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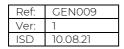
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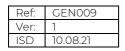
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1. Introduction and Purpose of Application

- 1.1 The British Library has a constant focus on environmental issues and continually strives to achieve best practices at its estates in St Pancras, London and Boston Spa, West Yorkshire.
- 1.2 Since 2010, a successful programme of energy and CO2 reduction has been implemented which to date has achieved impressive results, including improving the Operational Ratings of the British Library St Pancras building from the worst 'G' band to 'D' by 2018/19.
- 1.3 With the recent acceleration of Net Zero targets by 2050 from the Government, the British Library has re-evaluated its strategy and following the relevant guidance, has put in place a new plan for decarbonisation.
- 1.4 This plan has benefited from the recent Public Sector Decarbonisation Scheme (PSDS) Grant funding managed by Salix that allowed the Library to look at very innovative solutions for heat decarbonisation. Part of the strategy is for the implementation of an efficient hybrid solar collector system to be located on an existing flat roof of the British Library, that will simultaneously generate heat and electricity, at the St Pancras London site.
- 1.5 It is anticipated that these works would achieve a 20% saving on the natural gas consumption for space heating and hot water. Together with other carbon reducing works and activities it is the British Library's aim that by the end of 2022 that the British Library will have saved at least 70% of its CO2 emissions when compared to a 2010 baseline.
- 1.6 The British Library at St Pancras is located between Ossulston Street, Euston Road and Midland Road at Kings Cross.
- 1.7 The East elevation (fronting onto Midland Road) faces the St Pancras Renaissance Hotel.





- 1.8 The British Library sits between Euston Road, Ossulston Street and Midland Road. St Pancras Station and the Midland Grand Hotel lie immediately to the east, the Pullman Hotel, offices and residential to the west. To the south lies Euston Road, a busy traffic and pedestrian thoroughfare, as well as offices, hotel, residential and retail offerings.
- 1.9 To the North of the site is the Francis Crick Institute.
- 1.10 This Heritage Impact assessment (HIA), Design and Access Statement examines the proposed installation of combined solar thermal and photovoltaic-thermal (PVT) panels, Planning and Conservation policy relative to the proposal on existing flat roof planes at the British Library St Pancras London are considered.
- 1.11 The British Library and extension site are not part of a conservation area but are close to the King's Cross Conservation Area.
- 1.12 Pre application discussions have been held during the design development of the proposal with Camden London Borough Council and Historic England.
- 1.13 Flat parapet roof level 4 has been selected for the PVT installation limits the visibility of the installation, maximises the efficiency of the installation, and ensures a safe installation. The installation is located adjacent an existing service riser direct to the basement plant room limiting structural alterations to the existing fabric.
- 1.14 It is determined that the existing concrete flat roof 4, roof build up and fabric will not require to be reinforced to take the additional loads of the PVT installation.
- 1.15 The PVT installation will be placed on a framework directly onto the existing pre cast concrete slab surface.

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- 1.16 The proposed PVT works, in keeping with planning policy, seek the sustainable and optimum viable use of this British Library existing planes of the flat roof through the generation of renewal energy on site.
- 1.17 This HIA discusses the proposal in context with the site, National and Local Planning policy, concluding the proposed PVT works results in no harm to the significance of the British Library in terms of its heritage values.



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2. Background

- 2.1 Through the Public Sector Decarbonisation Scheme (PSDS), managed by the Department of Business, Energy, and Industrial Strategy's delivery body Salix Finance, this low zero carbon system is proposed to be installed to a flat roof of the British Library, London.
- 2.2 It has been established through feasibility and design that the combined solar thermal and Photo Voltaic and Thermal (PVT) installation will displace a lot more CO2 than a traditional Photo Voltaic installation of the same size
- 2.3 In parallel the installation will displace gas burnt onsite at the Library, rather than just displacing grid electricity, contributing to the Government's net-zero target by 2050.
- 2.4 To be successfully funded by the PSDS scheme, the installation must achieve a carbon reduction cost of £500 per tonne of CO2 displaced.

3. Proposal

- 3.1 The proposal is to laterally install Virtu solar collectors on support framework at the fourth-floor flat roof level fronting Euston Road, Midland Road and the public courtyard.
- 3.2 The benefits include:
 - Extremely low profile of the Photo Voltaic and Thermal (PVT) installation on the fourth-floor level.
 - Significantly less wind shear.
 - Higher efficiency.
 - Easier to install and maintain via existing service access stairs.
 - Existing vertical service risers from the roof to the basement can be utilised.

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The image above illustrates low profile existing installations on other sites.

4. Methodology - Design Process

- 4.1 The following methodology and generators have been considered during the design process:
- 4.2 To achieve and receive as much natural light/sunlight as possible.
- 4.3 This would maximise the efficiency of the installation per metre square. To be not obstructed by shade of the existing building, surrounding buildings and mass. The selected roof should have as little shade from the existing building features, surrounding buildings and mass as possible.
- 4.4 To have safe access for maintenance, by utilising existing service stairs.
- 4.5 The selected roof requires to be safe and easy to access to maintain the installation.
- 4.6 To be installed onto one roof and utilise existing service risers and plant rooms.

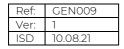
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- 4.7 The combined solar thermal and PVT installation requires to be installed onto one roof so that the system works as one cohesive unit, the better the return and heat production thus reducing as much carbon emissions as possible.
- 4.8 To be located as close as possible to the basement plant room. This minimises the systems heat losses with reduced long, alternating pipe routes/ runs and bends, reduces required pumping power, making the installation economically viable.
- 4.9 The pipework from the roof to the plant makes up a significant proportion of the total cost of the installation.
- 4.10 The existing building's heat demand informs that the optimal system size required are 950 solar collectors, equating to 800 m2 of unobstructed, unshaded roof space.
- 4.11 Calculations show that a 950-collector installation (800 m2) will achieve £500 per tonne target required for the installation to be funded by the Salix PSDS scheme.
- 4.12 A smaller PVT installation will not reach the target, since cost does not scale linearly with size. It has been established that a smaller PVT array would not therefore be economically feasible.

5. Heritage Assessment

- 5.1 This heritage assessment of the British Library, 96 Euston Road, London, NW1 2DB, has been researched and prepared by Ramona Usher BA MSc PgDip PhD IHBC (Dr Ramona Usher Conservation) on behalf of CBP Architects with input from Chris Perkins CBP Architects RIBA, MCIAT, MCIOB, Conservation Architect IHBC.
- 5.2 The assessment examines the proposed installation of combined solar thermal and photovoltaic-thermal (PVT) panels on two roof areas of the British Library, a Grade I listed building (NHLE ref: 1426345), also referred to as the 'study site', located between Midland Road, Euston Road and Ossulston Street.





- 5.3 Information regarding Listed Buildings, Scheduled Monuments, Registered Historic Parks or Gardens, Registered Battlefields and World Heritage Sites was obtained from Historic England's *National Heritage List for England*. Information on Conservation Areas was obtained from Camden Council.
- 5.3 This study has been prepared in accordance with the National Planning Policy Framework (2021) and provides an assessment of the significance of heritage assets on the site and its vicinity. As a result, the assessment enables relevant parties to identify and assess the impact of the proposed development.

6. Planning Background and Development Plan Framework

6.1 In considering any planning application for development, the local planning authority will be guided by current legislation, the policy framework set by government planning policy, by current Local Plan policy and by other material considerations.

6.2 Current Legislation

- 6.2.1 The applicable legislative framework is summarised as follows:
 - Planning (Listed Buildings and Conservation Areas) (P(LBCA)) Act 1990
- 6.2.2 The P(LBCA) Act provides for the protection of Listed Buildings and Conservation Areas and is largely expressed in the planning process through policies in regional and local planning guidance.
- 6.2.3 The P(LBCA) Act is the primary legislative instrument addressing the treatment of Listed Buildings and Conservation Areas through the planning process.
- 6.2.4 Section 66 of the 1990 Act states that '...in considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special

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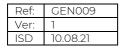


regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.'

- 6.2.5 Section 72 then adds that '...with respect to any buildings or other land in a conservation area, of any powers under any of the provisions mentioned in subsection (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.'
- 6.2.6 As far as Section 72 is concerned, it has previously been established by the Courts that development which does not detract from the character or appearance of a conservation area is deemed to be in accordance with the legislation. In other words, there is no statutory requirement to actively 'enhance'
- 6.2.7 The British Library and extension site are not part of a conservation area but are close to the King's Cross Conservation Area, as well as the Regent's Canal and Bloomsbury Conservation Areas.
- 6.2.8 Therefore, it is our assessment the proposed installation of the combined solar thermal and photovoltaic-thermal (PVT) panels will result in no harm to the significance of the British Library. This in the context in terms of the retention of the existing external roof finish/ fabric, utilisation of the existing service risers, uniformity on plan reflecting the footprint of the roof whilst the installation being set back from the existing parapet to reduce any visual impact at the perimeter.

