

# Case Name: URS Building, Whiteknights Campus, University of Reading

## Case Number: 1433722

## Background

Historic England has been asked to assess whether a Certificate of Immunity from listing should be issued for the Faculty of Urban and Regional Studies (URS) Building. The request constitutes a 'fast-track listing' assessment under our Enhanced Advisory Service.

## Asset(s) under Assessment

Facts about the asset(s) can be found in the Annex(es) to this report.

Annex	List Entry Number	Name	Heritage Category	HE Recommendation
1	1435127	URS Building, including the paved surface of Chancellors Way and raised edges of the ornamental pool, University of Reading	Listing	Add to List

## Visits

Date	Visit Type
31 March 2016	Full inspection

## Context

The URS Building stands within the campus of Reading University. It is not in a conservation area and is not locally listed. Prior to the request to consider the URS building for a Certificate of Immunity two applications to list the building had also been received (refs 1433124 and 1433044).

## Assessment

### CONSULTATION

The building's owner and the COI applicant, both the University of Reading; their agent, Turley Associates; the local planning authority, Reading Borough Council; the Berkshire Historic Environment Record (BHER); the Twentieth Century Society (C20); and an interested third party, were provided with copies of our consultation report.

The BHER, and the third party confirmed that they had no comments to make, and the C20 did not respond. Both the C20 and the third party had however previously expressed their view that the building merits listing.

Turley Associates responded on behalf of the University of Reading. This response supplements their report submitted with the COI application. Their report is largely factual but notes their view that the building does not have townscape, or group, value, and that the interior spaces are not grand and are mostly utilitarian in character. The consultation response offers some minor factual clarifications, which we have noted in the relevant sections of our report. The response also raises issues relating to the building's function, and by extension, questions its architectural success. Specific points raised include:

- \* that the position of the building's main entrance is not readily legible in its architecture;
- \* that way-finding is complex as a result of the two parallel spine corridors, and that the corridors are narrow;
- \* that the orientation and layout of the building results in overly hot south-facing rooms, and poor light quality in north-facing rooms;
- \* roof materials and internal acoustics are such that rain can cause noise disturbance, making teaching difficult.

Finally, the response asks that if we are minded to recommend the building for listing, that consideration is given to using the provisions made in the Enterprise and Regulatory Reform Act (2013) to identify those parts of the building that are not of special interest and therefore do not form part of the listed building.

#### HE Response:

Some of the criticisms made of the building have a level of validity: the entrances to the building are understated, and there are no grand foyers or show-piece interiors. That said, the interiors are carefully and solidly detailed, with the building's structure being the focus of its expression both internally and externally. The corridors could be argued to be narrow, but their parallel arrangement means that each only serves a single row of rooms, and the top-lit spaces and glazed screens where the corridors link, bring pockets of light and space into the core of the building. Because of the size and length of the building, directional signage is likely a necessity, but it is difficult to understand how the building's layout makes way-finding particularly complex. It is accepted that solar gain may be a problem, as, it seems, is the noise from rain on the roof. Solar gain can be an issue in some post-war buildings, where the issues associated with the extensive use of glass are not fully resolved, but as with the problem of the noisy roof, though an inconvenience, it is not something which would automatically undermine the listability of a building. New materials and technologies can often be successfully used retrospectively in listed, and unlisted, buildings to mitigate against such problems.

#### DISCUSSION

The URS Building is assessed against the Principles of Selection for Listing Buildings (DCMS March 2010) and our Selection Guide: Education Buildings (April 2011). University buildings represent some of the most innovative and finely construed projects of the post-war period and have been the subject of considerable research. In addition to our the Selection Guide, we have referred to the internal document 'Guidance notes on the selection of post-1939 educational buildings for listing' which formed the basis for the assessment of post-war university buildings in the 1990s when these buildings were first eligible for listing. In assessing the URS Building we have looked at the quality and purpose of the design, at innovation and influence, and at the degree of physical alteration. We have also considered it against other university buildings designed by the practice Howell, Killick, Partridge and Amis (HKPA), and their contemporaries. The assessment is informed by increased understanding of post-war university buildings, and by the HKPA monograph by Sherban Cantacuzino (1981) and draft text from the upcoming monograph by Geraint Franklin, which have provided a detailed analysis of the practice.

Along with their Faculty of Art & Design for the Middlesex Polytechnic (demolished) and the swansong of Chaucer College, Canterbury (1991-2), the URS Building comes at the end of HKPA's impressive sequence of educational buildings. It also comes towards the end of the boom in post-war university building more generally. What is notable however, is that rather than being a summation or a recapitulation of HKPA's 1960s work, the building expresses elements of the practice's architectural philosophy while being an entirely idiosyncratic and innovative response to the particulars of the brief.

