

Architecture and Public Art

2015



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In the early 1960s Battersea College of Advanced Technology was a potential university in search of a campus and Guildford was a town in search of a university. Many people pledged support to Dr Peter Leggett, Vice-Principal of the College and subsequently the University's first Vice-Chancellor and in March 1963 Guildford Borough Council also supported the idea. The Robbins Report, published in October 1963, included proposals that Colleges of Advanced Technology should become technological universities, which added weight to the proposal. The Report suggested that a University of this size would require around 360 acres.

In March 1964 development proposals were submitted to Surrey County Council for 200 acres initially, increasing to 300, for the land immediately beneath Guildford Cathedral and at Manor Farm (later reaching the recommended 360 acres with the addition of the Research Park). In May of that year the Government approved the College's move to Guildford. George Grenfell Baines of the Building Design Partnership (BDP) was appointed Planning Consultant and his firm commissioned to design the University buildings. Lessons learned from recently built universities were included in the design.

In December 1964, the plans for the Stag Hill site were presented to a meeting of the local authorities and other groups involved and because of a number of objections a three-day public inquiry was held in October 1965. Permission was granted in January 1966 and the University was given its Charter on 9 September 1966. The decision to build on Stag Hill meant that the University would be an urban institution and a 'dynamic part of Guildford' (Planning Report, November 1964). George Grenfell Baines' plans concentrated development in the middle of the site with three 'bands of activity' – residential, social and academic – with parking largely confined to the perimeter. He envisaged a 'compact hill town clustered below the Cathedral, surrounded



Senate House Fig. 1

by trees, with an encircling wall of academic buildings'. This linear model was taken up as the preferred layout for provincial universities. The tree planting and landscaping has been immensely successful and is fully described in a leaflet, *Trees At Surrey*, produced in 2003 by Gordon Hartman, Nigel Hodge and Simon Smith.

The Government provided £3.5 million of the original £6 million capital cost and the shortfall was made up by a very successful major Appeal. Nevertheless, because of these financial constraints and the need to build quickly it is generally acknowledged that the original buildings were utilitarian rather than architecturally distinguished but even over 48 years later they remain in use and skilful refurbishments have improved their appearance. The 1960s academic buildings were designed and built with flexibility in mind. The structural module allowed for a variety of spaces to be constructed within the shell. The test of how flexible a design is can only be achieved over time.

During the past 48 years these buildings have been modified, refurbished and remodelled to accommodate high tech biolabs, teaching space, engineering labs and offices within the same style of building. They have proved to be capable of meeting the initial life cycle criteria as dictated in the original brief and design, and to be sustainable. They have featured in a number of Funding Council design guides and in *An Approach to Laboratory Building* (August 1969, Laboratories Investigation Unit). Stag Hill Residences (duplex rooms) designed by Maguire and Murray were award-winning. **SENATE HOUSE** (Fig. 1) was one of the first new buildings on campus and the clockface was a gift from Charterhouse School.



Sir Austin Pearce Fig. 2

In more recent times the campus has been transformed by the erection of landmark buildings, predominantly as the result of architectural competitions.

A tour of the present University starts at the Piazza, the new gateway for most people as they arrive. Ahead lies the **AUSTIN PEARCE BUILDING** (Fig. 3), named after Sir Austin Pearce, Pro-Chancellor from 1986 to 1993, subsequently Pro-Chancellor Emeritus until 2004. His portrait bust by Tim Beswick (Fig. 2) is on the ground floor. The building was opened on 10 July 1997 by HRH The Duke of Kent and cost £8 million. (Architects: ADP. Project Architect: Roger FitzGerald.)