6.3 National Planning Policy Framework

- 6.3.1 In March 2012, the Government published the National Planning Policy Framework (NPPF). The Government issued the revised Framework in July 2018 and February 2019 and July 2021.
- 6.3.2 Section 16 of the NPPF, entitled *Conserving and enhancing the historic environment*, provides guidance for planning authorities, property owners, developers and others on the conservation and investigation of heritage assets.





Overall, the objectives of Section 16 of the NPPF can be summarised as seeking the:

- Delivery of sustainable development;
- Understanding the wider social, cultural, economic and environmental benefits brought by the conservation of the historic environment, and
- Conservation of England's heritage assets in a manner appropriate to their significance.
- 6.3.4 Section 16 of the NPPF recognises that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. Paragraph 189 states that planning decisions should be based on the significance of the heritage asset, and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.
- 6.3.5 A Heritage Asset is defined in Annex 2 of the NPPF as: a building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. They include designated heritage assets (as defined in the NPPF) and assets identified by the local planning authority during the process of decision-making or through the plan-making process.
- 6.3.6 A Designated Heritage Asset comprises a World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area.
- 6.3.7 Significance is defined as: The value of a heritage asset to this and future generations because of its heritage interest. This interest may be archaeological,

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architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.

6.3.8 In short, government policy provides a framework which:

- Protects nationally important designated Heritage Assets (which include World Heritage Sites, Scheduled Ancient Monuments, Listed Buildings, Protected Wreck Sites, Registered Parks and Gardens, Registered Battlefields or Conservation Areas);
- Protects the settings of such designations.

6.4 Local Planning Policy

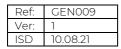
Camden Local Plan

- 6.4.1 The Camden Local Plan was adopted in July 2017 and is the key strategic document in Camden's development plan. It sets out the vision for shaping the future of the Borough and contains policies for guiding planning decisions. The following policies are considered relevant to these proposals:
 - Policy D2 Heritage

The Council will preserve and, where appropriate, enhance Camden's rich and diverse heritage assets and their settings, including conservation areas, listed buildings, archaeological remains, scheduled ancient monuments and historic parks and gardens and locally listed heritage assets.

• Designated heritage assets

Designated heritage assets include conservation areas and listed buildings. The Council will not permit the loss of or substantial harm to a designated heritage asset, including conservation areas and Listed Buildings, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:





- a. the nature of the heritage asset prevents all reasonable uses of the site;
- b. no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation;
- c. conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and
- *d.* the harm or loss is outweighed by the benefit of bringing the site back into use.

The Council will not permit development that results in harm that is less than substantial to the significance of a designated heritage asset unless the public benefits of the proposal convincingly outweigh that harm.

• Conservation areas

Conservation areas are designated heritage assets and this section should be read in conjunction with the section above headed 'designated heritage assets'. In order to maintain the character of Camden's conservation areas, the Council will take account of conservation area statements, appraisals and management strategies when assessing applications within conservation areas.

The Council will:

- e. require that development within conservation areas preserves or, where possible, enhances the character or appearance of the area;
- f. resist the total or substantial demolition of an unlisted building that makes a positive contribution to the character or appearance of a conservation area;
- *g.* resist development outside of a conservation area that causes harm to the character or appearance of that conservation area; and
- *h. preserve trees and garden spaces which contribute to the character and appearance of a conservation area or which provide a setting for Camden's architectural heritage.*

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• Listed Buildings

Listed buildings are designated heritage assets, and this section should be read in conjunction with the section above headed 'designated heritage assets'. To preserve or enhance the borough's listed buildings, the Council will:

- i. resist the total or substantial demolition of a listed building;
- j. resist proposals for a change of use or alterations and extensions to a [selfisted building where this would cause harm to the special architectural [seand historic interest of the building; and
- *k.* resist development that would cause harm to significance of a listed building through an effect on its setting.
- Archaeology

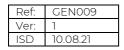
The Council will protect remains of archaeological importance by ensuring acceptable measures are taken proportionate to the significance of the heritage asset to preserve them and their setting, including physical preservation, where appropriate.

• Other heritage assets and non-designated heritage assets The Council will seek to protect other heritage assets including non- designated heritage assets (including those on and off the local list), Registered Parks and Gardens and London Squares.

The effect of a proposal on the significance of a non-designated heritage asset will be weighed against the public benefits of the proposal, balancing the scale of any harm or loss and the significance of the heritage asset.

Camden Planning Guidance: Design

6.4.2 The Council has prepared the *Camden Planning Guidance on Design* to support the policies in the *Camden Local Plan* 2017. This guidance is therefore consistent with the Local Plan and forms a *Supplementary Planning Document*, which is an additional material consideration in planning decisions. The Camden Planning Guidance covers a range of topics (such as housing, sustainability, amenity and





planning obligations) and so all of the sections should be read in conjunction, and within the context of Camden's Local Plan. The following guidance is considered relevant to these proposals:

The Council - will make a balanced judgment having regard to the scale of any harm or loss and the significance of the asset/s affected. We will take account of:

- The desirability of sustaining and enhancing the significance of any heritage asset/s and putting them to viable uses consistent with their conservation;
- The positive contribution that the conservation of heritage assets can make to sustainable communities including their economic vitality and health and wellbeing;
- The desirability of new development that affects heritage assets to preserve and enhance local character and distinctiveness.

Applicants - will need to show how the significance of a heritage asset, including any contribution made by their setting, has been taken into consideration in the design of the proposed works. The level of detail required will be proportionate to the asset/s importance and no more than is sufficient to understand the potential impact of the proposal on the significance of the asset/s affected.

6.4.3 Therefore, in considering the heritage implications of any application for listed building consent and planning permission, the local planning authority will be guided by the Local Plan policies and guidance, and government legislation, policy and guidance as outlined above.

7. Assessment Methodology

- 7.1 The following sources of information have been used to identify the designated heritage assets within the locality:
 - relevant designation records from Historic England's Heritage List for England;

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- information on Conservation Areas was obtained from Camden Council's website.
- 7.2 The most recent guidance produced by Historic England (Historic Environment Good Practice Advice Planning Note 3: The Setting of Heritage Assets), published December 2017, recognises that whilst setting is not a heritage asset, elements of a setting 'may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral'. This guidance also notes that the contribution of setting to the significance of a heritage asset is often expressed by reference to visual considerations, although the importance of setting lies in what it contributes to the significance of the heritage asset, and this can be influenced by a number of other factors.
- 7.3 In order to assess the contribution made by setting to the significance of a heritage asset, and the implications of new developments, the guidance recommends that a systematic and staged approach to assessment should be adopted, namely:
 - (i) identify which heritage assets and their settings are affected;
 - (ii) assess the degree to which these settings and views make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated.
 - (iii) assess the effects of the proposed development, whether beneficial or harmful, on the significance or on the ability to appreciate it;
 - (iv) explore ways to maximise enhancement and avoid or minimise harm;
 - (v) make and document the decision and monitor outcomes.
- 7.4 This report therefore follows steps (i) and (ii) to identify the local heritage assets and their settings and then makes an assessment of the potential impact of the proposed development having regard to steps (iii) and (iv).

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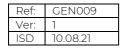
7.5 In order to understand the nature, extent and level of significance four types of heritage values are considered, as identified in *Conservation Principles* (English Heritage 2008):

aesthetic, communal, historic and evidential. Significance results from a combination of any, some, or all of the values.

- 7.6 Historic England defines 'evidential value' 'from the potential of a place to yield evidence about past human activity' and 'historical value' 'from the ways in which past people, events and aspects of life can be connected through a place to the present'. 'Historical value' tends to be 'illustrative' or 'associative': 'illustrative value' has 'the power to aid interpretation of the past through making connections with, and providing insights into, past communities and their activities through shared experience of a place.
- 7.7 The illustrative value of places tends to be greater if they incorporate the first, or only surviving, example of an innovation of consequence, whether related to design, technology or social organisation' (2008, p. 28-29).
- 7.8 'Aesthetic value' 'derives from the ways in which people draw sensory and intellectual stimulation from a place' and 'communal value' from 'the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory' (ibid).

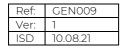
8. Historical Environment

8.1 The British Library occupies a prominent plot on a veritable island between Euston Road, Ossulston Street and Midland Road. St Pancras Station and the Midland Grand Hotel (Grade I, NHLE ref: 1342037) dominate immediately to the east, as does the Pullman Hotel to the west. To the south lies Euston Road, a busy traffic and pedestrian thoroughfare, and Camden Town Hall (Grade II, NHLE ref: 1379162).