The spine layout may have arisen from the suggestion, raised early in briefing but not formalised, that the building should be capable of extension. However central corridor plans were frequently adopted in commercial and educational buildings as a cost-efficient solution. Whereas in other hands the corridors could be mean, feature-less, artificially lit spaces, at the URS Building, circulation takes up a sizable 35% of the floor area, and the generous, top-lit stairwells and light-wells reflect the architects' belief that moving around a building should be a pleasant and sociable experience. Other HKPA examples include the curved Strathcona Building at Birmingham University, 1961-64, listed Grade II, and their Wolfson and Rayne buildings at St Anne's College, Oxford, 1960-69, listed Grade II, but the idea of loading a central spine with accommodation that projects out and cuts in to either side, creating a linear plan of dynamic cross section, coupled with natural light brought into the centre of the building, is novel in HKPA's oeuvre.

The expressed structure is a typical feature of HKPA's work, recalling their interest in oriental timber construction and the 'Elementarist' architecture (associated with the De Stijl movement) of Cornelis van Eesteren and Gerrit Rietveld. But whereas the practice's North House, Bromley, Kent of 1959-61, for

example, was an intricate essay in timber-framing, at Reading the trabeated post-and-lintel aesthetic is translated to reinforced concrete and amplified to a monumental scale, creating a distinctive and extrovert aesthetic. It is a didactic building, showing how structural loads are transmitted; this was appropriate given that Construction Management was amongst the courses taught here. The beams are also exposed internally, a key HKPA characteristic, but these become shallower or forked according to their structural role. The timber detailing to the stairwells are similarly in HKPA's consistent style and redolent of simple Japanese-inspired design. The key interior spaces are the two projecting lecture theatres and the Junior Common Room (JCR) at the eastern end of the building, plus the double-height ground floor printing hall, where the College of Estate Management's (CEM) correspondence courses were printed and packaged. This is a unique feature in a major post-war building for higher education, and of course a requirement for an institution for which so many students were distance learners.

HKPA's work in Oxford and Cambridge emphasises the continuity of the urban fabric, but the siting of the Reading building (along with its distinctive silhouette) makes it a marker building in this dispersed and somewhat undistinguished campus. The hard landscaping of pavements and pressed brown tiles extends the architectural aesthetic and colour scheme into the immediate surroundings, softened by surrounding cedar and copper beech trees and the ornamental pool with canted brick surround at the west end.

The building has few close parallels either within HKPA's oeuvre, or amongst the cannon of high quality university buildings to emerge in the post-war period. The dynamic, stepped cross section developing from a circulation spine can be related to 1960s thinking about 'indeterminate' architecture and certain megastructures such as Cumbernauld town centre (which also straddles a route). The dramatic massing is a characteristic of the heavy concrete style of the 1960s, sometimes loosely categorised as Brutalism: see, for example, the Brunel University Lecture Theatres (1965-7, Sheppard, Robson & Partners, Grade II) or the New Museums Site, Cambridge (Arup Associates, 1971-4). More unusual is the overtly demonstrative, and massive, post-and-lintel structure. Many buildings of the period revealed construction by projecting out beam ends or exaggerating structural connections (such as the Minerals and Metallurgy Building, Birmingham University, Arup Associates, 1964-6, Grade II or HKPA's Weston Rise housing, Islington, 1965-8), but few buildings are so painstakingly detailed to show how each piece fits together, and do so to such powerful effect.

Criticisms made of the building: that its entrance is not clearly announced, and that the interiors are utilitarian, have some validity. The interiors are carefully and solidly detailed, their virtues are simple ones, and beyond the central spine, within the rooms themselves, it is generally only the exposed structural elements of the building which are of note. However, it would be unfair to compare this building with HKPA's more generously funded Oxbridge work; at Reading a limited budget has been made to work hard. The building is rigorous and functional, without pretension or grand gesture, and the very low level of alteration is testament to its qualities. It is the extraordinarily expressive and transparent use of structure to enclose and define space, the innovative loading of the central spine with a variety of accommodation, and the almost post-modern exaggeration of the joints, which give the building its drama, its 'wit and virtuosity' (Amery). The URS Building stands comfortably alongside the best post-war university buildings, and it is therefore recommended for listing at Grade II.

