

HSLI GREAT HALL AND LIBRARY | EXTERNAL LIGHTING | DESIGN STATEMENT



3940R3DSv2
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Contents

1. Introduction
2. Listing Statements
3. Statement of Need and Justification
4. Design Intent Summary
5. Impact Statement
6. Statement of General Principles of Conservation
7. Summary of Other Documentation

1. INTRODUCTION

1.1 Background

This *Design Statement* is submitted as part of a formal Planning application for a project to significantly improve the external lighting of The Great Hall and Library of Lincoln's Inn.

Also known (under their respective listings) as "New Hall" and "New Hall Library" the buildings, which are joined by a vestibule link, are both listed Grade II*.

Recent developments to significantly improve the library, education and administrative facilities of The Inn, designed by MICA Architects, have been underway for some time and are now nearing completion. These works have included modifications to the East Terrace of The Great Hall and a small extension to the Library.

The works have been covered by a series of separate planning applications which have included localised lighting to the East Terrace but no other modifications to the existing external lighting of these two buildings.

The remainder of the existing lighting on the site in this area consists of simple floodlighting to the south elevation of the Great Hall, lighting to the lanterns atop the Great Hall and vestibule link, some light to the east facing roof of the Great Hall and decorative amenity lighting to the circulation areas around the building by traditional [gas] lanterns. Additional service lighting is in place to the plant room areas to the west of The Great Hall.

1.2 New Scheme Outline

The proposals set out in this document detail a scheme which essentially upgrades the existing external lighting and extends its coverage, in a similar style, to the currently unlit east and west elevations of the Great Hall and the northern elevation of the Library. The new scheme uses new LED light sources with the improved optical control, lower energy and maintenance costs that is facilitated with this technology. The design responds to briefings and information provided by the client steering group and professional advisors and can be described as follows:

This scheme replaces the existing floodlighting fittings to the Great Hall and vestibule link with more modern LED luminaires in identical locations to the current fittings with the exception of three floodlights in the centre of the south elevation.



Additional fittings will be extended, in a similar arrangement to the other elevations of both buildings to provide a gentle uplift to the whole building combination.

Additional highlighting will be provided to the chimneys and turrets at roof level.

The colour temperature of the new lighting will be a consistent 3000K warm white which will be seen in slight contrast to the warmer lighting of the lantern but far less harsh than the cooler metal halide flood lighting of the current installation.

2. LISTING STATEMENTS

THE GREAT HALL

Entry Name:	New Hall
Listing Date:	24 October 1951
Grade:	II*
Source:	Historic England
Source ID:	1379298
English Heritage Legacy ID:	478667
Location:	Camden, London, WC2A
County:	Camden
Electoral Ward/Division:	Holborn and Covent Garden
Built-Up Area:	Camden
Traditional County:	Middlesex
Lieutenancy Area (Ceremonial County):	Greater London

CAMDEN

TQ3081SE LINCOLN'S INN
798-1/106/1040 (West side)
24/10/51 New Hall

GV II*

Banqueting hall with offices. c1843-5. By Philip Hardwick with PC Hardwick & John Loughborough Pearson. Red brick with blue diapers and stone dressings. Slate roof with tall, decorative brick chimneys. Tudor style.

EXTERIOR: 2 storeys and semi-basement. Rectangular plan of 7-bay hall, plus lobby and entrance. Linked at north end to adjoining Library (qv). Gabled south end with 7-light, traceried window flanked by square twin towers. East and west elevations with five 8-light square-headed windows, separated by stone dressed buttresses topped with decorative stone finials rising through the embattled parapet, and 2 large bay windows at the high table end. 2-tier glazed fleche with weathervane. Lobby with octagonal turret in roof. Entrance approached by 3 flights of steps.

INTERIOR: hall with hammer-beam trusses. Screen at south end; on north wall fresco "Justice, The Hemicycle of The Law Givers" by G F Watts, 1852-9.

HISTORICAL NOTE: one of the earliest secular expressions of the revived historicism of Victorian architecture, made more correct in style by PC Hardwick who took over the commission when in 1843 his father became seriously ill. New Hall was restored c1984-87 by Peter Locke & Tony Dyson of Donald Insall Associates, particular attention being given to the roof and fresco.

Listing NGR: TQ3092781408

THE LIBRARY

Entry Name:	New Hall Library
Listing Date:	24 October 1951
Grade:	II*
Source:	Historic England
Source ID:	1379299
English Heritage Legacy ID:	478668
Location:	Camden, London, WC2A
County:	Camden
Electoral Ward/Division:	Holborn and Covent Garden
Built-Up Area:	Camden
Traditional County:	Middlesex
Lieutenancy Area (Ceremonial County):	Greater London

CAMDEN

TQ3081SE LINCOLN'S INN
798-1/106/1041 (West side)
24/10/51 New Hall Library

GV II*

Library. c1843-5. By Philip Hardwick and PC Hardwick, with JL Pearson. Enlarged at east end 1871-3 by Sir George Gilbert Scott. Red brick with blue diapers and stone dressings. Lead roof. Tudor style.

