

Testing times

Inside►

Our part in COVID testing
Estates teams adding value
One life, one day



Welcome

It's almost unbelievable that it has been a year since we first went into lockdown, living with restrictions ever since.

We've all heard the words 'unprecedented', 'challenging' and 'new normal' more than we'd like and experienced our own reality of living through a pandemic.

I am proud of everyone in Estates Operations and their contribution, along with their fortitude and resilience over these last 12 months.

There is positivity, mainly in the speed of vaccination taking place to begin the lift out of our straitened existence.

In this edition of **People, Places, Spaces** we look at the small but proud part Estates has played in Imperial College's contribution to the global fight against the pandemic.

At the beginning of March it was Imperial Women's Week. I was pleased to act on the theme #Choose to Challenge by handing over control of the Estates Forum to Estates women, including a fairy godmother named Sarah, who cast me as Good King Nicholas in a fairytale of White City!



Equality, and indeed diversity, is not just about a one-week themed College event. It is about an ongoing commitment to challenge thinking, perceptions, and unconscious bias. Estates is putting this high on the agenda as College working arrangements post-pandemic are discussed.

Your feedback in all areas of Estates Operations performance is something I seek and need in order to act effectively, and I thank you for your contribution to the staff wellbeing survey and other routes to collect this, including the questions you pose at our Estates Forums.

Easter is upon us, and the extended break, and it seems likely, if good weather is on our side, that we'll be able to get out and about a little more than we have done of late.

Have a good holiday,

Good King Nicholas
Director Estates Operations

Contents

NEWS	2	Welcome and Content <i>Thank you to our contributors this edition</i>	PLACES	9	Building the Commonwealth <i>New lease of life for underused space, plus</i> Going with the flow
	3	News round-up <i>New Maintenance contracts, sustainability update, quiz</i>		10	Cover story - testing times need test labs <i>Our part in setting up the COVID pandemic labs</i>
PEOPLE	4	One life, one day - David Traske <i>A close-up on our Quality Audit & Compliance Manager</i> Learning & Development calendar	SPACES	12	Doing things differently (1) <i>Projects take a fresh approach</i>
	6	Celebrating long service <i>An Estates Operations initiative</i>		14	Doing things differently (2) <i>Engineering adding value</i>
	7	Employees of the Quarter <i>Congratulations to the latest recipients</i>		15	One of those unnoticed projects <i>Getting rid of concentric wiring</i>
	8	Joining Estates during a pandemic <i>We meet three new colleagues</i>	NEWS	16	Championing Health & Safety <i>plus</i> Diversity dates, holidays and events

Alternative format
This magazine is available as a downloadable PDF on our website at: <https://www.imperial.ac.uk/estates-facilities>

EstatesCommunications@imperial.ac.uk

020 7594 8326



Dangoor Plaza

The Planning Application for a project that will transform the character of the South Kensington campus is now awaiting local authority approval.

The project includes repaving part of Imperial College Road, and as the councils' boundaries run just through the middle, it's been submitted to both Kensington and Chelsea and Westminster councils.

Dangoor Plaza, named after Imperial College alumnus, businessman and benefactor, David Dangoor, will introduce a new diagonal path that will cross the Queen's Lawn, joining the main entrances of the Sir Alexander Fleming and Sherfield buildings.

Feedback is expected in the next 10 weeks or so, with main works starting around July, to complete for the start of the next academic year this autumn.

Win a gift voucher

Take part in our easy to enter quiz for a chance to win one of three vouchers worth £50, £25, and £10.

The answers to the following three questions can be found in the pages of this magazine.

Q1: From where has concentric wiring been removed?
Q2: How many questions are there in the EMR?
Q3: What is Mike Kent's volunteer role?

To enter, email your answers to: EstatesCommunications@imperial.ac.uk by Friday 16 April 2021.

The winners will be the first three names drawn from correct entries. The judge's decision is final.

EEE update

(That's Engineering, Energy and Environment)

College has published its Sustainability Strategy for 2021-2026, setting out the five-year strategy for Imperial to become a sustainable and net zero carbon institution by 2040.

The strategy includes targets to reduce our energy and water use and waste. It also requires us to procure sustainably and consider sustainability at all stages of refurbishment and new building planning.

Estates has begun and is continuing activities which contribute to this goal, through the Engineering, Energy and Environment Team (EEE), led by Andy Hammond. These include:

- Continuing to extend the South Kensington heat network and to remove reliance on steam.
- Controlling our Building Services effectively so that systems are not running when not required.
- Ensuring we include sustainability in our projects where possible.
- Continuing to upgrade our Heating Ventilation Air Conditioning plant (led by Maintenance) with more modern efficient systems.

As well as these measures EEE are co-managing and supporting the Laboratory Efficiency Assessment Framework (LEAF) which was successfully trialled in 2019. Despite the challenges presented by the coronavirus lockdown, in 2020 many teams managed to submit calculations on the savings accruing from their LEAF actions: typically £1,000-£10,000 per year for each group.