In recommending the extent of designation we have considered whether powers of exclusion under s.1 (5A) of the 1990 Act are appropriate, and consider that they are. While the overall planning of the building forms part of its special interest, the cellular division of rooms to either side of the central spine, does not. For this reason it is proposed that the non-structural party walls between adjacent rooms are excluded from the listing. This is made clear in the proposed List entry.

## CONCLUSION

After examining all the records and other relevant information, and having carefully considered the architectural and historic interest of this case, the criteria for listing are fulfilled, and a Certificate of Immunity from listing should not be issued.

## REASONS FOR DESIGNATION DECISION

The URS Building at Reading University, 1970-72 by HKPA, is recommended for listing at Grade II for the following principal reasons:

- \* Architectural interest: the expressive use of structure to enclose space, which references traditional Japanese construction, and the playful exaggeration of the post and lintel joints, give the building drama, wit and virtuosity;
- \* Planning interest: the practical, cost efficient, central corridor plan is innovatively re-imagined to bring natural light into the core of the building and to create a linear plan of dynamic cross section;

\* Architects: the building comes towards the end of HKPA's impressive sequence of educational buildings; expressing elements of this important practice's architectural philosophy while being an idiosyncratic and creative response to its brief.

**Countersigning comments:**

Agreed. HKPA were one of the foremost British architectural practices of the post-war period, recognised by a number of their buildings, many educational, being on the statutory List. The URS building is bold, expressive and imaginative, meeting the criteria for listing at Grade II. SG, 30/05/16.

**Annex 1****List Entry****List Entry Summary**

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

**Name:** URS Building, including the paved surface of Chancellors Way and raised edges of the ornamental pool, University of Reading

**List Entry Number:** 1435127

**Location**

University Of Reading, Whiteknights, Reading, RG6 6UR

The building may lie within the boundary of more than one authority.

County	District	District Type	Parish
	Wokingham	Unitary Authority	Earley

**National Park:** Not applicable to this List entry.

**Grade:** II

**Date first listed:**

**Date of most recent amendment:**

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**Legacy System Information**

The contents of this record have been generated from a legacy data system.

**Legacy System:** Not applicable to this List entry.

**Legacy Number:** Not applicable to this List entry.

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**Asset Groupings**

This List entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

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**List Entry Description****Summary of Building**

University faculty building, 1970-72, by Howell, Killick, Partridge and Amis, built for the Faculty of Urban and Regional Studies, including the College of Estate Management (CEM).

**Reasons for Designation**

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## History

The post-war expansion of higher education was one of the greatest achievements of the period, with universities growing greatly in number and in size. While university building of the 1950s got off to an unadventurous start, the turn towards Modernism swiftly followed, and from the late part of the decade onwards, universities became the country's most ambitious architectural patrons. Some of the resultant buildings have come to be regarded as the best works of the period's most eminent architects, and a number are listed.

Reading University's post-war expansion was facilitated by its acquisition of Whiteknights Park, a 300 acre estate on the edge of town, with the first new building opening on the site in 1957. The size of the site enabled the university to attract other academic bodies, and the commission for a new building to house the Faculty of Urban and Regional Studies (URS) was prompted by the absorption of the College of Estate Management into the faculty in June 1967. The College of Estate Management (CEM) was founded in Kensington in 1919 by the Auctioneers' and Estate Agents' Institute to train land surveyors and estate managers in the 'profession of the land'. By 1965 it was looking for greater control over its degree courses than was possible under the aegis of the University of London and hence, after extended negotiations, it joined the faculty at Reading (although continues to remain a legally separate institution).

The architectural practice of Howell Killick Partridge and Amis (HKPA) were commissioned to design the new faculty building, with Stanley Amis the partner in charge (not John Partridge, as sometimes mistakenly attributed). The engineering was devised with the practice's regular collaborator, Frank Newby, of Felix Samuely and Partners. Construction started in November 1970, and the building was occupied in September 1972. The University offered the land, but the University Grants Committee (which from the early 1950s was providing almost 65 per cent of funding for university expansion) was unable to include the project in its 1967-72 quinquennial programme. The building's cost of £667,000 (equivalent to £8.5m in 2016) was met instead through the CEM's reserves, a fundraising appeal, and the sale of its buildings in Kensington. The building was ceremonially handed over from the CEM to the University in September 1973. HKPA also designed Wells Hall, a hall of residence for students of the Faculty.

