

# University of Lincoln

**London Campus - 70 Grays Inn Road  
Design and Access Statement and  
Capacity /strategy assessment**



**Shepherd Epstein Hunter**

THIRD ISSUE 301019

## Contents - issue 3

Executive summary.....	2
Introduction .....	4
Existing building.....	4
The University brief.....	6
Access, circulation and security.....	7
Fire escape provisions and impact on capacity.....	8
Current proposals (illustrative).....	9
WC provision in relation to occupancy.....	15
The central stair proposal.....	17
Photographs as existing.....	18
Location in context of Bloomsbury Conservation Area.....	20

## **Executive summary**

1. This document considers the proposed use of 70 Grays Inn Road as the London Campus of the University of Lincoln. It has been carried out by Shepheard Epstein Hunter within the week following an initial briefing on 29<sup>th</sup> April 2019 and includes an outline assessment of fire capacity and strategy by fire engineers MLM acting as sub-consultant to SEH.
2. This is the third issue, updated to reflect discussions and design work which have taken place since the previous issue.
3. The existing building is a steel-framed structure and is currently named Verulam Gardens. It consists of seven storeys, and the University is considering leasing the lower four floors (whole of first and second floors and only parts of the ground and lower ground floors).
4. The landlord is carrying out a refurbishment which is likely to be able to accommodate the University's requirements, and is intending to provide new corner entrances from the street, one of which will be solely for the use of the University.
5. The University outline brief as established in conversation with Simon Parkes, Deputy Vice Chancellor (Finance and Infrastructure) and Roger Ward, Deputy Director of Estates, envisages an exemplary, dynamic, creative and interesting Business School facility combining education and workspace elements in a largely open plan working environment.
6. The accommodation may share some common areas and circulation with the other tenants (of the top three floors), but for the most part will provide a self-contained environment identifiable as the University of Lincoln. Security and corporate image issues will thus need to be carefully considered. An additional note has been added to this revision to reflect pre-application discussions.
7. An analysis carried out by Shepheard Epstein Hunter (SEH) and MLM in Issue 1 of this report showed that the fire strategy is viable for the intended uses and will meet the needs of the intended occupancy. An additional escape stair is proposed from lower ground to pavement level (this requirement is to be further tested before proposals are finalised). If lobbies were added at each floor to each of the two existing escape staircases additional capacity could be achieved.
8. The analysis also shows that connecting all of the four University floors with an access stair, (and possibly dedicated University lift) is possible from a fire strategy point of view, and this is compatible with the University's vision, which is that all four floors of the whole School should be perceived as one space.

9. A new prominent access staircase is thus proposed which will make the layout of the accommodation easy to understand as soon as one enters the building, and which encourages people to meet and form collaborative relationships as they move around the School.
10. The details of the new central staircase are currently being discussed with the landlord's project team; the drawings included here therefore are subject to further design development.
11. An assessment of toilet provision is provided here: it concludes that some additional provision may be needed but this is subject to further review as the University's proposals develop, and confirmation by the Approved Inspector under the Building Regulations, appointment anticipated shortly.

## Introduction

The University of Lincoln (UoL) is considering taking a long lease on part of 70 Grays Inn Road to provide a London base and facilities for the School of Business.

Shepherd Epstein Hunter (SEH) was commissioned in May 2019 to undertake a very quick high level feasibility study to determine (primarily) whether the proposed area to be leased will support the occupancy levels and uses required for the School of Business. The first issue of this report (100519) addressed this central requirement.

This third issue of the report updates the earlier versions following a number of discussions with various parties and design development.

The project was discussed at a meeting (UoL/SEH) on 29 April 2019 at SEH's offices, which was followed by a visit to the building and tour of the proposed University floors. A subsequent meeting on 12 June 2019 with Simon Parkes, Deputy Vice Chancellor (Finance and Infrastructure) and Roger Ward, Deputy Director of Estates at SEH's offices further articulated the University's vision for the Business School in London and provided more details of the brief.

Meetings have been held with the landlord and their technical advisors to explore changes which can be made to the four storeys of the building under consideration to deliver the particular qualities that the University requires. As of 19 July, the landlord expressed their interest in creating a delightful space for the University of Lincoln.

Photographs of the existing building are included on later pages.

## Existing building

70 Grays Inn Road – currently named Verulam Gardens (<https://it46884.wixsite.com/verulam-gardens>) - is located in the London Borough of Camden, just outside the boundary of the Bloomsbury Conservation Area (see map on last page). The existing building comprises seven storeys including a lower ground floor (with natural light available from an area at the rear), and the top floor which is set within a large mansard roof.

The building has elevations to Grays Inn Road to the west, Portpool Lane to the north and Verulam Street to the south. The rear of the building faces east and overlooks the landscaped square (to which we understand the University will not have access) of the six storey residential block to the east.

As existing, the building is entered centrally off Grays Inn Road. The reception area contains the main stair core including two lifts, which serve all floors. There are two enclosed escape stairs serving the upper floors (first to fifth), each with a minimum width of 1200mm (scaled from CAD drawings provided by the University and referred to in a document 'Means of Escape Study' prepared by Rolfe Judd architects as '...each measuring 1285mm wide (based on DGS survey) - assumed to be effective width of 1200mm'. MLM advises that 'provided the handrails intrude no more than 100mm each side, they can be included in the width'.)

WC facilities are located in the main stair core, with two WCs at lower ground floor and five WCs (including one accessible facility) on each of floors ground to second. All WCs are 'superloos'; i.e. self-contained unisex facilities including wash hand basin within the WC cubicle.

Plans of the third, fourth and fifth floors are not available, however it is assumed that there are similar facilities on both floors, and that these will continue to be occupied as offices.

There is a separate stair (north, LHS of drawings shown here) that serves ground to fourth floor (not lower ground), also with a width of 1200mm. The lower ground has direct external escape to an area space to the rear (east), with outdoor metal stairs at either end of the area. One stair is steep, but for normal use, the other is a very steep and appears to be for maintenance access. Both metal stairs are approximately 830mm wide.

The University is considering a long lease (five to ten years) on part of the lower and ground floors and all of the first and second floors (four storeys in total). The third, fourth and fifth floors will remain occupied by others.