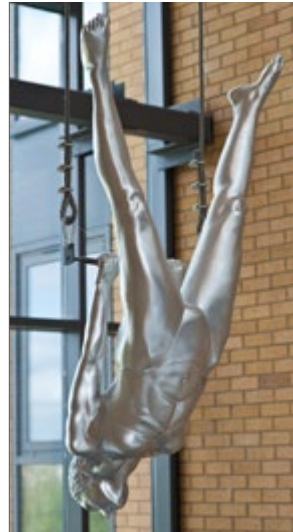


Austin Pearce Building Fig. 3

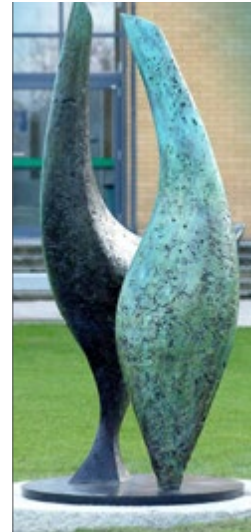


Alan Turing Fig. 5

It houses IT Services, 24 hour open access computer laboratories, the School of Law and four Lecture Theatres. Looking into the atrium we can see suspended the figure of an *Acrobat* by Natalie Staniforth (Fig. 4),



Acrobat Fig. 4



Knife Birds Fig. 6

who trained at Wimbledon College of Art, and who used to live in Guildford.

On the Piazza, in front of the building to the north, is a statue of *Alan Turing* (Fig. 5) by John W. Mills PPRBS, ARCA, unveiled by HRH The Earl of Wessex on 28 October 2004. Alan Turing is considered to be the 'Father of Computing' and early in his life lived for a time in Ennismore Avenue, Guildford.

Also on the Piazza is a bronze sculpture, *Knife Birds* (Fig. 6) by Bridget McCrum FRBS. It was inspired by African tribal knives she saw in the British Museum. It was unveiled in 2004 by Sir Idris Pearce, Pro Chancellor Emeritus, who, encouraged by the then Vice-Chancellor Professor Patrick Dowling (Portrait by June Mendoza, Fig. 32), first persuaded the University to set aside a Fund (Per Cent for Art) for sculpture and landscaping.

On the left of the Piazza is the **RIK MEDLIK**



Rik Medlik Building Fig. 7

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All The Gang Are Here Fig. 8

BUILDING, (Fig. 7) completed in 2003 at a cost of £14 million and opened on 12 October 2004 by Kim Howells, Minister of State for Lifelong Learning. 6,600m² in size and one of the most energy efficient buildings in the United Kingdom, it has a central atrium and triple glazed windows with integral blinds. Lighting levels are controlled by a sensor light on the roof and it is cooled at night by an absorption chiller utilising waste heat from the University Combined Heat & Power plant. It contains a 420-seat Lecture Theatre, the Lakeside Restaurant (open to the public for lunch) and Lakeside Coffee Shop. Materials reflect the existing architectural language found on the perimeter of the campus: gold buff bricks to the two upper storeys, strip windows and blue-grey



Geodesic Dome Fig. 9

curtain walling to stair towers. In addition, the façade treatment is enhanced with feature bays on each face and the use of pre-weathered zinc cladding to pick out key elements such as stair tower flanks and the curved wall of the lecture theatre. In 2003 the building won a Heritage Award from Guildford Borough Council for Environmental Sustainability and in 2004 the Guildford Society's Award for Best New Building.

Going towards Senate House, three bronze wolves are visible among the trees to the left of the road. They are called *All The Gang Are Here* (Fig. 8) and are by Carol Orwin SWA, a sculptor in the animalier tradition who lives in Guildford. They were installed in February 2007. Further on, the *Geodesic Dome* (Fig. 9) is to



Spine Fig. 10



Narcissus Fig. 11



Thinking Of My Future Fig. 15



Fish Fig. 12



Fish Fig. 13



Fish Fig. 14

be seen on the left. It was presented to the University in 1982 on the occasion of the Space Structures Conference hosted by Professor Zygmunt Makowski, based on the original construction by Buckminster Fuller.

Spine (Fig. 10) by Diane Maclean FRBS is sited by the lake, and was highly commended in the Guildford Heritage Awards 2005. The sculpture was made as a memorial to her father, a surgeon, and is constructed of stainless steel which changes colour according to the light and reflects the surrounding trees. It was installed in February 2004.

In front of the lake, by Senate House Square, is the stainless steel sculpture *Narcissus*, (Fig. 11) lent to the University by the internationally eminent sculptor William Pye FRBS, Hon. FRIBA, who has a house at Cutt Mill, near Puttenham. He saw the *Narcissus* by Bernini in Florence which inspired the abstract forms of the reflective stainless steel sculpture that he has made.