EXTERIOR: Rectangular plan of 8 bays 2 storeys, at right angle to New Inn Hall (qv), using the same entrance. 3-light windows separated by stone dressed buttresses topped with stone finials rising through the embattled parapet. East and west gabled elevations with 2 storey canted, traceried, bay-windows. Octagonal turrets at north-west and south-east corners, that at south-east corner with glazed look-out and spire. Tall, decorative brick chimneys.

INTERIOR: stone-faced with wooden open truss roof with pendentives and cast-iron galleries for shelves on 3 levels.

Listing NGR: TQ3090781433

3. STATEMENT OF NEED AND JUSTIFICATION

Lincoln's Inn is a thriving society of barristers, situated on a large estate of historic buildings, contemporary facilities, and tranquil grounds in central London.

The Inn is a multifaceted organisation, but is primarily dedicated to the qualification, training and development of its members, at all stages of their legal careers, in a prestigious, collegiate and inclusive environment.

The Inn prides itself on the standards of the facilities and environment that it provides for its members and other users of the site at all times of the day (and night), and sees a careful and balanced illumination of the Great Hall and Library as part of the need to provide a decorative amenity facility to the wider estate as a whole.

The existing external lighting is quite sparse by present day standards with the existing floodlighting of these buildings being concentrated at their southern end. The recent development of new facilities has added more conventional amenity lighting to the Eastern Terrace and made good use of the existing historic [gas] lanterns but does not extend to encompass wider building elevations or the very attractive architectural features of the chimney and tower highlights of the roof levels.

The new lighting will be controlled by a fully automatic time clock system which will also allow for graduated attenuation of levels meaning that as the night sky darkens, illumination levels can be effectively reduced to save energy. A manual override facility will also be provided to facilitate changes for one off events.

4. DESIGN INTENT SUMMARY

4.1 Background

The design strategy for this project has been informed by discussions and consultations with client representatives and their professional (planning) advisors as well as the architects of the East Terrace development and the relevant M&E consultants and designers of the localised lighting on the terrace. The scheme submitted follows as a natural progression to the overall strategy for the East Terrace which has, of course, already met with the approval of the Local Planning Authority.

4.2 The Existing Lighting

In more detail than has been set out in earlier sections of this document, the existing lighting comprises:

- a number of floodlights which currently illuminate the south elevation of the Great Hall and the return flank of the towers to the west elevation – NB not the east side to the terrace
- highlighting to the lanterns to the roof areas of the Great Hall and the vestibule link
- lighting to the east facing sloping roof of the Great Hall
- lighting from a small number of various historic [gas] lanterns around the buildings and at strategic doorways
- safety lighting to the plant room areas to the immediate west of the Great Hall and link which is hidden by the perimeter brick wall facing Lincoln's Inn Fields
- localised amenity lighting to the East Terrace – part of the new development

4.3 The New Lighting Scheme

The scheme provides a simple replacement of the existing floodlighting to the south elevation, Great Hall roof (east slope), Great Hall and vestibule lantern. It retains the historic lighting and the new amenity lighting to the East Terrace and stairs. The scheme also extends the same lighting of the south elevation generally along the east and west elevations of the Great Hall and to the Library in similar locations, which is generally above the head of the ground floor windows, providing a soft uplight.

It should be noted that the new lighting to the west and east elevations of the Great Hall and the elevations of the Library places fittings above eye level and will therefore not be a source of glare to pedestrians. Low level amenity lighting to these areas (and a soft wash to the lower parts of the elevations) is already provided by the historic amenity lighting.

There is also additional lighting at roof level, balancing the existing illumination of the east slope of the Great Hall with new lighting to the west slope and to the slopes of the Library as well. Further feature lighting is added at roof level to add highlight to the west side of the Great Hall lantern and also to the chimneys and turrets with their beautifully decorated brickwork patterns. The colour temperature will be "warm white" at 3000K which will provide a more attractive and faithful illumination of the red brick and blue diaper patterning of the elevations.

The new fittings selected for the elevations retain the existing locations, with only minor adjustments to improve coverage. LED fittings have been selected which are significantly smaller than those they replace and are of a more modern and clean aesthetic appearance.

All luminaires will be dimmable, meaning that the relative levels of illumination between different features of the building can be attenuated to achieve an appropriate visual balance, with highlighting to important features contrasting well with larger surface areas.

Typical of new LED luminaires, they are significantly more energy efficient than their predecessors and are also fitted with more effective optical control so that they will dramatically reduce the amount of light spill to unwanted areas, minimising environmental light pollution.