The landlord, Euro Properties, is currently undertaking refurbishment works in the lower ground to second floors. Refurbishment works, we understand, may include:

- creation of a new entrance on the corner of Portpool Lane which will serve the University only
- creation of a retail unit (café) on the southern half of the ground floor, also to be accessed from a new corner entrance, for a coffee chain with independent entrance and WC facilities
- formation of a new large shower facility at lower ground providing 1 accessible, 4 female and 4 male showers to support cycle storage at lower ground
- new services throughout the proposed University areas
- refresh of décor throughout the proposed University areas.

The structure of the building is a fire-protected steel frame, with one major deep beam running centrally along the long axis, cranked on plan between a central column and the central lift/stair core, with apertures for services to pass through.

This would appear to give the University sufficient flexibility to adapt the space arranged over the four floors, and discussions with the landlord's technical team since the first issue of this report have confirmed it is likely to be acceptable to the landlord to open up parts of the floors, with a central access stair connecting all floors, and an additional staircase from lower ground to pavement level.

### **The University brief**

The University has advised that the core requirements for the building include (revised since first issue:

- seminar rooms and teaching spaces, arranged as one communal space to facilitate social learning and shared workspace, with an emphasis on an open plan 'collaborative' environment and agile working, for an international student population (students will be Masters level so aged 21 plus), where London itself is part of the experience
- a modern, digital campus / building – everything from access to delivery should be 'digital' (such as access / room booking and tracking occupancy via phone code, charging devices, screen plug-ins to enable sharing of information with colleagues
- a memorable building interior with impact and a sense of place.
- possibly with co-worker space, so that students are in the same place as business people (possibly Lincoln-based businesses taking their first steps in London, thus serving the people of Lincolnshire, in accordance with the University's mission)
- library – plus the Business School gives access to other libraries in London
- access to concierge facilities (student support, access to services and events in London'
- coffee lounge as a social heart to the School
- some bookable meeting rooms, say for 8 to 10 people.
- academic work and touch down spaces
- space for business start-ups, including break out spaces, private works spaces and support facilities such as touch down spaces and kitchenette

The University undertook a preliminary feasibility study to assess the potential arrangement of spaces in early May 2019. These ideas have now been developed and are illustrated on the concept drawings included overleaf. The University's preliminary feasibility plans were used as the basis of MLM's fire assessment, which has informed the design work to date, and is not reproduced here.

## Access, circulation and security

The landlord's refurbishment proposes a new dedicated corner entrance for the University.

The existing stairs are part of the common parts of the building and will be used by the occupants of the third and fourth floor for means of escape, but access to the UoL demise will be electronically controlled so that only UoL-permitted occupants can enter the UoL area.

Wheelchair access to the upper floors will require use of the lifts in the main stairs.

Additional space is being provided within the landlord's area for bicycle storage.

We note that since the previous iteration of this report the University has received advice from Camden, which includes comments on security, and in response note the following:

- there will be a security strategy controlling access to the building. The details are still to be developed, but it is likely to ensure controlled access at the ground floor entrance, or close to it, either through a staffed reception barrier, or electronic access passes which are linked to the identities of individual users, or both (there may be different daytime and outside hours strategies)
- this would apply to all of the University's permitted users within its curtilage (i.e. co-workers as well as students)
- the café will not be a retail café, and not available to occupants without passes
- the University has its own campus security manager with an ALO qualification that will be engaged in the design development process to ensure that the completed building is secure and complies with best practice
- the details of the strategy will take account of consultation with 'Design Out Crime' officers before being finalised for construction



## Fire escape provisions and impact on capacity

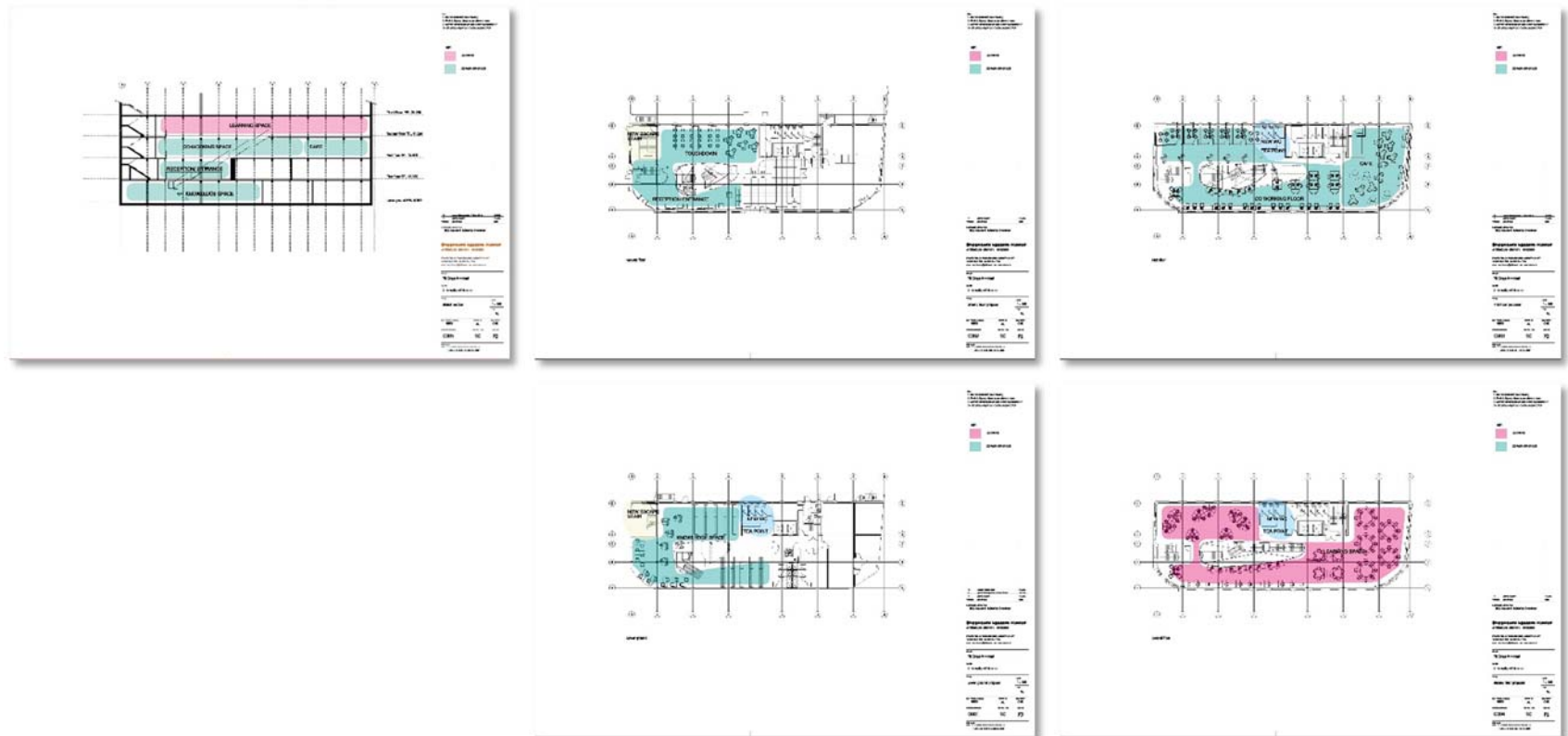
The University's outline proposals (May 2019) were reviewed by MLM Group Fire Engineering as sub-consultant to SEH. MLM's annotated versions of the University's feasibility plans were able to demonstrate that the arrangements as shown on the following pages are viable in terms of means of escape. In summary:

- *BS 9999: Code of practice for fire safety in the design, management and use of buildings* has been used rather than the Building Regulations Approved Document B, because it will enable more appropriate occupancies and travel distances
- The two main stairs (existing: one embedded in the University area, one in the common stair core) are sufficient to accommodate the occupancies shown on the University's feasibility drawings, and are likely to accommodate higher numbers (possibly double or more) if the exit doors have increased widths (from existing 850mm to 1050mm) and if the staircases are lobbied at each level.
- This assessment allows for the shared use of the escape stairs with the three upper office floors, based on the occupancies given for those floors in the Rolf Judd document 'Means of Escape Study'.
- On the lower ground floor it is currently assumed that an additional exit route will need to be provided (as was already proposed in the University's feasibility drawing). The previous iteration of the proposals included a lecture theatre, (which is no longer part of the University's brief) and it was assumed that the lecture theatre occupants would escape simultaneously in two directions.
- On the lower ground floor the rear existing external staircase can be considered useful as a means of escape, even though it is narrow. (Building Regulations may require shelter to be provided over to avoid slipping in rainy / frosty conditions.)
- It will be possible to link all of the four University floors together with an access staircase /atrium, as simultaneous evacuation of the building is assumed (but the atrium would need to be at least 4.5m from any exit to a protected means of escape route).
- Fire ratings of critical building elements will need to be confirmed in due course by the landlord (but reasonable assumptions were noted by MLM on their annotated drawings, and the building is likely to be compliant). These elements are: walls separating different tenancies (between UoL and plant/ ancillary facilities on lower ground, and between UoL and common reception on ground floor); and the glazing and other unprotected areas adjacent to the external fire escape routes.

Overall, the MLM review confirmed that the UoL proposed use is feasible and that an enhanced design using a stair / atrium linking all of the University floors is possible.

### Current proposals (illustrative)

On the following pages are floor plans and a section illustrating the likely arrangement of types of University space within the building.

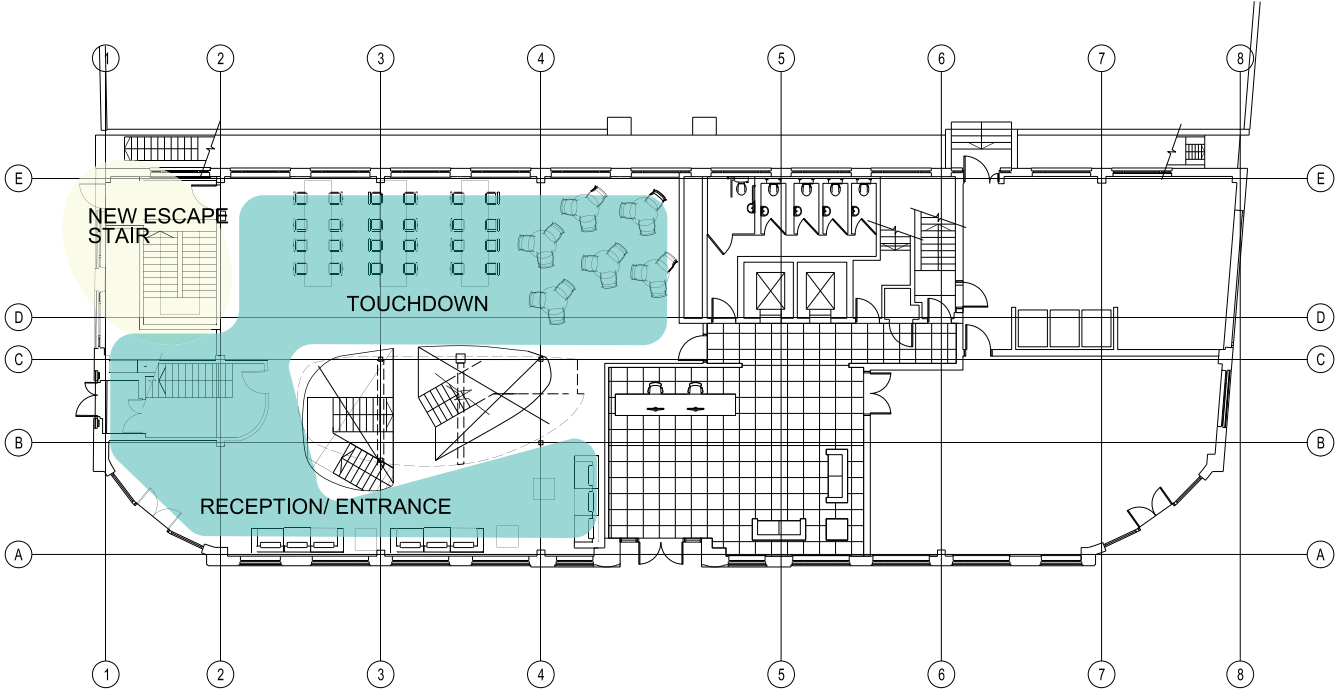


notes  
1. Do not scale from this drawing  
2. Work to figured dimensions where shown  
3. Confirm dimensions on site before fabrication or construction - report any discrepancies to CA