Also in this area are two of the three stainless steel *Fish* (Fig. 12 & 13) by Daren Greenhow. The one on a bicycle is approximately 2 metres long by 1.7 metres tall; the juggling fish on a unicycle is approximately 1.5 metres tall and is located on the steps to the left of the entrance to Senate House. The third one (Fig. 14) sits outside the George Edwards Building of the Library and is on a tricycle, the overall size being 1.8 metres long by 1.8 metres tall. The aim is to raise a smile from passers by.

Behind Senate House, in the amphitheatre, is a sculpture *Thinking Of My Future* (Fig. 15) by Zimbabwean sculptor Christopher Chipfuya, Art Conservator at the National Gallery of Harare. It has been given in memory of Sir David and Lady Orr by their daughters and was unveiled by Baroness Bottomley of Nettlestone, Pro-Chancellor, on 28 February 2010.

Nearby, on the outside of the Lecture Theatre Block, is a mural by Duncan Newton (Fig. 16) painted on three separate aluminium panels in 1980. It was commissioned by the Arts Committee under the Chairmanship of Professor Terence Lee, with the design work funded by the Arts Council and the cost of the materials met by the University.



Duncan Newton Mural Fig. 16

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Duke of Kent building Fig. 17

Continuing towards Yorkies Bridge, the distinctive grey shape of **THE DUKE OF KENT BUILDING** (Fig. 17) stands to the right of the road. (Architects: Sir Nicholas Grimshaw and Partners. Project architect: Chris Nash.) This iconic building was finished in 1999 and cost £10 million. It houses the Faculty of Health & Medical Sciences and is dedicated to HRH The Duke of Kent KG, Chancellor of the University since 1977, whose portrait by Paul Fitzgerald hangs inside (Fig. 18).



HRH The Duke of Kent Fig. 18

The building is highly visible from the town and won the Concrete Society Award in 2000 as one of the top 100 buildings in the world. The lecture theatres, study rooms and administrative offices benefit from a high degree of natural daylight filtering through from the atrium as well as the large areas of clerestory glazing on the outer walls. The building is essentially a reinforced concrete structure with exposed concrete. The use of timber Glulam beams for the roof structure creates a stunning open plan area on the top floor. The nose of the building is curved in two directions and clad in pre-weathered zinc. Beside it a podium is linked to the five storey block below ground level. The steps between the two line up with the Cathedral and the Students' Union.

The building opposite, **MILLENNIUM HOUSE** (Fig. 19), (known as The Train from its shape and its proximity to the railway line) was also conceptually designed by Sir Nicholas Grimshaw and Partners, to be in sympathy with the Duke of Kent Building. The detailed design was completed by local architects Gerry Lytle and the building, which houses student residences, was opened in 2000 and cost £4.5 million.



Millennium House Fig. 19



Students' Union mural Fig. 20

On the hill behind the Duke of Kent Building is the Students' Union. On the outside is a ceramic mural created by students at the then Roehampton Institute Art Department (Fig. 20).

Returning towards the main entrance, the academic buildings on either side of the Spine Road are joined by walkways. In 1996 they were the subject of a project for the MA course in Site Specific Sculpture at Wimbledon College of Art and adhesive dots, as shown in the watercolour by Heather Tipton (Fig. 21) were applied by Peter Jeffery, a second year student. Originally it was intended that they should be there for three months only but somehow they have survived the passage of time.

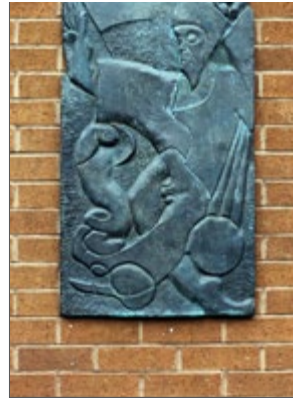


Walkways Fig. 21

Just below the Teaching Block, the **PERFORMING ARTS TECHNOLOGY STUDIOS (PATS)** (Fig. 22) are situated, providing facilities



Performing Arts Technology Studios (PATS) Fig. 22



Charmer Fig. 23

for music and dance. It was a Design-and-Build project (architects Ware MacGregor & Partners, builders Wiltshier DMC) at a cost of £1.25m.

