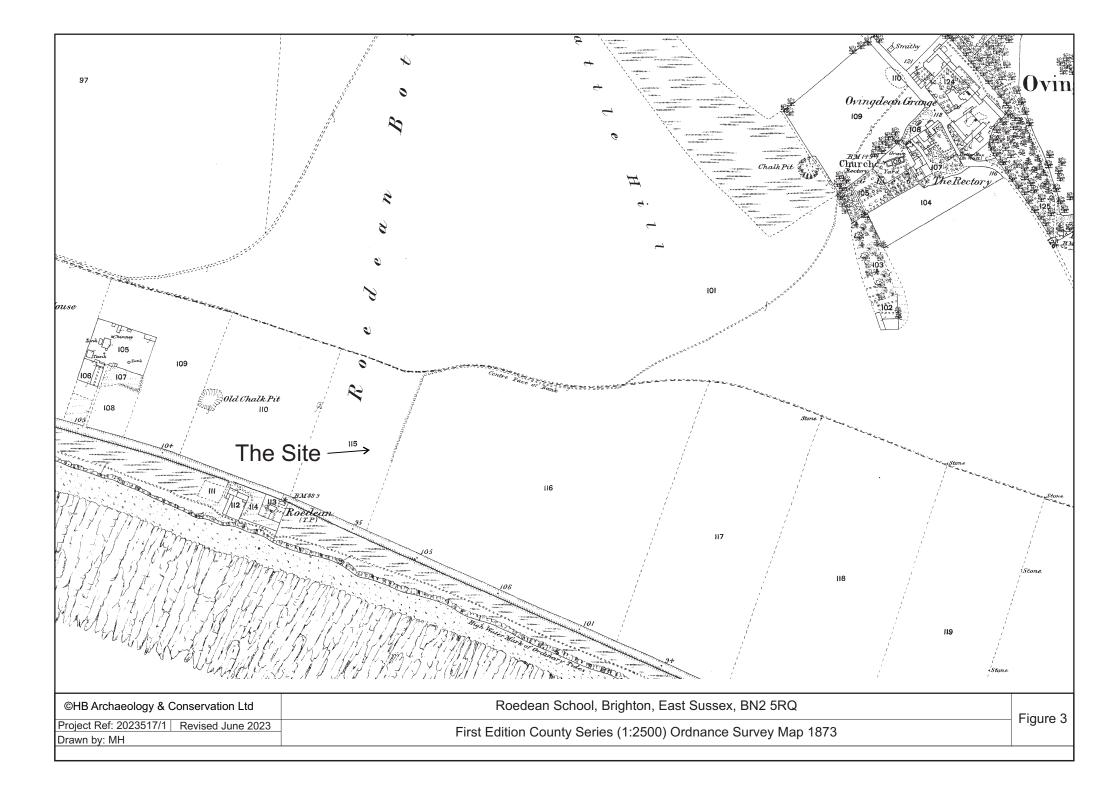
³ Documents held at The Keep, East Sussex Record Office

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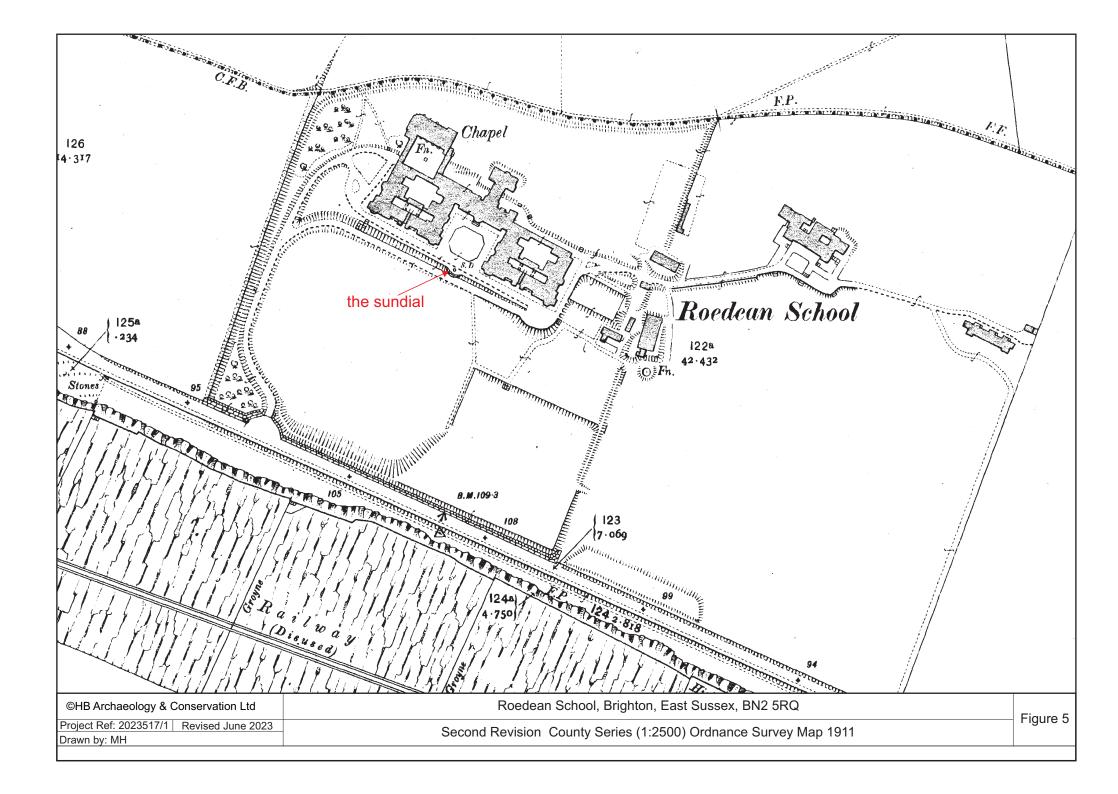