The URS Building is one of the last major university works by HKPA. William Howell (1922-74), John Killick (1924-71), John Partridge (1924-) and Stanley Amis (1924-) met in 1950 at the architect's department of the London County Council, where they designed the acclaimed Roehampton Lane estate (now known as Alton West, parts of which are listed at Grade II and II\*). Several private commissions and competition entries – notably their second-placed entry of 1959 for Churchill College, Cambridge - launched them into practice.

HKPA went on to develop a new architectural idiom for the expanding higher education sector. At Cambridge, Howell designed the University Centre (listed Grade II), and new buildings for Downing, Darwin and Sidney Sussex Colleges. At Oxford, their Wolfson and Rayne Buildings for St Anne's College and the Hilda Besse Building at St Antony's College (all listed at Grade II) were overseen by John Partridge. In addition the firm designed Acland Burghley School for the London County Council (Grade II), the Ashley and Strathcona Buildings at Birmingham University (both Grade II) and the Mathematicians' Houses at Warwick University (Grade II\*). Aside from the educational commissions, HKPA's workload ranged from private and public housing to court houses and theatres, the latter including the Young Vic, London; Christ's Hospital Arts Centre, Sussex (Grade II\*); and the Albany, Deptford.

## Details

University faculty building, 1970-72, by Howell, Killick, Partridge and Amis, built for the Faculty of Urban and Regional Studies, including the College of Estate Management (CEM).

**MATERIALS:** the building is composed of an exposed reinforced concrete frame finished in ochre-coloured cement; the frame is infilled with pre-cast concrete cladding panels of brown Thames Valley aggregate, aluminium panels, and aluminium windows. The low-pitched roofs are also covered with aluminium sheet.

**PLAN:** the building forms the south side of an open space enclosed by Whiteknights House to the west, the Humanities & Social Studies Faculty to the north and the Library to the east. The building has a long, narrow, footprint, which runs broadly east to west; the north elevation faces out onto the open space. The building has four floors, plus a basement and a partial fifth floor with plant room over. The plan is centred on a 120m long top-lit spine, which forms the principal internal circulation space. Rooms, lecture theatres and teaching spaces, project irregularly out from the spine, and to the north they project over a wide double-height, brick-paved, pedestrian walkway known as Chancellor's Way.

The circulation spine takes the form of a double corridor sandwiching a central core of staircases, lobbies, lifts and light-wells. Lecture theatres and tutors' rooms are at first floor level with seminar and teaching rooms above. The ground floor is reserved for the printing and administration of the CEM's postal courses. With the exception of a small ground-floor infill extension, alterations are limited to minor internal rearrangements of partitions, to subdivide, or open up, rooms in discrete areas of the building.

**EXTERIOR:** the building's elevations are formed of irregular projections, braking up its length with vertical and horizontal cut-aways to bring daylight into the corridors. The exposed structural frame creates a strong bay rhythm, and the joints of post and beam are exaggeratedly-expressed, with the fork-ended beams resting on, or supporting, the shouldered ends of the columns, giving a playful emphasis to the building's rational construction.

The structure is made to work hard, with beams post-tensioned for large spans and cantilevers. The most dramatic projection is to the north, over Chancellor's Way; the supporting structural columns forming a colonnade. The principal entrances, each of which gives access to a stair, are arranged along the north elevation, but the heavy modelling is a feature of both north and south elevations. The two end elevations to east and west give the appearance that the building has been sliced like a stick of rock, to reveal the cross-section of the structure. At both ends there are also projections – to the east a service tower, and to the west the central spine advances forward at first, second and third floor, projecting out over a square, ornamental, pool.

The building's roofs are visible as shallow, mono-pitch gable ends from the east and west ends; built-in box gutters terminate in projecting spouts to carry water away from the building. The proportions and glazing pattern of the windows vary depending on the rooms they serve, and some are more architecturally expressed, forming shallow oriels.

Chancellor's Way, which runs along the north elevation of the building, is paved with brown brick pavements. The route steps up near the building, forming a continuous shallow podium along its length. To the west, the pavements wrap round to side of the building and form a raised edge to the square pool beneath the projecting end of the building.

The building's expressed structure is a typical feature of HKPA's work, recalling their interest in oriental timber construction. However here, the trabeated post-and-lintel aesthetic is translated to reinforced concrete and amplified to a monumental scale, creating a distinctive and extrovert aesthetic. It is a didactic building, showing how structural loads are transmitted; this was appropriate given that Construction Management was amongst the courses taught here.