KEY

LEARNING

CO-WORKER SPACE



Ground floor

P1	Drawing originated	11/07/19
VERSION	DESCRIPTION	DATE
SUITABILITY DESCRIPTION		
(SX) Document_Suitability_Description		

Shepherd Epstein Hunter  
architecture planning landscape

Phoenix Yard, 65 Kings Cross Road, London WC1X 9LW  
tel: 020 7841 7500 fax: 020 7841 7575  
email: architecture@seh.co.uk web: www.seh.co.uk

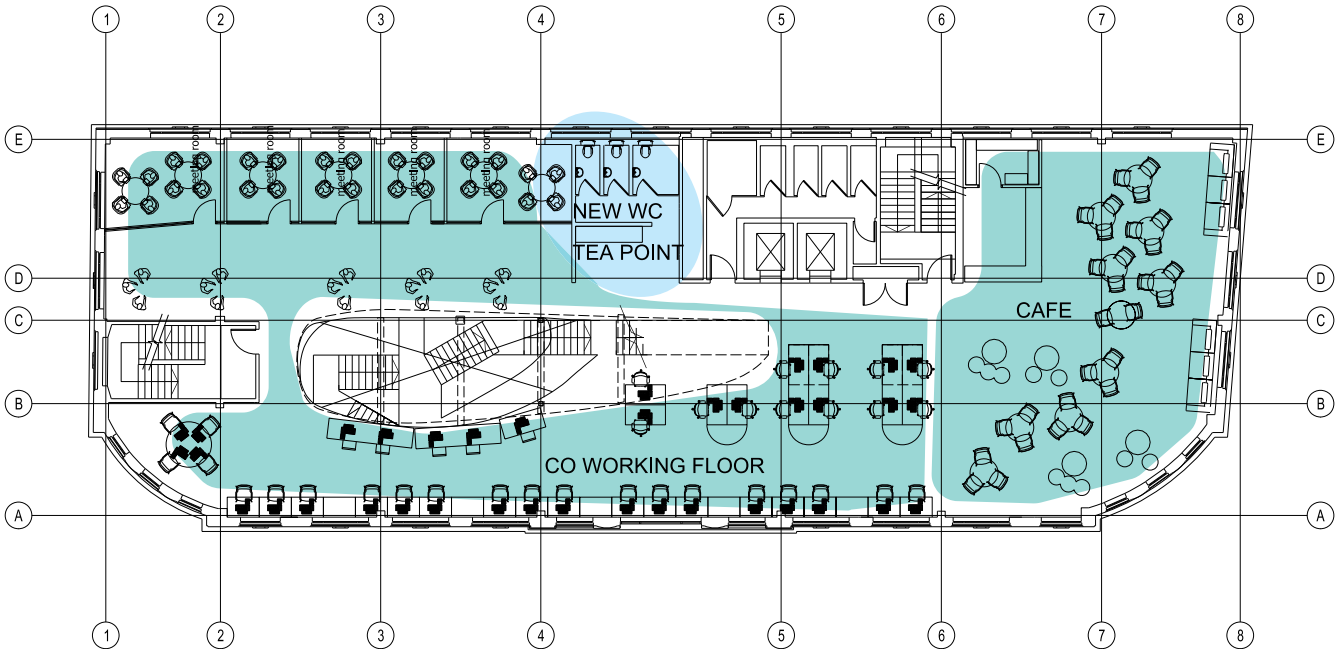
PROJECT		
70 Grays Inn road		
CLIENT		
University of Lincoln		
TITLE		SCALE
Ground floor proposal		1 : 100
		SIZE
		A1
SEH PROJECT NUMBER	DRAWN BY	CHECKED BY
19059	AL	CHK
DRAWING NUMBER	STATUS CODE	VERSION
00020	S0	P1

- notes
1. Do not scale from this drawing
  2. Work to figured dimensions where shown
  3. Confirm dimensions on site before fabrication or construction - report any discrepancies to CA

KEY

LEARNING

CO-WORKER SPACE



First floor

P2	Updated following receipt of historic SE info	19/07/19
P1	Drawing calculated	11/07/19
VERSION	DESCRIPTION	DATE
SUITABILITY DESCRIPTION		
(SX) Document_Suitability_Description		

**Shepherd Epstein Hunter**  
architecture planning landscape

Phoenix Yard, 65 Kings Cross Road, London WC1X 9LW  
tel: 020 7841 7500 fax: 020 7841 7575  
email: architecture@seh.co.uk web: www.seh.co.uk