- 8.2 Public and private subscription libraries were rare before the mid-19th century, and even when established, were rarely bespoke, instead utilising pre-existing buildings. An 1850 Act allowed local authorities to construct libraries, leading to the erection of 125. Queen Victoria's Golden Jubilee of 1887 led to the building of a large number of libraries as permanent memorials, and the 1892 Libraries Act of 1892 facilitated urban local authorities to raise funds for purpose-built libraries, while private benefactors also financed libraries. During the inter-war and post-war periods there were further waves of library building and the modification of existing interiors (Historic England, 2011).
- 8.3 The historical development of the British Library has been well documented in the National Heritage List for England list description (Appendix 1), Cherry and Pevsner (2002) and in the Conservation Management Plan (Purcell, 2019). These sources are summarised below. Given the proposed alterations are external in nature, with limited impact on the interior of the building (the internal works will utilize existing service rises), the following shall largely focus on the areas of alteration in question: upper roof 8, and lower roof 4.
- 8.4 The British Library was built between 1982-99 (although Cherry and Pevsner, 2002, cite the dates as 1978-97), to the designs of Sir Colin St John Wilson and M.J. Long. In terms of the logistics, Cherry and Pevsner acknowledge it was achieved after *'much agonizing over the site, and after drastic economies as a result of government parsimony.'* (2002, p. 372)
- 8.5 The site of the British Library occupies what was once the Somers Town Goods Station of the Midland Railway, constructed 1883-7, and closed in 1967 (ibid, p. 372). Regarding the collections of the Library, Cherry and Pevsner note these were originally part of the British Museum. As such, the whole is greater than the sum of its parts. They further note: *'In 1978 Wilson's plans for the St Pancras site were approved; building of the first of three planned phases began in 1982, to provide seven reading rooms accommodating 3,440 readers, and storage for 25 million books. Reduced funding led to the abandonment of the later phases and a*





revision of the plans of 1988: a new frontage was designed to complete the north side of the first phase, overlooking the empty spaces which had been designated for the later additions.' (Ibid, p. 373) Cherry and Pevsner go further: 'Despite all the changes to the plans during an agonizingly protracted birth, the result has an impressive coherence, a building which despite its complicated functions is easy to understand, grand, yet friendly in its details.' (Ibid, p. 373.)

- 8.6 The National Heritage list for England has produced a comprehensive history of the concept of the design, the most pertinent aspects are abbreviated as follows: the proposals included: 'A series of square, top-lit libraries with galleries, serve the remaining collections, with a large general reading room, and specialised libraries for studying rare books, music and maps. Wilson's aim was to create an environment that was 'vivid, pleasurable and memorable, while fitting with responsibility and sensitivity into its context. In 1978 the decision was made to build the design in three phases. The design as built was more sophisticated than the original ... To the rear, the north elevation was designed to allow for future extension.'
- 8.7 In terms of alterations since the iteration of this project, the National Heritage List for England have noted the following: 'there have been a number of minor alterations to the Library's fabric, primarily to adapt the facilities to changing needs of the public and to comply with the Disability Discrimination Act (DDA) provisions. These include: -
 - External installation of DDA-compliant ramps and handrails, bollards to external entrances and lighting to the Newton statue and clock tower;
 - Reading Rooms: altering reading room counters; installing electronic resource desks in the Rare Books Reading Room; converting a shelved storage area on the Lower Ground floor and installing a glass partition in Science 1 Reading Room;

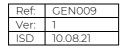
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- Public realm: installation of automated door openers in public areas to improve access; Conference Centre: refurbished in 2010, including the recovering of the auditorium seating.
- Responding to the areas in question of alteration, the National Heritage List for 8.8 England notes: 'The building has a concrete frame, based on 7.8m x 7.8m column centres, clad inside and out in red brick (hand-made, sand-faced dark Victorian Reds from Leicestershire) laid in stretcher bond, chosen because they were made of the same clay as those used for the adjoining St Pancras Station and Hotel immediately to the east. In a contrasting red to the brick there are metal sills and cornice bands, and cladding to the columns, the latter with stylized classical motifs, and dark green metal fascia's to the science rooms, colours inspired by the adjacent St Pancras Station and Hotel. Special stainless steel wall ties allow vertical movement between the series of sub-frames and the brick skin. There is a granite plinth to the Midland Road elevation, with plaster and panelling contrasted with brick and tile within; external columns are clad in steel. The stepped roofs are slatecovered, again akin to St Pancras Hotel, contrasting with the steel screens shielding the clerestory glazing. The brick and stone paviours to the forecourt are continued within the building.
- 8.9 Most pertinently to this application Cherry and Pevsner state: 'In some ways it is out of its time, designed before the impact of the new technology of the late 20th century was fully appreciated, and only time will reveal whether it is flexible enough to adapt to challenging needs.' (2002, p. 373.)

9. Summary of Heritage Assets

9.1 The National Planning Policy Framework defines a 'heritage asset' as: 'a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing)'.

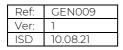




- 9.2 The study site comprises a Grade I listed building, NHLE ref: 1426345. The full list description is reproduced in Appendix 1.
- 9.3 The following listed buildings within the immediate vicinity of the study site:
 - St Pancras Station and Former Midland Grand Hotel, Grade I. NHLE ref: 1342037
 - K6 telephone kiosk outside St Pancras Station, Grade II. NHLE ref: 1393675
 - Camden Town Hall, Grade II. NHLE ref: 1379162
 - Levita House including attached shops and Somers Town Coffee House, Grade II. NHLE ref: 1113232
- 9.4 Given the confines to the proposed external alterations, the significance or settings of these listed buildings are not deemed to be affected by the proposed works, and therefore they do not warrant further consideration in this report.
- 9.5 The study site does not lie within a conservation area. The King's Cross Conservation Area lies immediately to the east of the study site.
- 9.6 There are no other designated heritage assets (i.e. Scheduled Monuments, Registered Parks and Gardens, Registered Battlefields or World Heritage Sites) within the study site or in its immediate vicinity.
- 9.7 It is therefore considered that potential impact upon the historic built environment would be restricted to alterations to a listed building.

10. Significance

10.1 Historic England's *Conservation Principles, Policies and Guidance* of 2008 sets out current good practice for assessing the significance of historic buildings in England and is derived from the 1979 *Burra Charter*. It states that the following values should be considered in order to fully understand the significance of a place:





- Historical value: the ways in which past people, events and aspects of life can be connected through a place to the present it tends to be illustrative or associative.
- Aesthetic value: the ways in which people draw sensory and intellectual stimulation from a place.
- Communal value: the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory. Communal values are closely bound up with historical (particularly associative) and aesthetic values but tend to have additional and specific aspects.
- Evidential value: the potential of a place to yield evidence about past human activity.
- The synopsis of significance below follows the categories set out in the 2008 edition of *Conservation Principles*. Aesthetic value has been paired with the title 'Architectural Value', to make it clear what this category addresses.
- 10.2 Purcell summarises the significance of the British Library as follows:

'The special interest of the British Library building is recognised in its Grade I listing, principally: its architectural evolution, association with Colin St John Wilson, its sympathetic response to its St Pancras surroundings, and the rich architectural quality of the spaces created inside. The holistic approach to design across all facets of the Library – its materiality, fixtures, fittings, artwork and furniture - and its surviving integrity are especially significant. The Library collection, however, is equally - if not more - important than the building that was built around it, illustrating every chapter and subject in the history of the country and much of the wider world. As a public resource, the Library - as a physical space and collection – has immense communal value as it serves the research and educational needs of the nation.' (2019, p. 45).

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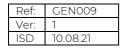


Historic Value

10.3 The British Library collection essentially originated in the mid-18th century when George II gave 10,500 volumes to the Royal Library, further expanded with George IV bestowment of manuscripts and state papers. These were housed in the King's Library, Great Russell Street in the 1820s. The 1911 the Copyright Act resulted in the Library being granted a copy of every book, periodical or newspaper published in Britain. The actual creation of a purpose-built home for this collection had been debated from the 1940s, when the 1943 County of London Plan proposed new library facilities. It wasn't until 1973 that the government acquired land formerly occupied by the St Pancras Goods Yard for the erection of the library. The National Heritage list for England list description summaries its historic interest: 'in the tradition of the Royal Festival Hall, it is a landmark public building incorporating at its heart the King's Library, given to the nation by George III'.