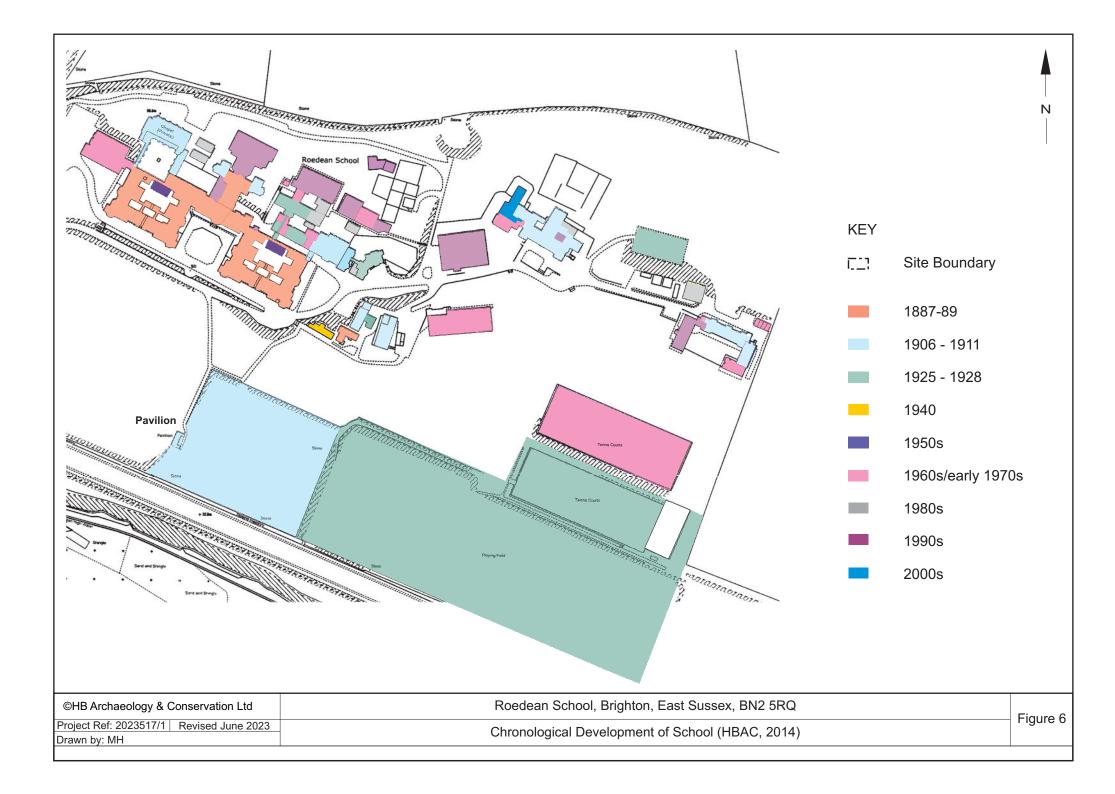
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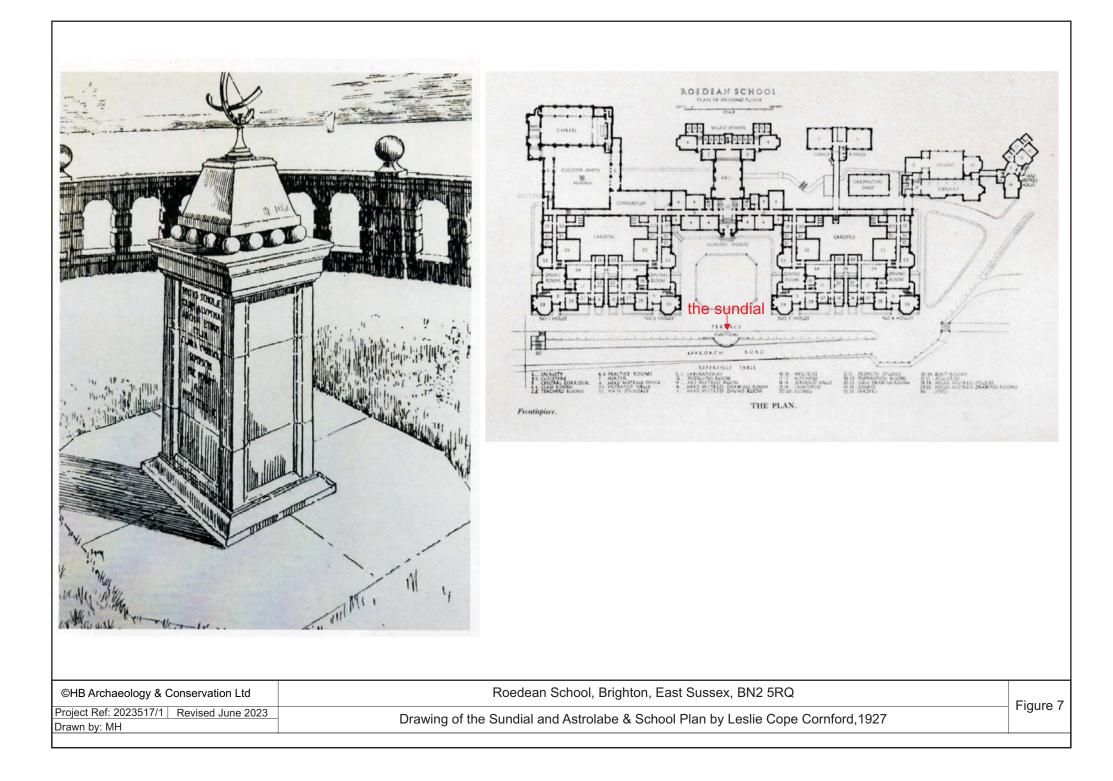