It was opened by Sir John Read in March 1988. The original building had two recording studios, specified to BBC standards: Studio One, which has become a performance space, and Studio Two, dedicated to John Lennon with Yoko Ono's permission, a Dance Studio with retractable seating, practice rooms, technicians' workshops, seminar rooms and offices, plus a spacious foyer. Over time much of the accommodation has been rearranged. The photograph (Fig. 23) shows the bronze plaque on the wall at the western end. It is titled *Charmer* (a snake charmer), cast from the original carved in slate by Jon Edgar, a Sussex sculptor of the Frink School, purchased from him after his exhibition in the Lewis Elton Gallery in November 2011.

The new building on the north of the Spine Road is the **JAMES CLERK MAXWELL BUILDING** (Fig. 24), for the Institute for Communication Systems, completed in March 2015. Although it is one of the University's



James Clerk Maxwell Building (Artist's impression) Fig. 24

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smaller buildings, it is the UK's first innovation centre focussed on 5G networking and will be one of the largest academic research centres for mobile communications, with 130 researchers and around 90 PhD students, accommodating both the University's own researchers and those of its industry partners. 5G is the fifth generation of mobile cellular systems which focuses on providing more capacity with lower power consumption. The building will consolidate the leading position the University has in Europe and pave the way for further development of the University's long-term strategic partnerships with major global telecommunications organisations.

Architects Scott Tallon Walker's concept for the new building creates a flexible space with a circular atrium that acts as a central lung, to ensure maximum interaction amongst researchers. The scheme has achieved the BREEAM 'Very Good' environmental rating using mixed mode, naturally ventilated, simple yet sophisticated energy concepts for its ventilation.

Just before the Spine Road joins the Perimeter Road it is flanked by two matching buildings. The third of the buildings at the University designed by Sir Nicholas Grimshaw and Partners, the **ADVANCED TECHNOLOGY INSTITUTE (ATI)** or Daphne Jackson Building, (Fig. 25) has 2,800m² of floor space and cost £10 million.



Advanced Technology Institute and International House Fig. 25

It was opened by Lord Sainsbury of Turville, Minister for Science & Innovation, on 7 October 2002.

It has been constructed to provide for the merger of a number of groups whose combined knowledge and skills place the University at the cutting edge of research. Facilities include clean rooms, optical and specialist laboratory spaces, ancillary workshops, offices and meeting rooms. The low energy approaches included natural ventilation to cellular space and mixed mode ventilation to the open plan research area.



Professor Daphne Jackson Fig. 26

Daphne Jackson, whose portrait by Jane Allison (Fig. 26) hangs inside, was appointed Professor of Physics in 1971, the first woman to hold a Chair in Physics. She became Head of the Department and served as Dean of the Faculty of Science for some years. She initiated the Women Returners scheme and died in 1991.

Opposite is **INTERNATIONAL HOUSE**, (Fig. 25) reflecting the academic style of the ATI Building. Designed by local architects Lewis and Hickey, it was completed in 2003 at a cost of £8.4 million. The four-storey building provides 258 student bedrooms arranged in six-bedroom self-contained flats. Unusually it has been designed with the inherent flexibility to permit the future conversion into academic offices.



Dr Peter Leggett Fig. 29



Sir George Edwards Fig. 30



Library and Learning Centre Fig. 31

Beyond this building, the former UniSPORT building (Fig. 27) has been converted into the **IVY ARTS CENTRE**, for the use of the School of Arts and the Guildford School of Acting. The architects were Broadway Malyan. It opened in 2011 at a cost of £4.5m and provides a 200-seat theatre, a smaller 50-seat theatre, studios, lighting and scenery workshops, dressing rooms, green room, a large wardrobe store, a room for costume-making and a laundry. A new entrance houses the Box Office, foyer and bar, with a separate Stage Door.



Ivy Arts Centre Fig. 27

Leaving the campus, the **GUILDFORD SCHOOL OF ACTING'S** new building (Fig. 28) was completed in 2009. (Architects: Penoyre & Prasad. Project architect: Peter Penoyre. Contractor: Volker Fitzpatrick). It provides 15 new dance and drama studios, all fully environmentally controlled, 10 tutorial/practice rooms, changing and shower facilities, café and an IT and resource room. The building also accommodates the GSA administration offices.