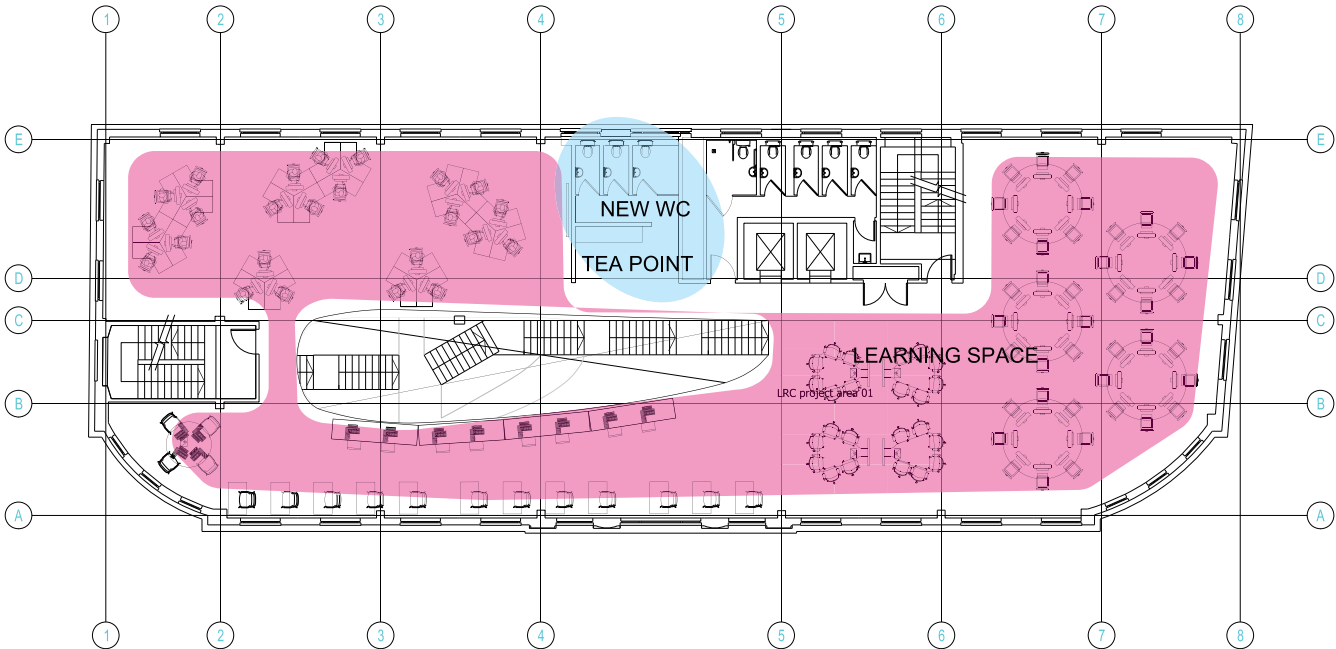
PROJECT		
70 Grays Inn road		
CLIENT		
University of Lincoln		
TITLE		SCALE
First floor proposal		1 : 100
		SIZE
		A1
SEH PROJECT NUMBER	DRAWN BY	CHECKED BY
19059	AL	CHK
DRAWING NUMBER	STATUS CODE	VERSION
000311	S0	P2

- notes
1. Do not scale from this drawing
  2. Work to figured dimensions where shown
  3. Confirm dimensions on site before fabrication or construction - report any discrepancies to CA

KEY

LEARNING

CO-WORKER SPACE



Second floor

P1	Drawing originated	11/07/19
VERSION	DESCRIPTION	DATE
SUITABILITY DESCRIPTION		
(SX) Document_Suitability_Description		

Shepherd Epstein Hunter  
architecture planning landscape

Phoenix Yard, 65 Kings Cross Road, London WC1X 9LW  
tel: 020 7841 7500 fax: 020 7841 7575  
email: architecture@seh.co.uk web: www.seh.co.uk

PROJECT		
70 Grays Inn road		
CLIENT		
University of Lincoln		
TITLE		SCALE
Second floor proposal		1 : 100
		SIZE
		A1
SEH PROJECT NUMBER	DRAWN BY	CHECKED BY
19059	AL	CHK
DRAWING NUMBER	STATUS CODE	VERSION
000412	S0	P1

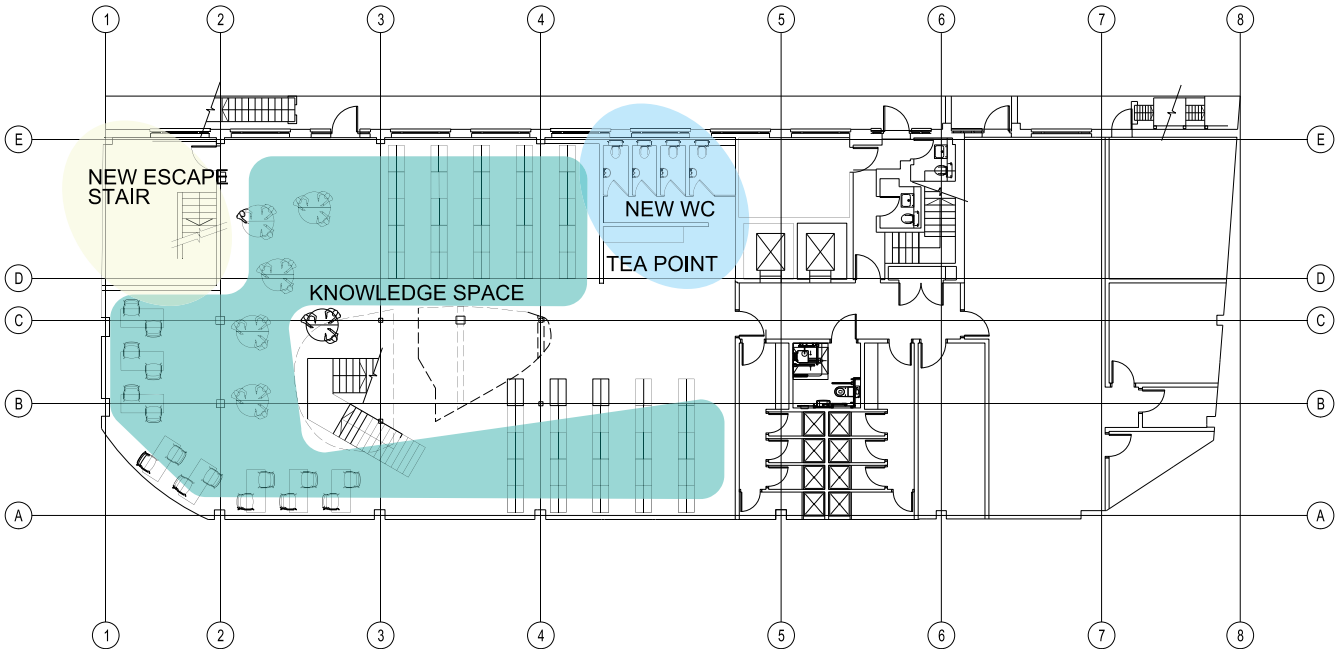
FILE NAME  
PROJECT CODE <ORIGINATOR> <NAME> <LEVEL> <TYPE> <40%> <SHEET NO.>  
19049-SEH-00-02-DR-A-0004

notes  
1. Do not scale from this drawing  
2. Work to figured dimensions where shown  
3. Confirm dimensions on site before fabrication or construction - report any discrepancies to CA