Aesthetic and Architectural Value

- 10.4 The British Library, built to the designs of Sir Colin St John Wilson, is Britain's only major public building of the late 20th century (Cherry and Pevsner, 2002). The National Heritage list for England summarises it is 'a major work by the eminent architect and academic Sir Colin St John Wilson and his architectural partner, M.J. Long' and it possesses artistic interest 'for the fusion of art with architecture as a component of the design ethos, exemplified by Paolozzi's Newton in the piazza.' Prior to this, the erection of two 20th century public libraries in London lead to a 'battle of styles between classical and modern after the Second World War': Kensington Library (1960) by E. Vincent Harris (Grade II*) was the last grand neo-Georgian public library, followed in the same year by Holborn library, which was designed by the borough architect, of a rather austere and modern design, typical of the period. The British Library represents a departure from the former two, employing an aesthetic to its form and materials.
- 10.5 It retains its original form of two horizontal tiered wings of unequal length. The geometric external facades are composed of red brick, with the handmade Leicester bricks chosen to match those used to construct the adjacent St Pancras





Station and hotel, being made from the same clay. The roofs are a combination of grey slate for the pitched elements, and pre-cast concrete slabs, overlaid with asphalt, for the flat sections.

- 10.6 Cherry and Pevsner opine that 'Wilson's view of St Pancras is significant. He sees it as a link in a chain – a representative of the 'English free style' – a flexible approach adaptable for the new building types of the 19th century ... The Library is full of allusions to the great heroes of modernism, but not so much the rationalist stream ... Aalto, Wilson's particular hero, is evoked not only by the brick, the sloping roofs and the stepped approaches, but inside by the curved partitions, tactile surfaces and ingenious natural lighting, used with the aim of creating a humane environment within the colossal scale of the whole. There are more exotic resonances as well; the layered roofs and the use of red are a conscious echo of another form of public architecture on the grandest scale, the Chinese temple.' (2002, p. 374)
- 10.7 Historic England's list description concludes the British Library's possesses architectural interest 'for its stately yet accessible modernist design rooted in the English Free tradition with Arts and Crafts and classical influences, crisply and eloquently contextualised by its massing and use of materials which respect and contrast to the St Pancras station and hotel.' Historic England also adds that the building's aesthetics are achieved through 'its level of craftsmanship and skilful handling of a range of materials externally and internally, including Travertine, Portland and Purbeck stone, granite, Leicestershire brick, bronze and American white oak throughout, carefully and meticulously detailed.'

Communal Value

10.8 The British Library has clear communal significance in terms of its role as a public building, its original and continued purpose serving London and the country as a whole. Purcell neatly and accurately define the Library's communal value:

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'As a public body, the British Library has an innately high communal value: its core purpose is to care for the nation's library collection and make it available for anyone to view it. This core communal value is further diversified by the variety of ways in which the public can interact with the Library: in person physically, by walking freely into the building and using its spaces; at a distance through its website; and intellectually through its programme of events.

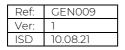
The different types of people who use the Library is also significant: anyone can walk through the entrance and visit the exhibitions as a visitor. Those wishing to use the reading rooms and consult library items in person must obtain a pass, converting from a visitor to a reader. Readers cover a vast range of subjects (by virtue of the Library's status as a legal deposit library) with different research intentions, from casual knowledge gatherers to academic researchers (frequently linking with partner institutions within the Knowledge Quarter). The collections and study space provided at the Library are immensely valued by its readers, who are able to shape and direct the course of change at the Library so that it remains a valid research resource and adapts to the changing needs of its users.' (2019, p. 49)

Evidential Value

10.9 The evidential value of the British Library is derived from its significance as a source of evidence of past human activity, not just the physical structure itself, but more significantly as a vessel to house its collection of manuscripts, state papers, books, periodicals and newspapers, many of which span centuries. The actual structure itself is of a brave and modernist design of its period, rejecting external ornament and embracing minimalism on its external facades - a departure from the classical facades typical of grand civic buildings.

11. Heritage Impact Assessment

11.1 The National Planning Policy Framework requires that 'In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by





their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance' (para. 189).

- 11.2 This application concerns the proposed installation of combined solar thermal and photovoltaic-thermal (PVT) panels on a lower flat roof area (roof 4) of the British Library. The PVT panels will sit on a galvanised framework which in turn sit on feet located over the existing precast concrete slabs that cover the entire roof area. There are no structural works or alterations to the existing roof fabric required.
- 11.3 Sun path studies at differing times of the day and throughout the year simulated shadows to the roofs. The lower roof (roof 4) was found to be exposed throughout the year to maximum light and sunlight ensuring full use of the PVT panels in their delivery of energy.
- 11.4 The pipework on the roof will run under the PVT panels and incorporated within the support framework. This pipework be encapsulated in black insulation and sit on containment with feet resting on the existing precast concrete slabs. The pipework will extend from the PVT panels to the existing roof vertical service riser that is located adjacent to the maintenance access stair and guarding rails.
- 11.5 The existing internal service risers pass vertically through the building from the roof to the basement. The new distribution pipework from the PVT panels will be installed within the existing service riser and extend to the existing basement plant room. The pipework will be fire stopped at the horizontal position at each floor compartment level.
- 11.6 The supporting plant which is part of the PVT panels installation is to be installed within the existing basement plant room area. This has avoided any plant being located on the roof area minimising visual intrusion to the external roof area.

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- 11.7 In addition, the new supporting basement plant and equipment has been integrated into the existing energy saving systems currently installed within the plant spaces.
- 11.7 There will be small localised structural openings formed within the basement plant room service riser area for the new pipework to be installed to the plant area (2no slots - 1.0m wide x 500mm deep openings at high level) This will allow the new pipework to be installed horizontally to the new localised basement plant, following the current existing concept of pipework distribution within this basement plant room area.
- 11.8 Pre-application discussions have been undertaken with the local planning authority and Historic England on 16th June 2021, and 19th July 2021 with feedback addressed in the design development.
- 11.9 Several points were raised from the meeting 16th June 2021 which required to be addressed:
 - Review other locations on the library flat roofs at a higher level.
 - Review the layout of the PVT panels in terms of a visual horizontal level layout as opposed to a staggered (vertically) layout following the roof falls on section.
- 11.10 A detailed review of these points highlighted the following:Location of the PVT panels on the building:
 - One other upper roof (level 8) was explored to install the PVT panels and associated equipment. This roof could accommodate 730 tubes, compared to the lower roof (4) which could accommodate 950 tubes.
 - It was established by sun path analysis that due to the existing building mass the majority of the upper roof was found to be in shadow.

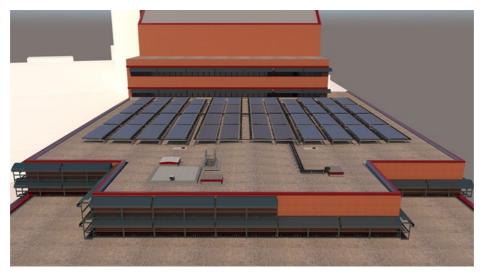
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- The limited size of the upper roof footprint reduced the number of solar collectors that could be installed affecting the output and efficiency of the system.
- Locating the array on the upper roof would incur a 38% reduction in carbon savings compared to locating on the lower roof where the carbon savings are considerably higher, but without a significant reduction in cost.

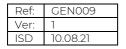
Review of the PVT panels horizontal layout:

• The frame-mounted array has all solar collectors set on a frame, with all solar collectors set at the same height offering visual consistency. This arrangement allows pipework to be distributed under the support framework thus avoiding visual clutter of services.



Visual image of the PVT panels in situ

11.11 Details of the proposed installation are described in the plans and reports accompanying this application. Purcell's Conservation Management Plan (2019) does not address climate change and energy efficiency specific to the generation of renewal energy on site.





11.12 In relation to installation of PV panels on flat roofs Historic England note the following in their guidance on Energy Efficiency and Historic Buildings: Solar Electric (Photovoltaics):

'Where a tilted PV panel might have an undesirable visual impact, panels can be mounted at low pitch angles (as low as ten degrees) or even flat. This will allow the array to be hidden from ground- level view behind a parapet wall. The output will reduce slightly by not having the panels at the optimum tilted angle.' (2018, p. 10)

- 11.13 The frame-mounted PVT panel array is mounted flat, set behind the existing brick parapets, formed on a ballasted galvanized steel framework to accommodate the falls of the roof. The existing pre-cast concrete slabs and rainwater outlets will remain in situ with no changes to the existing fabric.
- 11.14 The significance and heritage values of the British Library have been extrapolated in the previous section. With regards to the roof, the stepped nature of the flat sections contributes to the modern aesthetic and architectural significance of the building. The composition of the flat roofs is pre-cast concrete slabs, overlaid onto foamglass and a waterproof layer of asphalt, and is of no value or significance in their own right. The flat roof levels are enclosed by a raised parapet wall.
- 11.15 The PVT panels are set back from the perimeter raised parapet walls to not impede maintenance works to the parapet areas.
- 11.16 The proposed works have considered the frame mounted option for the following reasons:
 - The frame mounted option would present a neater and less visually intrusive installation to the roof of the building with all solar collectors set at the same height offering visual consistency.