	THE ROEDEAN SCHOOL NEW BUILDINGS.
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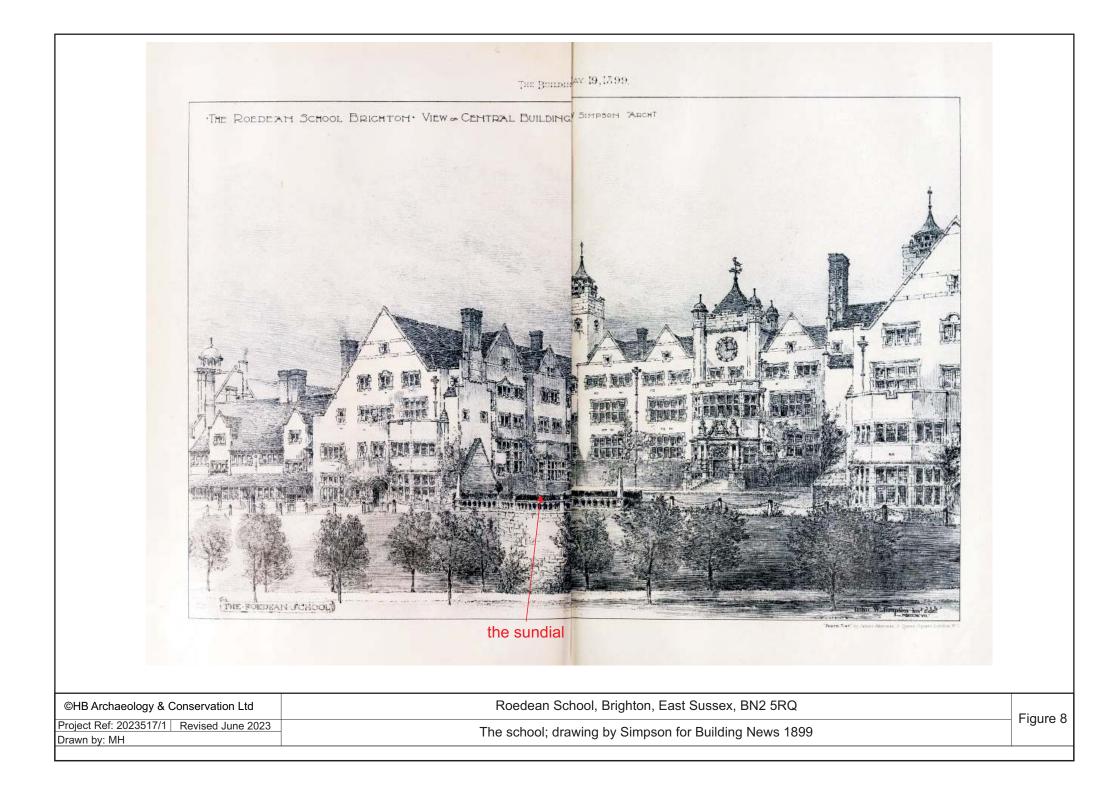
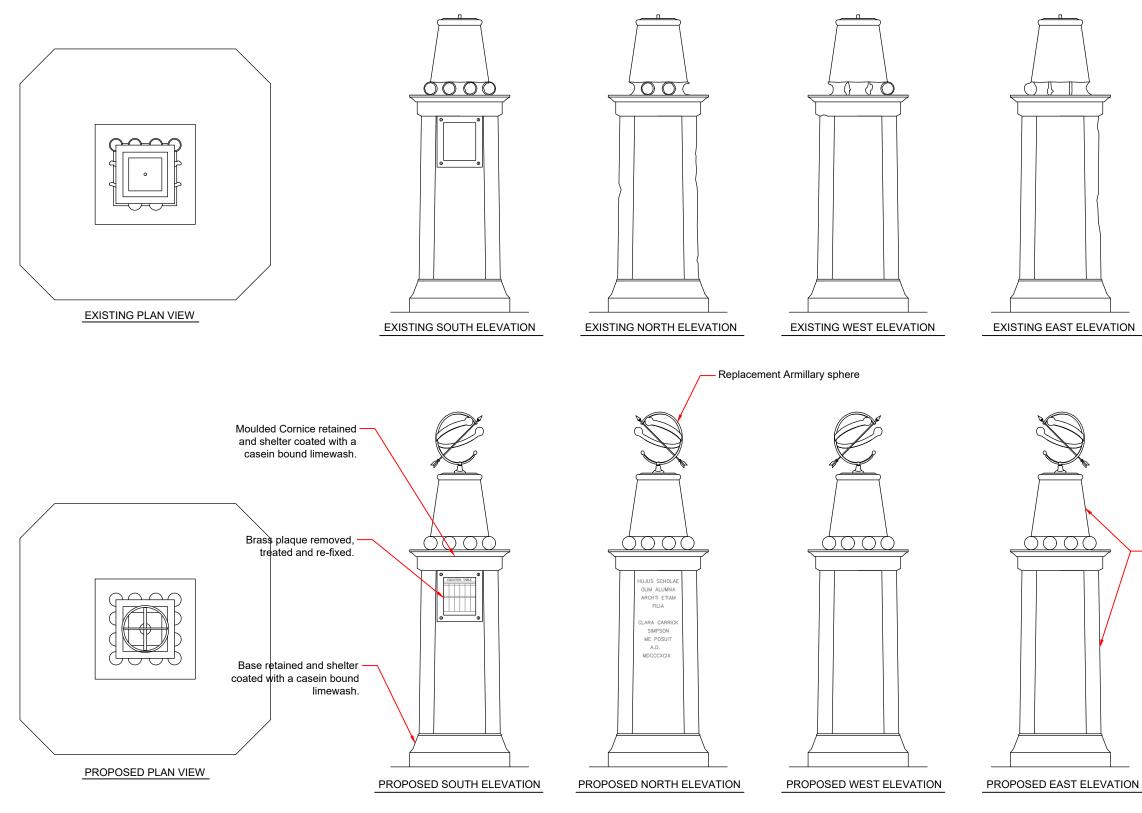
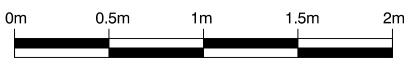