KEY

LEARNING

CO-WORKER SPACE



Lower ground

P3	Indicative furniture added	19/07/19
P2	Updated following receipt of Historic SEI info	19/07/19
P1	Drawing originated	11/07/19
VERSION	DESCRIPTION	DATE

SUITABILITY DESCRIPTION  
(SX) Document\_Suitability\_Description

Shepherd Epstein Hunter  
architecture planning landscape

Phoenix Yard, 65 Kings Cross Road, London WC1X 9LW  
tel: 020 7841 7500 fax: 020 7841 7575  
email: architecture@seh.co.uk web: www.seh.co.uk

PROJECT		
70 Grays Inn road		
CLIENT		
University of Lincoln		
TITLE		SCALE
Lower ground proposal		1 : 100
		SIZE
		A1
SEH PROJECT NUMBER	DRAWN BY	CHECKED BY
19059	AL	CHK
DRAWING NUMBER	STATUS CODE	VERSION
000113	S0	P3

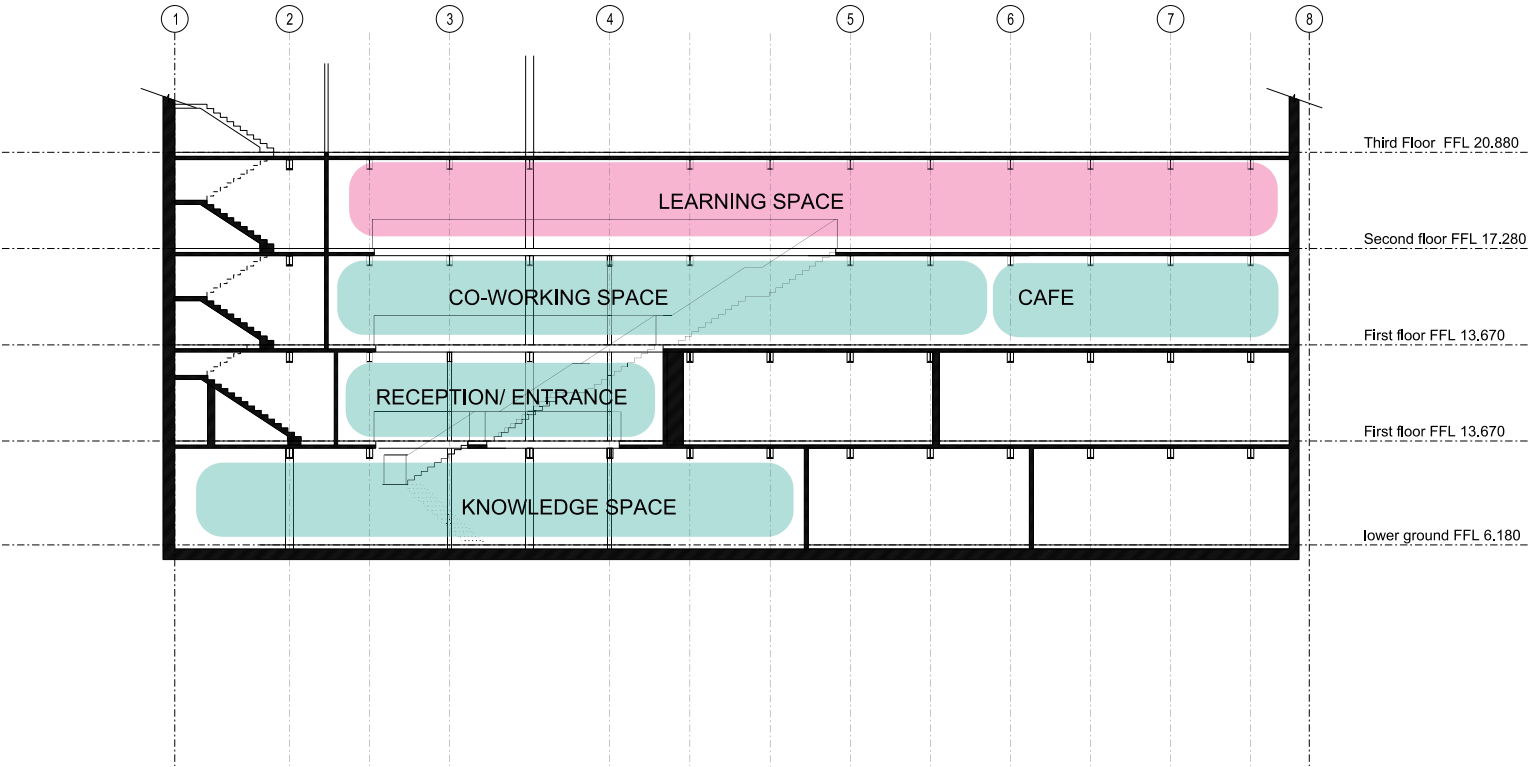
FILE NAME  
PROJECT CODE <ORIGINATOR><NAME><LEVEL><TYPE><40%><SHEET NO.>  
19049-SEH-00-LG-DR-A-0001

notes  
1. Do not scale from this drawing  
2. Work to figured dimensions where shown  
3. Confirm dimensions on site before fabrication or construction - report any discrepancies to CA

KEY

LEARNING

CO-WORKER SPACE



P2	Updated following receipt of historic SE info	19/07/19
P1	Drawing generated	11/07/19
VERSION	DESCRIPTION	DATE
SUITABILITY DESCRIPTION		
(SX) Document_Suitability_Description		

Shepherd Epstein Hunter  
architecture planning landscape

Phoenix Yard, 65 Kings Cross Road, London WC1X 9LW  
tel: 020 7841 7500 fax: 020 7841 7575  
email: architecture@seh.co.uk web: www.seh.co.uk

PROJECT		
70 Grays Inn road		
CLIENT		
University of Lincoln		
TITLE		
Sketch section		
SCALE		1 : 100
SIZE		A1
SEH PROJECT NUMBER	DRAWN BY	CHECKED BY
19059	AL	CHK
DRAWING NUMBER	STATUS CODE	VERSION
000514	S0	P2

FILE NAME  
PROJECT CODE <ORIGINATOR><NAME><LEVEL><TYPE><4004><SHEET NO.>  
19049-SEH-00-ZZ-DR-A-0005

## WC provision in relation to occupancy

Our assessment of current provision and future requirements, in summary, suggests that:

- on the lower ground and ground floors no additional WC provision may be required – the facilities being provided by the landlord will be sufficient
- on first and second floors a total of eight additional WCs may be required (we suggest four on each of these two floors).