The large (104m²) and medium (88m²) studios are arranged on three floors, around two sides of a central atrium space. Clerestory glazing above the atrium brings natural light into

the heart of the building and into the studios through internal glazed screens. The ground floor of the atrium is a generous circulation space which also includes the student café and refreshment area. This can open out to the new piazza formed in front of the building. Also at ground floor level, two studios are capable of being opened up into one large performance space.



Guildford School of Acting Fig. 28

Apart from those already mentioned, other buildings have been dedicated to prominent individuals, notably the former Postgraduate Medical School (Fig. 34) to Dr. Peter Leggett (Portrait by Norman Hepple, Fig. 29), first Vice-Chancellor, the front end of the Library block to Sir William Mullens, first University Treasurer 1966-1975, and the building between Senate House and the Lecture Theatre block to Philip Marchant, an architect who had been a member of the governing body of Battersea College of Technology and later chaired the University Development Committee for 10 years. The Library, built in the early 1970s, was in 1981 officially named the **GEORGE EDWARDS LIBRARY** after Sir George Edwards, OM, CBE, FRS, DL, an outstanding aeronautical

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engineer who was Chairman of the British Aircraft Corporation from 1963 to 1975 and the University's first Pro-Chancellor (1966 to 1979). The library contains his portrait bust by Sheila Mitchell FRBS (Fig. 30). In 2011, an extension to the Library, the **LIBRARY AND LEARNING CENTRE** (Fig. 31), was opened to bring in new technology and social space, providing a more modern environment for free learning.

Two blocks of student residences have been given dedications: Twyford Court, opened in 1994, was named after Eric Twyford, Chief Executive of Guildford Borough Council, who was Chairman of the University's Buildings and Estates Committee for several years; Bellerby Court, opened in 1999 and built in partnership with Spelthorne Housing Association, marks the many joint ventures between town and gown supported by Bill and Doreen Bellerby, both of whom served for over 40 years as Borough Councillors, were former Mayors, were awarded



Professor Patrick Dowling Fig. 32



The Surrey Scholar Fig. 33



The Leggett Building Fig. 34

the MBE and are now Honorary Freemen of Guildford.

The entrance to the University was given striking emphasis in March 2009 by the unveiling by the Chancellor, HRH The Duke of Kent, of a 5 metre high stainless steel Stag by Allan Sly FRBS who was also the sculptor for *The Surrey Scholar* (Fig. 33) in Guildford High Street. *The Surrey Stag* (front cover) is his stylised interpretation of the University's crest, in heraldic parlance "on a wreath or and azure a stag trippant proper resting the dexter forehoof on a key".

Manor Park Campus

The Manor Park Campus is currently the scene of large-scale construction. Already completed is **THE LEGGETT BUILDING** (Fig. 34), a regional centre of excellence for health education and research. (Architects: ADP, from a concept by Arup Associates.) Constructed in 2005 at a cost of £10 million, it is a steel-framed building, fully air-conditioned, one third laboratories, two thirds academic space. In front of it is *Spiral* by Bridget McCrum FRBS, (Fig. 35) carved from Clipsham stone and donated to the University by Juliet Arnold in memory of her husband Simon.

The Masterplan for the Manor Park campus provides for around 4,000 student and some staff residences



Spiral Fig. 35



Manor Park Residences Fig. 36

(Fig. 36). Construction commenced in 2005 and by 2014, approximately 1,850 bedrooms had been completed at a cost of around £60m. They have been designed as a collection of large buildings of 3 and 4 storeys in height and grouped to create both a public street scene and to enclose semi-private courtyards, providing secure areas with a high degree of passive surveillance within a car free campus. The buildings are predominantly faced in brickwork with some render and timber to create interesting facades. The pitched roofs are clad in slate. The architects for these residences were Broadway Malyan.

Design has commenced on the next phase of 1,000 residences and MJP Architects have been appointed for this work.

A network of footpaths and cycle paths provides a safe and secure route to the existing Stag Hill Campus. The building design relies on the use of a restricted palette of materials, including sustainable cedar cladding and render, used in different proportions in different zones to create varied combinations of materials.