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- There will be less impact on the roof fabric owing to fewer fixings as the framework sit on pads.
- There will be a lower risk of maintenance problems occurring with the frame mounted option, thus reducing the potential for damage being caused to the existing roof and wider building.
- 11.17 Research on the existing designed building details of the concrete structure shows that there are no structural strengthening works required to the existing concrete roof or structural columns to address the additional loads of the PVT panels, thus minimising any intrusion to the existing building fabric.
- 11.18 The works would therefore entail limited physical fixings into the roof area in question. As noted, the roof fabric is of no significance, as the roof area does not offer any visual aesthetic nor visual architectural value. Elements of the existing roof finishes will still be seen as they will not be covered by PVT panels.
- 11.19 It is the stepped form of the roof that is of value. The panels will not be visible from the ground, being concealed behind the existing parapet walls. They will be visible from the upper floors of the adjacent Midland Hotel, but the roof of the British Library, whilst part of the immediate setting of the Grade I listed Hotel, does not form a meaningful part of the significance of the Library.
- 11.20 Historic England supported the proposal when presented through the pre application stages.
- 11.21 The scheme is supported by the Camden Climate Change Alliance.
- 11.22 Therefore, it is our assessment the proposed installation of the combined solar thermal and photovoltaic-thermal (PVT) panels will result in no harm to the significance of the British Library in terms of its significance and heritage values.

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12. Conclusion

- 12.1 The NPPF states that planning decisions should be based on the significance of the heritage asset, and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset. This report fulfils this requirement by providing an assessment of the study site and the impact of proposed development upon it.
- 12.2 The proposed installation and service runs will not result in harm to the historic significance of this Grade I listed building. Its inherent significance lies in its historic, architectural, communal and evidential values as outlined in Section 6.
- 12.3 The proposed works, in keeping with the NPPF, seek the sustainable and optimum viable use of this British Library through the generation of renewal energy on site. The proposed works will therefore not harm the heritage values of the place. The proposed works are compliant with the requirements of the Planning (Listed Buildings and Conservation Areas) Act, the policy objectives of the NPPF, and local planning policy.

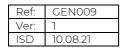
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14. Plates

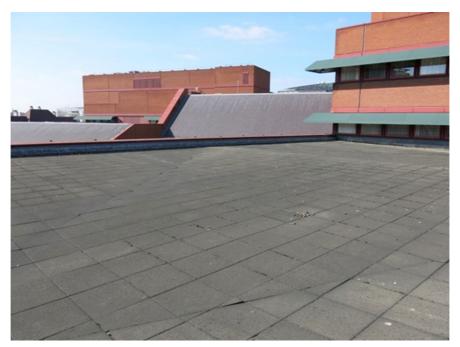


Plate 1: The lower flat roof, Level 4, looking towards the Midland Hotel.



Plate 2: Plant access to the lower flat roof, Level 4.

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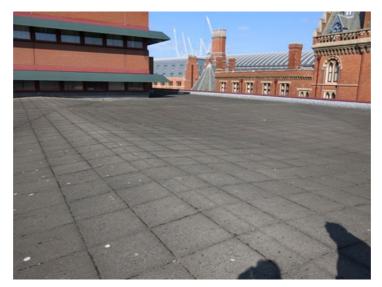


Plate 3: The lower flat roof, Level 4, looking north-east toward St Pancras Station – shows the levels and falls to the rainwater outlets.



Plate 4: The lower roof, Level 4, looking west towards the Pullman Hotel - shows the levels and falls to the rainwater outlets.

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Plate 5: Overall context photograph of roof level 4 – showing precast concrete slabs and falls to existing gullies



Plate 6: Context photograph of existing service access maintenance stair, and service riser to receive pipework

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cbp.



Plate 7: Service intermediate floor service riser- pipework to be installed against corner of wall leading to basement plant room



Plate 8: Service riser to roof – pipework to be installed against corner of wall leading to basement plant room

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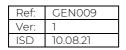
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Plate 9: Street view looking along Midland Road toward Euston Road



Plate 10: View of roof levels from Euston Road back toward Midland Road



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Plate 11: View of roof levels from Euston Road (level 4 behind street landscaping)



Plate 12: View from Ossulston Street

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Appendix 1

The British Library, piazza, boundary wall and railings to Ossulston Street, Euston Road and Midland Road

Heritage Category: Listed Building

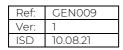
Grade: I List Entry Number: 1426345 Date first listed: 31-Jul-2015 Location Description: The British Library, 96 Euston Rd, London NW1 2DB County: Greater London Authority District: Camden (London Borough) Parish: Non Civil Parish National Grid Reference: TQ2997082897

Summary

Public Library, the present design based on that of 1975-8, built 1982-99, though opened in 1997; architect Sir Colin St John Wilson, with M.J. Long, Douglas Lanham, John Collier, John Honer and many more.

Reasons for Designation

The British Library designed by Sir Colin St John Wilson with M.J. Long, built 1982-99, is listed at Grade I for the following principal reasons: * Architectural interest: for its stately yet accessible modernist design rooted in the English Free tradition with Arts and Crafts and classical influences, crisply and eloquently contextualised by its massing and use of materials which respect and contrast to the St Pancras station and hotel; * Materials: for its level of craftsmanship and skilful handling of a range of materials externally and internally, including Travertine, Portland and Purbeck stone, granite, Leicestershire brick, bronze and American white oak throughout, carefully and meticulously detailed; * Interior: for the well-planned interior spaces comprising the generously lit reading rooms and multi-level atrium, successfully fulfilling the brief to create the nation's Library; * Historic Interest: in the tradition of the Royal Festival Hall, it is a landmark public building incorporating at its heart the King's Library, given to the nation by





George III; * Architect: a major work by the eminent architect and academic Sir Colin St John Wilson and his architectural partner, M.J. Long. Wilson has a number of listed buildings to his name notably the St Cross libraries at the University of Oxford (Grade II*); * Artistic interest: for the fusion of art with architecture as a component of the design ethos, exemplified by Paolozzi's Newton in the piazza; * Group Value: with the Grade I St Pancras Hotel, Grade II Camden Town Hall and Grade II housing on Ossulston Street.

History

The British Library has a long and complex history before it was even imagined on its current site. In 1757 George II presented the Royal Library of 10,500 volumes collected by British monarchs from Henry VIII to Charles II, a gift which brought with it the privilege of receiving a copy of every book registered at Stationers' Hall. Further donations of manuscripts and state papers followed including the gift of George III's books by George IV, and the building of the King's Library was the first phase of the British Museum built in Great Russell Street in 1823-6. In 1852-7 the courtyard of Sir Robert Smirke's building was infilled by a new Reading Room, designed by his brother Sydney. In 1911 the Copyright Act granted the Library a copy of every book, periodical or newspaper published in Britain. The Newspaper Library had been built at Colindale in 1904-5; in 1914 the Edward VII galleries were opened and in 1937 the North Library was constructed within them. The congestion was intense and delays in waiting for books notorious.

The 1943 'County of London Plan' suggested the opening up of land south of the British Museum in Bloomsbury to form an open space and provision for new library facilities, although ideas of opening up a vista from the British Museum go back much further, for example to W. R. Lethaby's idea of the 'Sacred Way' linking it to Waterloo Bridge made in 1891. In 1962 Sir Leslie Martin and Colin St John Wilson were among a number of architects invited to compete by interview for the project, just as they were completing the St Cross group of libraries for Oxford University. These were three libraries, reached at different levels off an external staircase that forms the centrepiece of the design. The small library for the Institute of Statistics has gone, but the English and Law libraries are both square and top lit, with galleries and peripheral carrels. For Leslie Martin evolution was more important than innovation, something he noted that Alvar Aalto had identified in his own library work, and he suggested in his 'Buildings and Ideas', 1933-83,

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from the Studio of Leslie Martin and his Associates, Cambridge University Press, 1983, that having determined an ideal plan at St Cross, which was repeated for each of the three libraries there, it only needed refinement elsewhere. This idea was developed further by Wilson.

Wilson felt that the success of the St Cross libraries recommended him and Martin to the Ministry of Public Buildings and Works. Nevertheless their first proposals combined the stepped internal courtyard plan of St Cross (and their other university work) within a larger context. The first scheme, approved early in 1964, was an ambitious project that created a piazza south of the British Museum down to Nicholas Hawksmoor's St George's, Bloomsbury. To the east would be a new library for books, maps, music and manuscripts, while to the west would be a gallery, archives for prints and drawings, and a conference centre. There would also be a residential development, with shops, publishers' offices and a public house.