**INTERIOR:** the building's structure is exposed internally as it is externally, with the beams tapering in depth and forking as the engineering requires. The top-lit stairwells and light-wells are enclosed in timber and glass screens, with fin-like vertical mullions, allowing light through the building, and creating a sense of structural transparency. The timber detailing is in HKPA's consistent style and redolent of simple Japanese-inspired design. The wells have pitched glass lanterns over them, with the exception of one well, which is open to the sky. The dog-leg stairs are self-supporting, with balustrades of painted tubular steel and timber panel. Internal walls are of painted concrete block, and doors are mainly flush-panel or have two glazed panels, although a number are later replacements.

The two first-floor raked lecture theatres are double-height spaces, as is the printing room on the ground floor. Timber and glass screens, matching those used elsewhere, create a partition between the printing room and the offices at first and second floors, again, allowing light and views to travel through the space.

Pursuant to s.1 (5A) of the Planning (Listed Buildings and Conservation Areas) Act 1990 ('the Act') it is declared that internal, non-structural, party walls between adjacent rooms are not of special architectural or historic interest.

**Selected Sources****Books and journals**

Cantacuzino, S, Howell Killick Partridge and Amis, (1981), pp. 96

Franklin, G, Howell, Killick, Partridge & Amis, (Forthcoming)

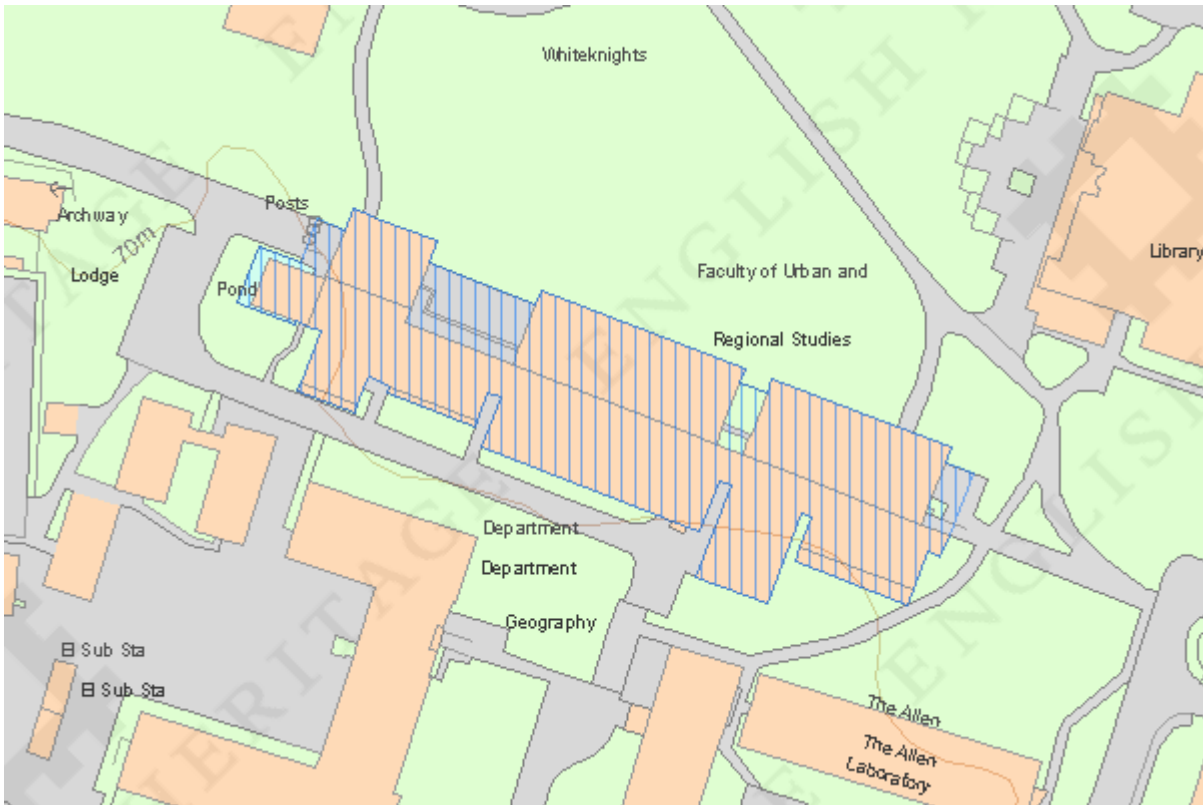
Harwood, Elain, Space, Hope and Brutalism, (2015), pp. 252-253

Pevsner, N, Bradley, S, Tyack, G, The Buildings of England: Berkshire, (2010), pp. 461



**Map**

**National Grid Reference:** SU7332671728



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The above map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF - 1435127\_1.pdf