Landscaping has been designed to retain existing trees and hedgerows wherever possible, to enhance these with semi mature trees and to create new open spaces designed to contribute to local bio-diversity, provide wildlife corridors and create opportunities for new habitats. The buildings and integrated services, which include natural ventilation to bathrooms, have been constructed to high standards of sustainability and energy efficiency and have achieved an excellent BREEAM rating.



Triple Ripple Fig. 37

Left to Right: Professor Brian Falconbridge, Diane Maclean, Professor Sir Christopher Snowden, Vice-Chancellor

In a prominent position stands *Triple Ripple* (Fig. 37) by Diane Maclean FRBS, unveiled in February 2008 by Professor Brian Falconbridge, President of the Royal British Society of Sculptors. It stands 4 metres high and is made from highly polished steel. At night it is lit by constantly changing multi-coloured lighting effects linked to street lighting.

A two-dimensional piece of work by Diane Maclean, produced in collaboration with cancer researchers, is installed in the Leggett Building.

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Veterinary School

The proposed School of Veterinary Medicine will comprise three buildings: An academic building (VSM) (Fig. 38) of approximately 6,600 sq.m, a Veterinary Pathology Building (VSP) (Fig. 39) of approximately 2,500 sq.m, and a Clinical Skills Centre (VSC) (Fig. 40) of approximately 900 sq.m. The School is one of the largest single building projects the University has undertaken, at a development value of £45m.

Following an architectural competition, Devereux Architects were selected to carry out the detailed design of all three buildings. BAM Construction Limited have been appointed main contractor and commenced construction in February 2014. The buildings will be completed ready for the academic year commencing September 2015.



VSM (Artist's Impression) Fig. 38



VSP (Artist's Impression) Fig. 39



VSC (Artist's Impression) Fig. 40

Surrey Sports Park

The facilities for students, staff and the local community have been given an immense boost by the construction of the £36 million **SPORTS PARK** (Fig 41), situated on the land bordering the A3. (Architects: Faulkner Brown. Contractor: Willmott Dixon). It was opened in April 2010 and contains a 50-metre swimming pool, three multi-purpose sports halls, eight squash courts, climbing wall, two activity rooms, health and fitness suite, social areas including café and bar and extensive changing facilities.

The development also contains a new terrace of sports pitches, two floodlit all-weather pitches and eight outdoor tennis courts.



Surrey Sports Park Fig. 41



Movement in Steel Fig. 42

On 27 May 2011 a mural *Movement in Steel* (Fig. 42) was unveiled by Allan Wells, Olympic athlete, as part of the celebration to mark the Sports Park's first anniversary. It was created by artist Barnaby Gorton, depicting the 14 sports on offer, inspired by the image of a bouncing ball in time-lapse photographs. It consists of 83 pieces of aluminium alloy. The pieces are 20mm away from the wall, casting shadows and thus achieving a 3D effect. On the opposite wall is a basket ball player made from hand-cut African wood with the edges gold-leafed.

Surrey Research Park

The construction of the **SURREY RESEARCH PARK** was begun as a 'green field site' in 1981. Planning Consent was achieved in 1983. In early 1984, the University began its own development programme on site by putting in roads and services. Building began in mid 1984 and the first company took occupation in July 1985. Today the Park is now valued at over £100m, has a rent roll of £9.5m and is home to over 130 companies.