Elements of Martin and Wilson's St Cross scheme can be seen in the eastern block of the proposal, and of the practice's Harvey Court, Cambridge, in the western, but on a scale and grandeur that was unprecedented, and with a basement archive going down some seven storeys under the piazza. Then a new Labour Government asked for a scheme that would also include the Science and Patents departments as well as the Library's humanities collections. The desire for a doubling of the library accommodation coincided with growing conservation pressure, always sensitive in Bloomsbury, which demanded the retention of properties on Bloomsbury Square and a consequent reduction in the size of the development site. Martin withdrew in 1970. In 1972 Wilson produced a dense scheme for a large new British Library - a square, stepped block for the main collections and a long wing for the Science Collections, together with a residential precinct of stepped terraces running eastwards from St George's Bloomsbury. Recognising the scale of what was required, in 1973 the Government instead purchased nine acres of the St Pancras Goods Yard then being vacated by British Rail, and Wilson set to work on a new scheme in 1975. The brief was now to serve an independent British Library, formed by the British Library Act of 1972 that brought together the British Museum Library, the National Central Library and the National

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Lending Library for Science and Technology. In 1980 a small extension by Wilson to the British Museum on Museum Street was opened.

The BL site is a wedge-shaped piece of land bounded by Euston Road to the south, by Midland Road to the east and by Ossulston Street to the west. Wilson's designs, which rapidly gained approval in 1978, retained the idea of placing the Science and Patent collections in a long wing, which with conference facilities and staff offices lines Midland Road. A series of square, top-lit libraries with galleries, serve the remaining collections, with a large general reading room, and specialised libraries for studying rare books, music and maps. Between the two areas was planned a vast Reference Reading Room an entrance hall, and a new piazza on to the Euston Road. Wilson's aim was to create an environment that was 'vivid, pleasurable and memorable, while fitting with responsibility and sensitivity into its context'. The RIBA Journal for April 1978 (from which that quotation is taken) estimated that it would take twenty years to build. The Bloomsbury scheme was described as 'monumental' and 'classical', that at St Pancras 'a contemporary, stripped vernacular look' (Building Design, 10 March 1978) yet within the context of Wilson's whole body of work the similarities are greater than the differences, and show the evolution of his designs in the manner Martin and Aalto considered so important.

In 1978 the decision was made to build the design in three phases. Work began in 1982, when Princes Charles laid the foundation stone, but following extensive tests to the foundations the main building campaign began in 1984. The engineers, Ove Arup and Partners, faced a monumental task in constructing such a deep basement area out of the London clay so near major London Underground tunnels and next to the Grade I-listed St Pancras Station and Hotel. Phase 1, representing c 60% of the whole project, was sub-divided into three for the purposes of measuring annual expenditure targets. Phase 1a provided an equivalent space to that existing in Bloomsbury, with Phases 1b and 1c allowing for moderate expansion. The existing building is essentially a reduced version of phase 1 - following a decision made in December 1987 to complete the building to this reduced scale, leaving the scheme with scarcely more seats than had the old Reading room in Bloomsbury. Wilson commented that 'it was like constantly pulling a plant up by the roots to see if it was still alive and then cutting a bit off before

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shoving it back in the ground' (Stonehouse, 2007, 111). The design as built was more sophisticated than the original. The Humanities and specialist reading rooms were already grouped in two square, top-lit areas (making for a larger entrance courtyard than in the 1978 design) and the Science collections given their separate wing. In 1986-7 Wilson replaced the original Reference Reading Room with a central glazed casket or shrine, the King's Library - likened by him to the Kaaba at Mecca but also with similarities to the Beinecke Rare Book Library at Yale University in New Haven by Gordon Bunshaft of SOM, and placed comprehensive café facilities behind it. A library for the India Office collection and exhibition areas were designed at this stage. To the rear, the north elevation was designed to allow for future extension. The principal works of art, including Eduardo Paolozzi's Newton (1995) after William Blake and a tapestry based on R. B. Kitaj's If Not, Not, were commissioned at this time. The leather reader chairs were specially designed by Ron Carter.

It was also in 1990 that the National Audit Office complained that it was the very decision to phase the work that had cost so much time and money, made worse by the subsequent sub-division of that phasing, and the stop-go funding of the project throughout the 1980s. The project was split between the Office of Arts and Libraries and the Property Services Agency - in fact the only people not to be criticised by the National Audit Commission were Wilson and his design team, who provided the only continuity through the project.

Sir Colin St John Wilson (1922-2007), Professor of Architecture at Cambridge University between 1975 and 1989, began his career at London County Council where he collaborated with (Sir) Leslie Martin, among many others, before becoming a lecturer in Architecture at Cambridge in 1956 where Martin was Professor. Wilson and Martin worked together on a number of projects, but Wilson is undoubtedly best known for his design of the British Library, a project of some 30 years duration. A highly influential architect of the post-war period, his renown is attested by 10 of his buildings being designated, including the Oxford University St Cross Library building (1961-5) and Harvey Court halls of residence at Gonville and Caius College, Cambridge (1961-2) both listed at Grade II*. Wilson's principal architect partner was M.J Long (b.1939). M.J. Long studied at

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Smith College in Massachusetts, and received her MArch from Yale in 1939. She worked for Sir Colin St John Wilson from 1965 to 1996, as a partner from 1974, and latterly a director. She also ran a separate practice (MJ Long architect) from 1974 to 1996.

Alterations

There have been a number of minor alterations to the Library's fabric, primarily to adapt the facilities to changing needs of the public and to comply with the Disability Discrimination Act (DDA) provisions. These include: - External installation of DDAcompliant ramps and handrails, bollards to external entrances and lighting to the Newton statue and clock tower; - Reading Rooms: altering reading room counters; installing electronic resource desks in the Rare Books Reading Room; converting a shelved storage area on the Lower Ground floor and installing a glass partition in Science I Reading Room; - Public realm: installation of automated door openers in public areas to improve access; - Conference Centre: refurbished in 2010, including the recovering of the auditorium seating.

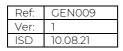
In addition, the British Library have carried out ongoing maintenance and upgrading of office spaces, lifts, lighting, CCTV, fire alarms and access controls.

Details

Public Library, the present design based on that of 1975-8, built 1982-99, though opened in 1997; architect (Sir) Colin St John Wilson, with M.J.Long, Douglas Lanham, John Collier, John Honer and many more. The structural engineers were Ove Arup and Partners, with mechanical engineering services from Steensen Varming and Mulcahy and quantity surveyors Davis Langdon and Everest. William Lam advised on lighting.

The Conservation Centre: although attached to the rear north elevation (Long and Kentish, 2006), the centre is a separate building and very recent in date. It is not part of the special interest of the Library.

Works of art: some significant internal and external works of art associated with the design of the library, contemporary with its completion and opening, and supported by outside sponsorship are of special interest and included in the listing. Where this is the





case, these are specifically mentioned in the List entry. Other free-standing or 'curated' works are not include

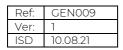
Structure and Materials

The building has a concrete frame, based on 7.8m x 7.8m column centres, clad inside and out in red brick (hand-made, sand-faced dark Victorian Reds from Leicestershire) laid in stretcher bond, chosen because they were made of the same clay as those used for the adjoining St Pancras Station and Hotel immediately to the east. In a contrasting red to the brick there are metal sills and cornice bands, and cladding to the columns, the latter with stylized classical motifs, and dark green metal fascia's to the science rooms, colours inspired by the adjacent St Pancras Station and Hotel. Special stainless steel wall ties allow vertical movement between the series of sub-frames and the brick skin. There is a granite plinth to the Midland Road elevation, with plaster and panelling contrasted with brick and tile within; external columns are clad in steel. The stepped roofs are slatecovered, again akin to St Pancras Hotel, contrasting with the steel screens shielding the clerestory glazing. The brick and stone paviours to the forecourt are continued within the building.

Interior joinery throughout is in American White Oak, with maple used only in the Conference Centre. The floor and wall finishes are of Travertine, Portland Whitbed, and Purbeck limestone, with contrasting Travertine and brick paviours on the ground floor of the atrium. In general the door furniture and stair handrails are in brass, the latter over bound with leather, with a bronze structure to the King's Library.

Plan

The building comprises two main blocks of libraries above ground, linked by a central entrance range, with a large piazza over four tiers of basement stacks on piled foundations, and small additions to the rear. The basement is divided by the tunnels of the Northern and Victoria Lines, with resilient bearings separating the conference centre structure from the Hammersmith and City/Circle Lines. The frontage parallel to Euston Road contains the main entrance and atrium, with the King's Library and restaurants behind; to the west (left) are the humanities, rare books and music libraries; to the east (right) the science and patent libraries adjoin the conference centre (with its own





entrance) parallel to Midland Road, making an acute angle, with a vertical clock tower containing service shafts between the west block and entrance range. Additional public and staff entrances are along Midland Road.