Figure 9: Alterations as Proposed, Spruce Architecture, November 2022









Existing structure, photo taken Oct 31st 2022.

PROPOSED ALTERATIONS: Existing astrolabe and pedestal to be restored by specialist to replicate the original structure.

Project

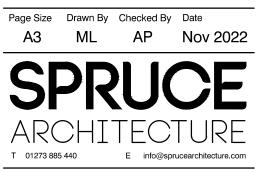
Roedean Astrolabe

Address

Roedean School Roedean Way Brighton BN2 5RQ

Drawing description

Existing and Proposed Astrolabe



This drawing is the copyright of Spruce Architecture. Do not scale from this drawing. All dimensions shown are approximate and should be

checked on site. Any discrepancies on this drawing are to be reported

to Spruce Architecture.



Obelisk and pedestal replaced with identical design to orginial in Portland Stone.

Appendix 1: List entry Summary

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

Name: ROEDEAN SCHOOL MAIN BUILDINGS

List entry Number: 1380831

National Park: SOUTH DOWNS

Grade: II

Date first listed: 26-Aug-1999

Details

BRIGHTON

TQ3503SW ROEDEAN WAY 577-1/58/761 (East side) Roedean School, main buildings

Ш

Girls' school. 1897-8. The principal school building is the 150m long range of school house and boarding houses built in 1897-8; there are other buildings of special architectural or historic interest attached to it, namely the chapel, of 1905-6, and the art, music and library wing of 1910-11 with the headmistress's house; the 1897-8 building is the work of John W Simpson, the others are by JW Simpson and Maxwell Ayrton. Red brick laid in English bond, roughcast with Bath stone dressings, roof of tiles recently renewed. The original building is set out almost symmetrically with a central school house flanked by boarding houses set forward on either side, thus creating an open quadrangle in the centre. The school house is loosely Jacobethan in style, while the boarding houses take their character from contemporary Arts and Crafts domestic architecture.

EXTERIOR: the school house front is of 7-window range, with 3 storeys and attic, and is set out with a central clock tower flanked by 2 gabled bays to either side, with staircase towers set back at either end; plinth of red brick; 2 storey canted and parapeted bay to clock tower incorporating a round-arched entrance with Gibbs surround to the archivolt, flanked by pairs of blocked lonic columns carrying an entablature with pulvinated frieze and vase ornaments flanking a broken pediment which carries an emblem of the school; all windows flat-arched, those to either side of the entrance under the same entablature; ground- and first-floor windows have mullions and transoms, with dripmoulds, those to second and attic floors have dripmoulds only. The gables have stone bands running across at sill and lintel levels, a motif repeated elsewhere in the building. The clock tower has a gilded clock at attic level, embattled parapet of stone, octagonal corner turrets with ogee lead caps, and a pyramidal roof; the staircase towers have stone quoins to the upper stages, stone parapet and an octagonal lead-covered cupola with ogee lead cap and finial. Steps up to central entrance flanked by short splayed balustrades. Each boarding house consists of an asymmetrically gabled 4-storey range running north-south, and a 2-storey range running east-west, and they are grouped in pairs to the east and west of the school house, with the tall, asymmetrical gables at the outer end of either group. Segmental-arched porch with hollow-chamfered mouldings and carved label stop, giving onto segmental-arched entrance; beside the entrance a 2-storey canted bay of equal dimensions on all 3 sides, with 9-light mullioned and

transomed window to ground floor and 9-light mullioned window to first floor, and a parapet embattled only at the centre; upper windows all mullioned, one having a central blank stone panel as if for an inscription; the 2-storey range has brickwork to the ground floor with stone dressings to windows, a lean-to roof which forms a canopy between bays, and a gabled staircase wing; brick stack between the 2 ranges. The returns of the eastern group of boarding houses have an external chimneystack at the south end with offsets and brick pilasters, and a single-storey canted bay with embattled parapet to the centre; the returns of the western group have the same details except that the base of the external stack has a gable form of brick imposed upon it. The dining wing of 1963, attached to the west end of the main school buildings, is not of special architectural or historic interest.

INTERIOR: the interior of the school house includes the vestibule with 2 pairs of Doric columns flanking the cross-passage, bronze lanterns to a short staircase balustrade, and panel of c1900 listing the founders' names in gilded letters. Staircase of 2 flights, then one, with panelling to the outer walls and a balustrade of simplified Jacobethan character; the cross-passage on the first floor has a pair of lonic columns distyle in antis; hall at mezzanine level, relatively plain in character with panelling inscribed with pupils' names, segmental arches in front of the windows, south gallery, and roof carried on composite semicircular trusses.