BAE Systems Applied Intelligence Ltd Fig. 44



Professor Anthony Kelly Fig. 43

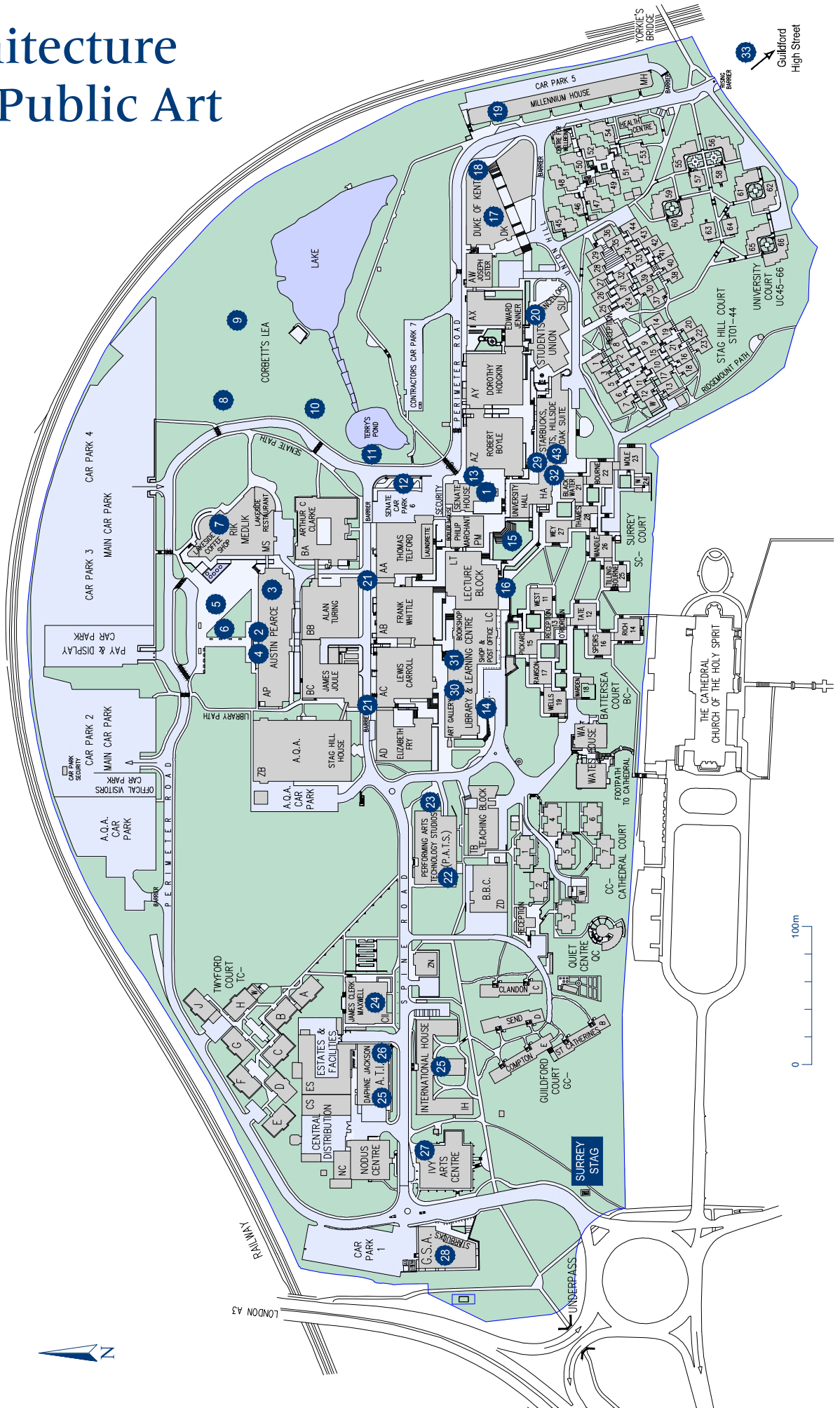
It is a tribute to the efforts of the second Vice-Chancellor, Professor Anthony Kelly (Portrait by June Mendoza, Fig. 43), John Lewis and Leonard Kail, University Architect and University Secretary respectively at that time. The construction and development of the Park has been undertaken by Professor Stephen Baker and Dr Malcolm Parry over the past 35 years.

A number of different architectural practices have been involved but one of the finest buildings is Waterside House occupied by BAE Systems Applied Intelligence Ltd. (Fig 44). It was originally constructed for the Borax Group and started life as large industrial scale laboratories plus space for prototype development and some commercial functions. It was designed by Ketley Gould Architects, completed in 1994 and constructed by James Longley & Company. The building is constructed in traditional materials with a Welsh slate pitch roof and is set in its own 5 acres of parkland, with views over one of the Research Park lakes. The building is one of the largest on the Park, with a floor area of 19,800m².