Exterior

The south elevation facing the piazza includes the main ENTRANCE. Steps lead to the sliding entrance doors, set at grade under a canopy with a display window to the gift shop to the left; the ramp to the right of the steps was constructed in 2014. To the left (west) of the entrance, each panel of the five-bay, four-storey frontage (housing internally the exhibition rooms and shop), has two metal roundels, above which is an additional step and clerestory to the roof. The western block is itself divided into two sixbay blocks, each of six bays, to the west with double-stepped pitched roofs, and a flat roof to the raised set-back block in between.

A ten-bay block to the east (right) rises to six main storeys with staff facilities behind, its height determined in relation to the hotel and station across the road to the east; panels of brushed metal sun shields are repeated on the east and west elevations. The CLOCK TOWER rises above the junction between the east block and the stepped roofscape of the entrance. The clock near to the apex faces south with stepped brick and red metal detailing above. Feature spotlighting added to the base of the clock tower in 2014 is not of special interest.

The conference centre adjoins seamlessly to the south, its entrance at the forecourt elevation, with a large porthole opening above to light the stairs within, and its raked pent roof-line presenting a bold face to Euston Road, broken by two bands of projecting triple-glazed fenestration with sun screens at the south-east corner. To Euston Road, a modest kiosk café and an undercover ramp (added in 2010) that leads through to the piazza are not of special interest. On the Midland Road elevation a colonnade, with metal railings in between, rises from a Royken granite plinth and supports the projecting and stepped east wing above with long strip windows defined by louvred metal sun screens and interrupted by a projecting 'V'-shaped staircase 'oriel' window;

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the soffit is coffered. The north elevation has landscaped roof terraces incorporating a circular pergola and a projecting stair tower.

The rear (north) elevation was intended by Wilson to allow for further phases of building (see history above). It has a series of stepped terraces repeating the same idiom of brick panels and paviours, with planters and a square-patterned trellis and balustrade somewhat reminiscent of Frank Lloyd Wright. There is a broad public terrace with planting boxes leading out from the large staff restaurant, which has a fully-glazed facade shielded by metal screens; above it is an enclosed terrace, including a circular pergola surrounding fixed wooden seating.

The west elevation (to Ossulston Street) and rear elevation of the western block is supported on red columns with deep bracketed eaves and has a stepped roof; an external circular escape stair for the humanities reading room, constructed with radial bricks, is attached to the rear.

Despite the contrast of square and diagonal, the structure of the two blocks is on a strong square grid, reminiscent of that which governs Wilson's nos. 2 and 2a Granchester Road, Cambridge (a pair of houses of 1961-64, one of which with a studio for himself, listed at Grade II, NHLE ref 1392069), and which appears in details such as coffering, doors and screens, the supports of the uplighters, glazing, grilles and trellises. Common ingredients are set out in Stonehouse (2007).

Piazza, Portico and External Artworks

To the south (front) of the main entrance is a forecourt known as the piazza with brick paviours set within a grid of limestone slabs that includes steps, raised levels and a rotunda defined by walls topped with granite boulders at the entrances; Sir Antony Gormley's 'Planets' installation of 2002, noted but at the time of the inspection (2015) but is not part of the special interest of the building. There are flag poles and a temporary, free-standing café on the piazza; neither the café here* nor other cafes* within the building's envelope, or the flagpoles* are included in the listing. DDA compliant handrails have been added in a number of places and are not of special interest. A raised plinth at the point of intersection between the main south and angled, ramped south-

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eastern entrance incorporates Eduardo Paolozzi's Newton (after Blake), installed in 1995, an integral part of Wilson's composition and made by the Morris Singer Foundry with raised planting behind. Feature lighting for Newton, with an associated plinth made by East Coast Casting, was added in 2014 and is not part of the special interest of the building. To the south on the Euston Road entrance, the square brick entrance gateway, known as the Portico, forms a rectangular frame to an angled entrance, with a stone panel incised with the name 'The British Library' repeated in the pattern of the iron gates and their high overthrow, by David Kindersley and Lida Cardozo. The bronze chair, Witness, by Sir Antony Gormley, installed in 2011, is noted but is not part of the special interest of the building.

Interior

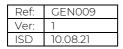
The interior of the Library combines quiet, top-lit reading rooms in the west and east blocks joined centrally by a complex space of multiple entrance concourses arranged in terraces organised with the King's Library at the core.

Freestanding furniture throughout is noted because it was designed by the architects (with Reading Room chairs by Ron Carter) but cannot be included in the listing. Fixed furniture is included in the listing unless stated otherwise.

Interior artworks: the British Library retains numerous works of art as part of their collections, some of which are displayed within the building. However, for ease of their curation, and in recognition that they may be donated items, these works of art* are not included in the listing, although purpose-built architectural elements for housing them may be included and will be specified.

Public Realm

Entrance and catering areas: bronze sliding and double entrance doors lead to a low vestibule with shop and exhibition halls to the west (left), from which stairs rise to an atrium on four main levels with galleries reached off dog-leg stairs to left, a ramp and a more dramatic spiral stair to right, set behind stairs to the lower ground and a low fountain. Travertine columns contrast with Portland limestone floors in two colours; internal porthole openings light the spaces to the right. The cyma curve roof





incorporates clerestory glazing with top lighting to the rear and inset spots; the hanging lights are by Juha Leviska. The central control desk divides access to this main space into two. The main foyer at ground level is defined by built-in seating and balustrading of travertine, with plant troughs. A bronze chair* by Gormley, was installed on the ground floor c.2012 but is not part of the special interest of the building.

The lower ground floor has travertine columns, beams, dado and lift surrounds (as repeated in the rest of the building), limestone and brick paviour floors. The cloakroom has a sinuous counter * and banks of oak lockers* are attached to the walls; these are not included in the listing. Access to offices lie through double doors to the left. Fixed sculptures integral with the building are Anne Frank by Doreen Kern was installed in this location in 2003 and is not of special interest. Paradoxymoron is a painting of 1996 by Patrick Hughes. The reconfigured education space* on this floor is not included in the listing.

To the centre of the ground floor are sets of escalators next to the stairs of limestone with Travertine balustrades leading to the Upper Ground Level and Level 1; handrails – like the door handles – here and through the building are wrapped in leather with brass curves, inspired by those of Gunnar Asplund and Alvar Aalto. In the lift lobby at Upper Ground Level is a model * of the Library set on a plinth*, cut to reveal the basement stacks below the piazza, which is not included in the listing.

There is much art on display in the entrance atrium. A wall tapestry, conceived as part of Wilson's original design, based on R. B. Kitaj's If Not, Not, made by Edinburgh Weavers was moved to the side of the front entrance in 2013. A statue of Shakespeare* (a replica based on that by Roubiliac 1758) stands to the left of the stairs to the west wing above a stepped, inscribed plinth marking the opening of the Library by Queen Elizabeth II on 25 June 1998. On the west wall of the atrium, four busts* in red steel roundels of the donors to the collections (Sir Thomas Grenville, Joseph Banks, Sir Robert Cotton and Sir Hans Sloane) are also replicas. The statue of Shakespeare* and busts of the donors* are noted because of their prominence in the atrium but are replicas and are not included in the listing although their architectural plinths are included.

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Banks of lifts serve the two sets of reading rooms either side of the atrium, the lobbies of which have travertine detailing and limestone borders to the carpeted floors. All carpet* is of standard contract range and not included in the listing. All lifts* in the library are utilitarian and are not included in the listing. Other balustrading is formed of simple steel uprights with a brass top rail. There is built-in bench seating within travertine walls, and black fossil limestone paving to the rear gallery serving the cafe at Upper Ground Level, with kitchen and staff restaurants behind on Level 1, separated by oak doors and louvres. The fixtures* and fittings* of all catering areas, restaurants and lounges for both public and staff use, including seating*, counters*, vending equipment and kitchen equipment*, are not included in the listing.

A belvedere at Level 1 gives views across the foyer. Two more floors above this level have walkways and balconies at the rear over the entrance to the servery. A corridor, with a built-in travertine seat, leads to the staff restaurant and outside terraces for staff and public, including the pergola garden. Limestone floors also serve the lower restaurant area, the stair to which has a built-in travertine handrail and inset lights; there are travertine stall risers to the servery.

Exhibitions

At the Upper Ground floor of the western range, beneath the Rare Books Library, is the Sir John Ritblat Gallery, a permanent display of the 'Treasures of the British Library', with a central service core and concrete columns with afromosia veneer coating. Here there is a combination of free standing temporary cases which not of special interest and, attached to the enclosing walls, permanent cases contemporary with the building. Stairs lead down to the Paccar Gallery for temporary exhibitions, which partly underlies the 'Treasures' exhibition, with access points from both the Ground and Lower Ground floors; the wall partitions in the Paccar exhibition and the stairs between the Paccar and Treasures exhibition spaces* are functional and do not form part of the listing. The adjacent exhibition workshops* are classed as office areas and are not included in the listing. Stairs with travertine risers and steel and brass handrails lead down from the ground floor to the Paccar Exhibition space but beyond this point the exhibition partition walls*, fixtures* and fittings* are temporary, not fixed and not included in the

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listing. At the Upper Ground floor, to the rear of the foyer, is a temporary exhibition area, again with free standing fittings, masking the view of the King's Library at this point; the exhibition panels* and structure* are not included in the listing because of their temporary nature.