5. IMPACT STATEMENT

Overview

The new lighting schemes at The Great Hall and Library will add articulation to this important Grade II* listed aspect of Lincoln's Inn's night-time environment.

The works will involve

- the replacement / addition of wall lights to the exterior facades where fixings will only be made into mortar joints
- a new lighting control system

All of the new works will be carried out in accordance with the Statement of General Principles of Conservation set out in section 6 of this document.

New Equipment

The physical impact of new equipment will be specified to minimise impact on fabric. Light fittings and other equipment are not to be fixed to sensitive fabric nor obscure any important architectural details or otherwise detract from the historic character of the exterior.

Luminaires are to be finished in the established dark grey colour used for luminaires across the estate.

Fixings and Cable Routes

Fixings are to be inserted into existing joints or on cornice levels where they cannot be seen. Fixing into decorative carving, stonework and mouldings is to be avoided – except where specifically and individually agreed. No decorations or mouldings will be affected.

Wiring routes are to be horizontal, running along mortar courses and vertical only at the internal corners with buttresses in such a way that minimises their visual impact on the exterior of the buildings using existing routes wherever practical.

Quality and Standards

A careful choice of finishes for wiring and equipment will be made reduce its visual impact. Consideration has been given to access for ongoing maintenance of equipment and fire safety, and no heat generating equipment will be fixed near timber or flammable or temperature sensitive fabric. The full specification and scope of work, to be included in a separate tender document, will set a high standard for all works associated with this project.

Execution

Only electrical contractors who are highly experienced in working with heritage buildings will be invited to tender for these works. They will be required to provide method statements to ensure that all works will be planned to take precautions and care that prevent damage to the fabric of the building or other damage to the churchyard.

Oversight & Supervision

The works are to be inspected by the Lighting Consultant in liaison with the Contract Administrator.

6. STATEMENT OF GENERAL PRINCIPLES OF CONSERVATION

The following general statement informs the assessment of the impact of the proposed works on the fabric of historic buildings and will form part of the general conditions of this tender. Specific instructions by members of the design team may supersede generalizations listed here.

Where reference is made to the CA [Contract Administrator] decisions may be referred by the CA, to the Architect, Lighting Consultant or Project Manager as appropriate.

Before any work starts a thorough and systematic investigation and on-site survey of the existing electrical and lighting circuits is to be carried out by the Contractor's electrical engineer. This will provide a clear and coordinated picture of what services and routes exist and where any new routes are required.

Only once this knowledge is gained can invasive work be considered to minimize the disturbance to the historic fabric. Pre-existing accessible voids, slots, holes and service routes must, wherever possible, be reused to minimize additional permanent scarring to the building.

If new builder's work openings are absolutely necessary, then all must be done to ensure that as many services as possible share a common route through the building. This will minimize the loss of historic fabric and along with designing in spare capacity will ensure, at least in the short term that further loss of building fabric is contained. Any and all such routes must be pre-approved by the CA before any works commence.

Where the building design lends itself to offering suitable routes, a surface installation may sometimes be a better solution, for example where moldings, column capitals cornices or balustrades can disguise the presence of a carefully installed cable or pipe. However, it is important to ensure that an installation of this type does not cover up, damage or interrupt the view of important building features and surfaces, nor should it create dirt traps or staining patterns from any resulting heat and air movement. Any and all such routes must be pre-approved by the CA before any works commence.

With this type of surface installation, the fixing and positioning of the clips and brackets are also of importance as these must respect the buildings' requirements on spacing, and not those of manufacturers' or relevant standards. Fixings should be made into material that is sacrificial and not permanent, for example mortar rather than stone or brick. Timbers should not be drilled wherever this can be avoided; the use of wood screws is less damaging. Cables should be secured with screws fixed into timber or plastic plugs wherever possible. The use of pin clips or any other fixings installed with hammers is to be avoided except where expressly instructed or approved by the CA. With all installations, intervention should be kept to a minimum and strict observance to the principle of reversibility should be adhered to.

This principle applies equally well to the fixing of any component within a building services system, for example a light switch or a fire alarm break glass unit may need the additional help of a pattress, or other secondary support system, to enable the mortar joints to be used. In the final design, all routes, openings and making good must be coordinated and agreed with the CA.

Any builder's work openings still found to be needed must be approved before work commences. Where loss of historic fabric is inevitable the disruption should be taken as an opportunity to additionally survey, record and/or repair other services found. All necessary builder's work must be done with far greater care than is the norm, this will mean that it will usually take far longer to remove, replace or renew any building services installation in an historic building. Service routes may need to be more convoluted and or longer than usual to accommodate the structure.