To an extent the level and type of provision will be dependent upon the final uses and layouts which are agreed with the University. Our current calculation of toilet provision is provided as follows:

There is an additional facility located in the proposed commercial café on the ground floor; this is not included in any capacity calculations.

The provision is assumed to be ‘superloos’ throughout, i.e. self-contained unisex facilities including a wash hand basin. This could be reviewed, however, (which may result in a more space-efficient provision) depending on University policy.

### ***WC Provision for lower ground and ground floor***

In Issue 1 we had allowed for lecture and seminar rooms on the ground and first floors, this is no longer a requirement of the brief. For Issue 1 the estimated occupancy of the ground and first floor was 225 persons with a 50/50 gender split. Referring to BS 6465-1:2006 + A1:2009 Sanitary installations – Part 1, we had assumed that the University facilities for teaching were classed as assembly buildings where WC use is not concentrated in intervals and offices/business spaces are classed as workplaces. Provision for Assembly Buildings where WC use is not concentrated in intervals is given as the table on the left, but this may no longer be relevant as the lecture theatre previously under consideration is no longer part of the brief.

Section 5.3.3 of BS 6465-1 states that where washbasins are included within the WC compartment, WC provision should be increased by 25% i.e. one additional WC per four WCs or part thereof should be supplied. On the current provision of 8 WCs on the ground and lower ground (6 WCs plus 25%) we estimate an occupancy of 150 female students and 250 male students (assuming notional allocation of 5 WCs for females and 1 for males). Therefore there is adequate provision for the ground and first floors.

These assumptions and the resulting occupancy figure will be further reviewed with the University in subsequent iterations of the design.

Table 8 Minimum provision of sanitary appliances for assembly buildings where WC use is not concentrated in intervals

Sanitary appliance	Male visitors	Female visitors
WC	1 per 250 males; plus 1 for every additional 500 males or part thereof;  Male WC provision should be half female WC provision where urinals are not used	2 for up to 40 females; 3 for up to 70 females; 4 for up to 100 females; plus 1 for every additional 50 females or part thereof
Urinal	1 per 50 males up to 100 males; plus 1 for every additional 100 males or part thereof	–
Washbasin	1 per WC and in addition, 1 per 5 urinals or part thereof	1, plus 1 per 2 WCs or part thereof
Cleaners' sink	As 5.5	

*NOTE Where the building type or form of entertainment is subject to an entertainment licence, the scale of provision and the location and arrangement of the toilets needs to be agreed with the licensing authority.*



### ***WC Provision for first and second floor***

We have assumed that the first and second floors proposed uses of academic, teaching and business start-up spaces are classified as workplaces. We have estimated an occupancy of 301 across the two floors (112 on the first floor, 93 on the second floor) using the proposed layouts provided by UoL.

BS 6465-1 Provision for workplaces is given as the table on the left, below.

Where unisex toilets are provided, provision can be calculated on 100% of the population and the number of toilets does not need to be increased as recommended by 5.3.3 (6.4.1 e)).

With the current provision of 10 WCs on the first and second ground we estimate a maximum occupancy across the two floors of 150.

To accommodate the proposed UoL occupancy of 301, an additional 7 WCs are required. The additional 7 WCs would raise the maximum occupancy to 325 across first and second floor.

All occupancy figures provided above are subject to further design development and confirmation by the University in due course.

Table 3 **Minimum scale of provision of sanitary appliances for staff toilets in offices, shops, factories and other non-domestic premises used as place of work**

Sanitary appliances for female staff, and for male staff where urinals are not installed		
Number of persons at work	Number of WCs	Number of washbasins
1 to 5	1	1
6 to 15	2	2
16 to 30	3	3
31 to 45	4	4
46 to 60	5	5
61 to 75	6	6
76 to 90	7	7
91 to 100	8	8
Above 100	8, plus 1 WC and washbasin for every unit or fraction of a unit of 25 persons	

## The central stair proposal

To provide the University with the required occupancy levels, we conclude that the following are required:

- new escape stair from the lower ground to ground floor level
- additional WC facilities.

To meet the University's likely aspirations for a London Business School campus building which is attractive and welcoming, and which encourages interaction and collaboration, we suggested in Issue 1 that a key element of the design should also be:

- a new open stair linking all four floors (possibly also with a dedicated University lift).

This suggestion has been adopted and enhanced by the University, with the idea of a new stair running through the middle of the plan adjacent to the central structural spine beam, visually and socially connecting all floors.

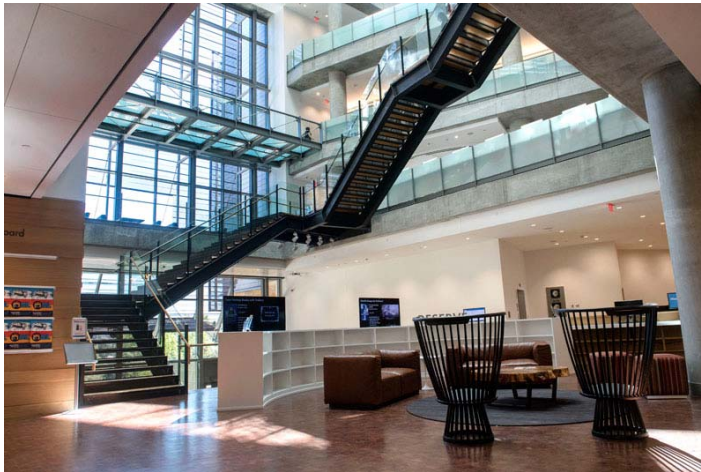
This supersedes a number of alternative staircase locations and arrangements that have also been explored.