The art, music and library wing is rendered with stone dressings and roof of tiles; 3 storeys and a 4th in the stair tower to the west. It is linked to the I897-8 building by a broad segmental arch with a room over; there is a shallow, 3-storey gabled wing to the east, whose ground- and first-floor windows are contained within a single stone architrave with blind arcading to the spandrels. Windows Tudor-arched and flat-arched. The rest of the south front of the building has 2 slightly-projecting gabled bays of one-window range, with a single-storey canted bay between them with an 8-light window; the second-floor windows are set back behind an embattled parapet and have virtually continuous glazing. Stack to the pyramidally-roofed corner tower, and stacks on either side of the eastern wing.

The headmistress's house is rendered with stone dressings and roof of tiles, recently renewed. The entrance front, facing south-east, has wings splayed to either side of the central flat-arched entrance with moulded architrave under a segmental arch, with Tudor-arched windows above flanked by pilasters. Each wing has a slightly canted 2-storey bay with a transom to the ground floor window and a deep parapet. Late C20 garage addition on south front. Stepped brick stack to rear. The interior of the library has panelled walls incorporating 7 book stacks and a large stone ingle-nook fireplace at the east end of unusual design: flat-arched hearth with scalloped corners under a broad bracketed lintel in the form of a triangular pointed arch so shallow as to be almost flat; this arch is enclosed within what can only be described as a large, introverted, eared and shouldered architrave which rises to ceiling height: the ear and shoulder break inwards, giving room to small pilasters at the top corners. The walls of the art room are covered with tiles executed by pupils in the 1930s and 1940s, many dated and signed; most are decorated with stylised foliage in painted enamels, but one notable series of relief-moulded tiles depicts scenes in the life of Roedean School.

The chapel is rendered with stone dressings and a roof of slate. The east end has a central gabled section set slightly forward and flanked by buttresses, with an east window of Palladian form but with 2 mullions and a transom under the central round arch. The north side has the lower part rendered, the upper part in stone with clerestory windows; modillion cornice, and gables over each of the 4 bays, reflecting the vaulting of the north aisle. The south side, much higher because of the fall in the ground, is detailed in the same way but without the gables. The west end has 2 outer bays of one-window range and a central

gabled section with a pair of round-arched windows to the narthex set back under a pair of segmental arches, with a bracketed balcony over that; and a tall, round-arched recess above the balcony, whose face is decorated with a cross in stone. Bell tower with domed cupola to south. The interior of the chapel mixes English Classical with Byzantine elements in an unusual way. The nave walls are panelled in wood in a late C17 style, to a height of about 2 metres, and the rest of the walls are covered with grey-white marble articulated with bands of golden-buff marble. The altar stands in a central curved recess in a marble, galleried screen articulated by pilasters carrying a full entablature and gallery with urns, and is flanked by flat-arched entrances with lunettes over, the spandrels filled with neo-Byzantine openwork ornament. A marble screen immediately in front of the east window repeats its Palladian arrangement, mullions and transom. The other windows are flat-arched and of 2 lights set in pairs with a lunette above, each pair being set back in a round-arched panel; 2 pairs of windows to the chancel, 5 pairs to the south, 4 to the north aisle. 4 bays to the nave, with an organ gallery over the narthex, the bays articulated by pilasters on the south, antae on the north, with bases and capitals of bronze, the capitals neo-Byzantine in style; barrel-vaulted plaster roof with panelling and bay-leaf ornament. Round-arched entrance at west end, set in a square architrave with a frieze inscribed 'AUDI FILIA TE VIDE'. The south aisle is stepped up to just below the height of the panelling, forming a kind of gallery, and has transverse barrel vaults over each bay. The windows are all filled with C20 memorial glass, the most notable in design being the pair in the second bay from the east in the north aisle, both by Morris and Company, of 1917 and 1920.

To the north of the eastern group of boarding houses is a 2-storey range continuing the line of the art, music and library block, rendered to the ground floor with late C20 first floor added; and to the north of that is 2-storey rendered block with a foundation stone of 1927; these buildings are not of special architectural or historic interest. (Carder T: The Encyclopaedia of Brighton: Lewes: 1990-).

Listing NGR: TQ3507303136

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