Where old services cannot be reused, but retain particular significance to the building, it is important to leave them in place if possible. This equates to leaving them in a condition where nothing can cause future disruption to the historic fabric, for example services are disconnected, made safe or drained down and then recorded. Their removal should only be considered if they have no historic significance or could pose a future danger to the historic fabric.

Wherever possible continuous cables should be used through the installation and therefore the number of cable joints or in-line terminations should be kept to an absolute minimum. All terminations should be made in accessible and suitable locations.

Where older installed cables are to be retained and reconnected as part of a new installation, or where any other new junctions are required, all such terminations should only be made in fixed junction boxes with fixed-back terminals such as din rail or other appropriate connectors. The risks of thermal cycling for all cable types and terminations must be considered.

All junction boxes should be identified and correctly labelled and be shown on the contractor's O&M drawings. Termination schedules should also be included in the O&M manuals.

Installations of this nature in historic buildings should be designed and installed so that they have as long an installed life as can be expected. For this reason, the use of pvc/pvc cabling and any pvc or plastic containment shall not be permitted unless expressly specified or approved by the CA.

MICC or PYRO cables are required for all visible surface cabling, the use of FP or FIRE-TUFF cabling for visible surface runs will not be permitted unless expressly specified or approved by the CA.

Notwithstanding the above all cabling systems should be designed to avoid vulnerability to damage by rodents or other wildlife, thus any pvc cabling, including final circuit wiring should be in suitable containment. These risks to all cabling in roof voids, floor and other ducts should be fully assessed.

7. SUMMARY OF DOCUMENTATION

DOCUMENT TRANSMISSION SHEET		LIGHT PERCEPTIONS LIMITED											
Job no.	3940	2nd Floor, 2 Twyford Place, Lincoln's Inn Office Village Lincoln Road, High Wycombe HP12 3RE mail@lightperceptions.co.uk www.lightperceptions.co.uk											
Sheet no.	191120	Project title	HSLI GREAT HALL EXTERIOR										
DOCUMENT No	Title	Revision											
DOCUMENTS													
3940R3DS	LIGHTING DESIGN STATEMENT	V3											
3940_R3	RIBA 3 RENDER AND VISUALS PACKAGE (PPT)	V2											
3940_R3	RIBA 3 RENDER AND VISUALS PACKAGE (PDF)	V2											
3940_LD	LUMINAIRE DATASHEETS	V2											
DRAWINGS													
3940_D_001	EXTERIOR LIGHTING GENERAL ARRANGEMENT - EXISTING	D											
3940_D_101	EXISTING EXTERIOR LIGHTING - ELEVATION 1	B											
3940_D_102	EXISTING EXTERIOR LIGHTING - ELEVATION 30 , 31	B											
3940_D_002	EXTERIOR LIGHTING GENERAL ARRANGEMENT - PROPOSED	D											
3940_D_201	PROPOSED EXTERIOR LIGHTING - ELEVATION 1	B											
3940_D_202	PROPOSED EXTERIOR LIGHTING - ELEVATIONS 2 , 3 , 4	B											
3940_D_203	PROPOSED EXTERIOR LIGHTING - ELEVATION 5	B											
3940_D_204	PROPOSED EXTERIOR LIGHTING - ELEVATIONS 6 , 7 , 8 , 9	B											
3940_D_205	PROPOSED EXTERIOR LIGHTING - ELEVATIONS 10 , 11 , 12 , 13	B											
3940_D_206	PROPOSED EXTERIOR LIGHTING - ELEVATIONS 14 , 15	B											
3940_D_207	PROPOSED EXTERIOR LIGHTING - ELEVATION 16	B											
3940_D_208	PROPOSED EXTERIOR LIGHTING - ELEVATION 17	B											
3940_D_209	PROPOSED EXTERIOR LIGHTING - ELEVATION 18	B											
3940_D_210	PROPOSED EXTERIOR LIGHTING - ELEVATION 19	B											
3940_D_211	PROPOSED EXTERIOR LIGHTING - ELEVATIONS 20 , 21 , 22 , 23	B											
3940_D_212	PROPOSED EXTERIOR LIGHTING - ELEVATIONS 24,25,26,27,28	B											
3940_D_213	PROPOSED EXTERIOR LIGHTING - ELEVATION 29	B											
3940_D_214	PROPOSED EXTERIOR LIGHTING - ELEVATION 30 , 31	B											
SCHEDULES													
3940_LS	LUMINAIRE SCHEDULE	V3											
Distribution list		Issue Date	day	20									
			month	11									
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Issue form:		P = Prints D = 3.5" HD Disk N = Negative CD = Compact Disk E = E-mail F = Fax											
Status:		P = Preliminary A = Approval T = Tender C = Construction R = Record I = Information											
Comments:		191120 RIBA 3 "SCHEME 2" ISSUED FOR APPROVAL											