Very basic hand sketches were provided in Issue 1 of this report to explore how the design could be developed.

These ideas have now been developed further, as illustrated in the SEH plans shown on earlier pages. Some examples of existing precedents are shown in the photographs on the left.

Structural advice has been provided by Edge Structures, which demonstrates that the existing structure can be adapted reasonably efficiently, and without new foundations, to provide the desired staircase arrangement.

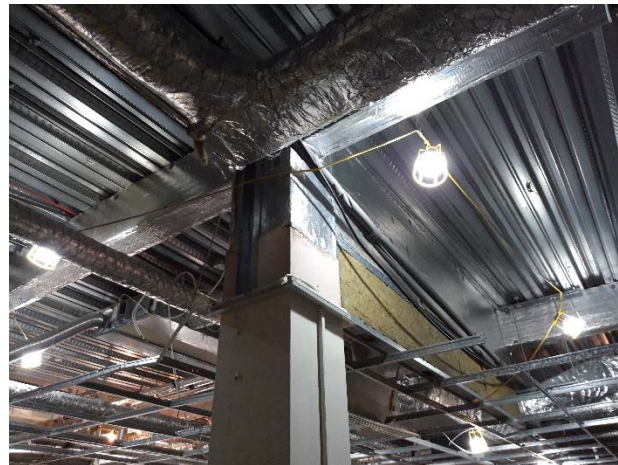
The final detailed design of the staircase and the general arrangement of the floors and ancillary accommodation is currently under discussion with the University and the landlord's agents and technical team.



## Photographs as existing

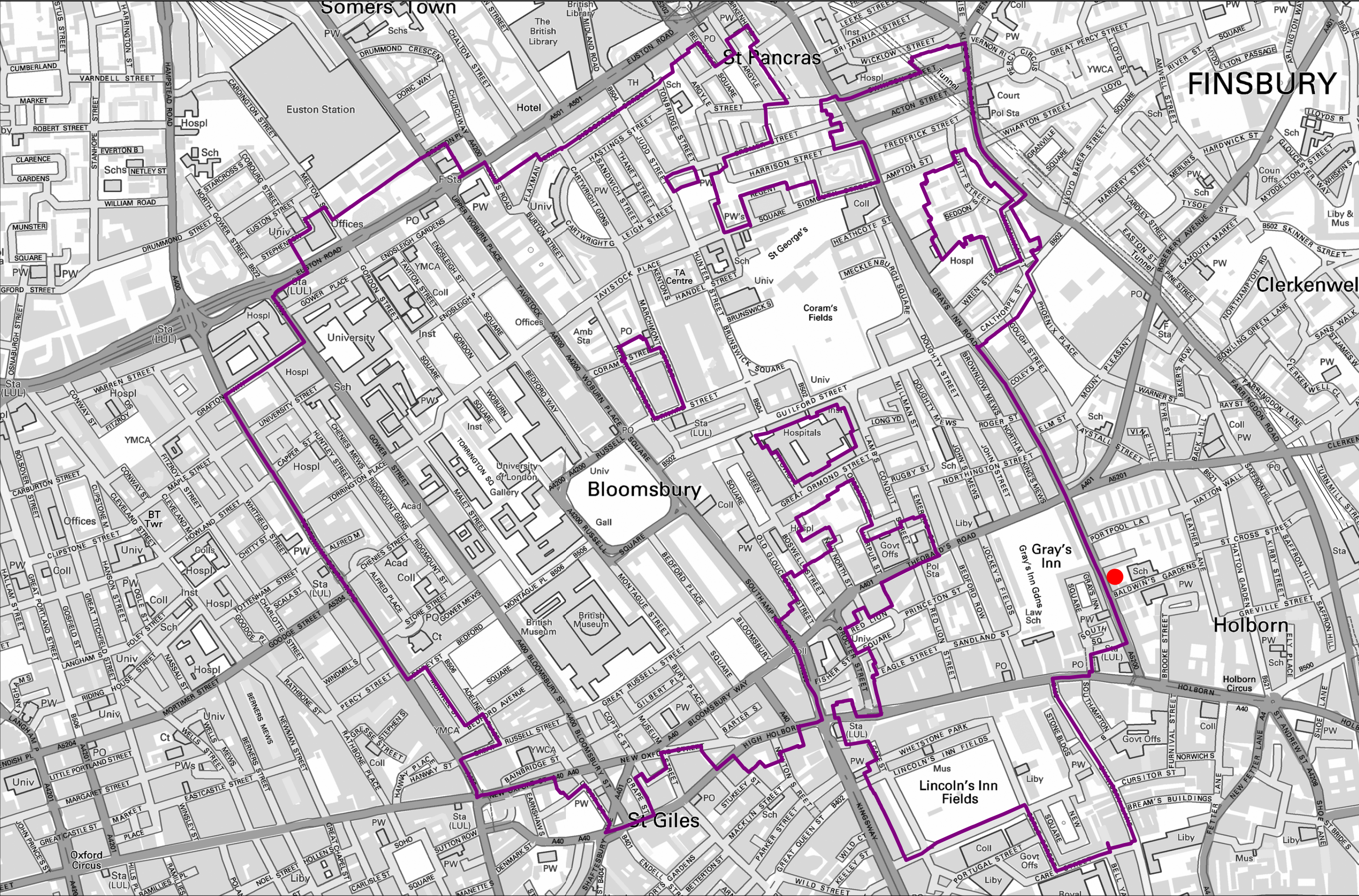








Location in context of Bloomsbury Conservation Area



Bloomsbury CA



Reproduced from the O.S. map with the permission of the Controller of H.M.S.O. Licence no. LA100019726.

#Map for Internal Use Only#

Scale 1: Not Usable Scale

Print Date: 10/05/2013

Printed By: L.Small





# University of Lincoln

**London Campus - 70 Grays Inn Road  
Design and Access Statement and  
Capacity /strategy assessment**



**Shepherd Epstein Hunter**

THIRD ISSUE 301019