Shop and Box office

Flanking each side of the atrium's ground floor, both the shop* and box office* have C21 shop fronts* and fittings* and are not included in the listing.

Reader Registration

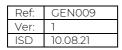
Is a remodelled office area at Upper Ground level which is not included in the listing. Toilets* for staff and public throughout the building are utilitarian and are not included in the listing.

Reading Rooms and the King's Library

There are 11 reading rooms in total, divided broadly into humanities on Levels 1 to 3 in the west block, fronting Ossulston Road, and science in the east block on Levels 1 to 3, fronting Midland Road.

King's Library

Rising in the centre of the building behind the foyer, the King's Library is accessed from a bridge over a narrow 'moat' at the Upper Ground floor through heavy bronze double doors. It is a six-storey glazed casket, served by an internal lift and escape stairs, with an independent structure comprising a bronze framed curtain wall set within a trough or moat, travertine walled with a glass balustrade and black marble base. Wilson described it (1998, references below) as 'an object in its own right ... simultaneously a celebration of beautifully bound books, a towering gesture that announces the invisible presence of treasures housed below and a hard-working sources of material studied in presence of treasures houses below and a hard-working source of material studied the Rare Book Reading Room opposite: the symbolic is at one with the use'. The books are placed on outward-facing shelving as close to the glass as is feasible, on stacks which move inwards while allowing air movement for the preservation of the books, so that the





bindings can be enjoyed. Subtle lighting within alternate mullions inside the cases highlights the bindings. At the centre are fixed stacks. There is a bust of George III* by Peter Turnerelli,1812 on a black marble plinth, of note, but not included in the listing.

Humanities Reading Room

Access to the Humanities Reading Room is at level 1 in the west block. This lofty, tripleheight and essentially square space, receives generous daylight through rooflights and clerestories with a coved ceiling sweeping up to the top-floor clerestory. Inserted on two sides are the two projecting and stepped upper floors, enclosed by giant square piers accessed by internal timber-lined stairs; the third being the map room. The piers are panelled to shoulder height in American White Oak incised with delicate lines, imitating fluting; all timber detailing used for the balustrades, desks and wall shelving and joinery is American White Oak. The pierced oak balustrading to the upper floors has elongated stanchions, repeated as a vertical motif in the cornice that makes a feature of the air ducts and lighting troughs below, and countered by the multiple vertical shafts of the up-lighters; the built-in oak desks have square patterns incorporating lights and sockets, and brushed black steel built-in lights. Other finishes are in impact-resistant, glass reinforced gypsum (GRG) rather than plaster, for ease of maintenance, plain or sparely detailed with stylized classical motifs with Japanese overtones. All these square and vertical patterns have sources in Frank Lloyd Wright, whose Robie House Wilson particularly admired. This plan form derives from that of Leslie Martin's Law Library at St Cross, Oxford, designed in association with Wilson and built in 1959-63. The Control and issue desks match the American White Oak panelling and shelving of the walls, and like the desks and chairs are by the architects. The chairs are not fixed, thus are ineligible for listing, but the reading desks, with leather tops, mostly are some are modified for DDA compliance, others altered to take computer processor units with additional electrical supply for lap-tops.

Adjacent to Humanities is the Rare Books and Music Reading Room, with the Manuscript Reading Room on the single balcony above. The details here are repeated on a more modest scale, with conoid-topped columns and flatter slopes to the ceiling. Carrels or sound booths against the perimeter wall are built into the music library, originally, it is said to accommodate those wishing to use portable type writers; the film

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reader room is alongside. Doors throughout the reading rooms are of American White Oak with brass and bound leather handles, glazed to the booths and film-reader room.

Science Reading Rooms

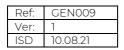
The eastern block housing the science and social science collections is on three floors, topped by a coffered ceiling that is upswept to the top of the main windows, with a balustrade protecting the ducting below. On the other side are two stepped back galleries with broad timber ledges topped by brass handrails. To the street (Midland Road) it has large, continuous side windows, with in between carrels, desks and a connecting stair with glass balustrades. There are more bookcases for material on open shelves than is found in the humanities libraries; those in freestanding, moveable units* are not included in the listing. There are broad timber ledges to the balconies. Control and issue desks match the oak panelling and shelving of the walls, and like the tables and chairs (not fixed, and the same as those in the humanities reading rooms and not included in the listing) are designed by the architects. Some additional internal glass partitioning was added in 2012 and is not of special interest.

Business and IP Centre

On Level 1 of the east block, formerly a science reading room, the Business and IP Centre has a modernised entrance foyer and inserted glass meeting rooms; the foyer and meeting room partitions* are not included in the listing. The high windows are overbuilt-in shelving and a single gallery whose balustrade is lined in timber (former Science North reading room), linked by a spiral stair (also with a timber balustrade) and with shelving on both levels. Ducts form a cornice, the square columns are timber lined to dado height, and there are built-in desks, not all with reading lamps; the wall shelving is lit with downlights.

Newsroom

On Level 2 in the east block, the newsroom created from a former science reading room in 2014, has a reconfigured foyer* and renewed fixtures* and fittings* and a digital screen* installed. It is not included in the listing.





Asian and African Studies Reading Room

On Level 3 in the east block, formerly the Indian Office Library, is a double-height space so that the historic picture collection can be hung. The fittings are similar to those in the other Reading Rooms.

Offices and Basement

The staff offices are located to the rear of the east and central blocks, the principal entrance being the staff entrance gate (gate 8) from Midland Road. The offices* are adaptable spaces with standard furniture*, fixtures* and fittings* and are not included in the listing with the exception of the 4th Floor Executive office which is included in the listing as a representative example.

Access to the reading rooms and public realm is via stairs to the rear and lifts; there are no notable fixtures and fittings here except for the carved, timber war memorial to all Library Association librarians from the Commonwealth lost in the First and Second World Wars which is fixed to the wall opposite the main lifts to the science reading rooms and is included in the listing. At the rear also is the staff restaurant with timber dado repeated in the maple battens fixed to the bases of circular columns and hanging lights by Louis Poulsen. On Level 4 of the east block is the Board room and its adjacent Executive Office suite, a 'staff' area with meticulous travertine and American White Oak finishes; the Board room furniture is by Ron Carter and where fixed is included in the listing.

Beneath the piazza are four vast basement floors^{*} with overpainted brick walls, mechanical and motorised stacking and secure pens for rare and valuable items. On Basement level two is the control room for the Mechanical Book Handling System (MBHS), a bespoke conveyor belt system transporting items in trays to and from the basement to the reading rooms' service desks via lifts. As part of the integral design of the Library the basements and MBHS are noted here, but none of the basement levels^{*}, their fixtures and fittings^{*} are included in the listing. Collection item storage areas^{*} on other floors, including large areas of the Lower Ground Floor, Manuscripts and Philatelic Storage Rooms are not included in the listing.

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Loading bays*, plantrooms*, cores*, lift-shafts*, and other utility and service areas* are not of special interest and are not included in the listing.

Conference Centre

Refurbished in 2010, the centre serves the Library and external functions and is entered from the forecourt through bronze doors, with lower and upper foyers, served by a travertine lined stair well, the treads in Purbeck marble and Portland stone. The lift wall and dado are in travertine with limestone floors and maple joinery. There is a 250-seat auditorium accessed on two levels (seating recovered in 2010) and four seminar rooms seating 20-65 people, of these only the double-height Elliott Room is of special interest; the others have standard fixtures* and fittings*. A large foyer with a bar is reached by a broad travertine-lined stair incorporating built-in seating, and leather-bound brass handrails, dubbed the 'Spanish Steps' by Wilson to denote his intention that they be a meeting and conversation place. The toilets* and cloakroom* are not included in the listing.

Subsidiary Features

The entrance adjoins walls to Euston Road and Ossulston Street; the latter has two pairs of set-back gates, the first into the forecourt, the second to the rear of the western wing, and railings set on a low, stone-capped wall with brick piers. The semi-circular planters* to the Euston Road frontage and railings between and including Gate 10 and Gate 9* fronting Midland Road (installed in 2008) are not included in the listing.

* Pursuant to s.1 (5A) of the Planning (Listed Buildings and Conservation Areas) Act 1990 ('the Act') it is declared that these aforementioned features are not of special architectural or historic interest.

This list entry was subject to a Minor Amendment on the 17/08/2016

This List entry has been amended to add sources for War Memorials Online and the War Memorials Register. These sources were not used in the compilation of this List entry but are added here as a guide for further reading, 29 August 2017.

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