Patricia Grayburn
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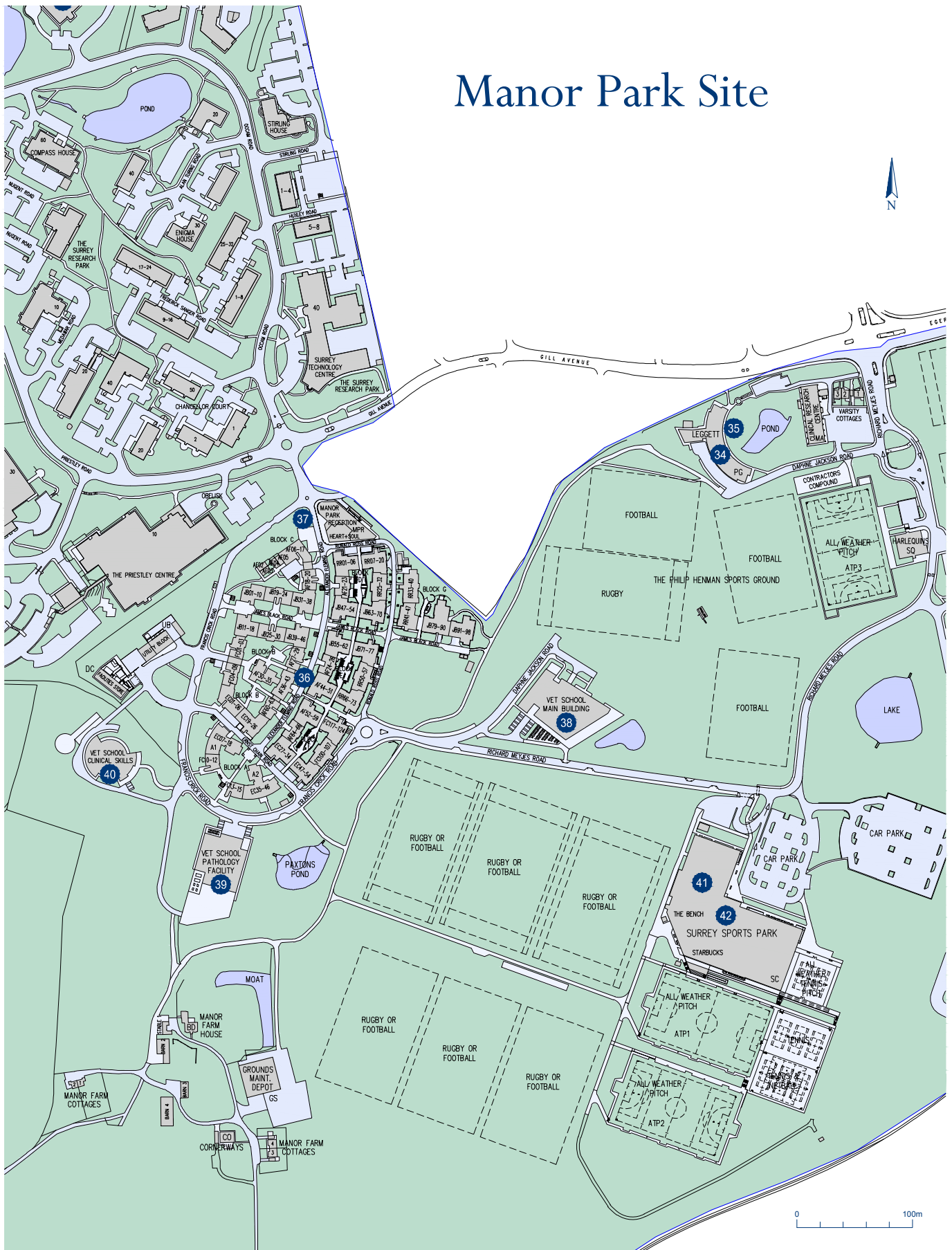
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Stag Hill Campus



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Manor Park Site



Patricia Grayburn MBE DL worked in the Architect's Department of London County Council for 8 years, during which time she commissioned sculptures and murals for housing estates, several of which are now listed. She then became Head of Press and Public Relations for the Royal Festival Hall and since 1983 has been Arts Administrator at the University of Surrey. She is currently responsible for the Public Art programme at the University.

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Sponsored by the School of Arts

University of Surrey

Guildford, Surrey GU2 7XH UK

T: +44 (0)1483 689167

E: p.grayburn@surrey.ac.uk

www.surrey.ac.uk