Other steps follow from engaging consultants to carry out thermal models, post occupation evaluations and photo voltaic panel installation feasibility studies. For instance there is a heat decarbonisation study for the halls or residence in Paddington, Wilson House, which has allowed us to better understand how we decarbonise and at what cost and benefit.

The next steps will be to commission consultants to undertake a full survey and investigation of our campuses and buildings to provide us with a strategy that will be used to gain financial support to achieve our 2040 target.

The [Sustainability Strategy](#) is available on the College website.



One life, one day - David Traske

Estates Operations Quality Audit and Compliance Manager David Traske is based at South Kensington campus. His responsibilities include the Estates Management Record submission and management of the Learning and Development and Communications Officers

It's 7am and David is at his desk at home in Canterbury. The early start gives him uninterrupted focus time before his family rises, useful for the data driven, highly focused work that he performs.

Pandemic remote working isn't a huge change for David, he was already working two out of his four days a week that way, however getting some time back from the commute on the other two is a bonus. "I'm looking forward to the lighter evenings and getting into the garden after work", he says.

David has one of those management information jobs in College that not many people know about, nor understand the significance of. Yet what he does is necessary. His work is used internally and externally to assist effective budget-setting, decision making, and many other uses.

He's the first to admit number crunching seems dull, and therefore can be hard to engage people with just how important it is and why they need to provide accurate information on time.

David explains: "The Estates Management Record (EMR) for example is an annual report for the Higher Education Statistical Agency (HESA) on behalf of the Office for Students (OfS). Data, some mandatory, is collected from universities, and other higher education (HE) providers. There are currently 312 questions to answer and many questions have subsets of data needed to calculate the answers, so it's quite a task."

Data driven

"The data is provided to UK governments and funding bodies to support their work in regulating and funding HE providers. Information collected is also

published as official statistics."

At Imperial EMR is used by Finance as part of a wider piece of work to justify future levels of Capital Expenditure.

Data required covers finance, staff and student counts, space measurement, building and functionality and environment, energy, emissions, and waste. It is drawn from departments right across College, not just Estates, and he is reliant upon the considerable efforts of several colleagues.

David adds: "Much of our data collection could start as early as 1 August each year, but as data entry for HESA does not start until January of the following year there is a strong temptation to postpone the start of collection, a temptation some find irresistible. This can have unfortunate consequences, and not just for my blood pressure!"

It almost goes without saying that David enjoys getting stuck into the data and analysis, and solving problems he encounters, however he says: "Delays can hinder the ability to check data and delve deeper into calculations. Variances from previous year's submissions and from comparators trigger questions which must be answered to HESA's satisfaction before they will submit it to the head of institution to sign-off."

It takes around six months in every year to collate and check the data, and given its importance he's required to update progress to the Director of Estates Operations Nick Roalfe on a weekly basis. Nick acts as the stick, when the carrot approach isn't having the desired effect on those who should be contributing.

David says: "When I inherited the task of our EMR return we completed 54% of the questions. Thanks to my colleagues I'm pleased to say we are now able to answer more than 90% of their questions."

David started his career in Hotel and Catering management, taking a degree at Strathclyde University, remaining in higher education to work, broadening out his role with each post into which he progressed.

In 1994 he joined Wye College, part of the University of London, but based in Ashford, Kent, as General Manager and became part of Imperial upon its merger in 2000 so earning 26 years of continuous service.

Cardiff City

David is a private family man, but will openly admit to supporting Cardiff City football club, the home town club he was introduced to by his Dad, saying: "they need support".

Apart from being the driver

behind our EMR, he looks after Key Performance Indicators reporting on activity across all of Estates Operations. There are currently 243 of those each year that he collates on a variety of cycles including monthly, quarterly and annually to form a dashboard report.

He also analyses the Health & Safety SALUS reports which have a usefulness College-wide. Recently, in conjunction with ICT, he's started to use PowerBI software to automate this.

Then there's the part of his job description which he describes as 'anything Nick Roalfe asks me to do.' Such as when a policy, procedure, documentation or analysis is needed, David is the 'go to'.

Car parking

In the past he's been asked to manage the Estates Customer Service Centre, College Receptions and memorably the thankless task of car parking.

"I swore I'd never touch car parking again after my University of Kent experience, then I was given Security and car parking to manage at Wye and blow me it happened again at Imperial!"

David also has responsibility for the Estates L&D Officer Angela Williams and Communications Officer, Jan Carberry, who in BBC sitcom W1A fashion dub him 'Head of Better'.

David had roles in training support staff in the past, and still displays a genuine interest in training and 'enabling people to develop', so he is pleased to have Angela under his remit. He's a champion too for the importance of communications in leadership and development.

David says: "There is a synergy we have, the three of us, as a small team of cross-departmental value ... and I no longer have to manage car parking."

Learning and development

Just some of the training options available for Estates staff in the coming months are listed below.

All are online through Teams, unless otherwise stated.

If you want to know about any training or sponsorship available please contact [Angela Williams](#).

● **Asbestos Awareness**

12 May, 09.30-11.00

15 July, 09.30-11.00

12 October, 09.30-11.00

● **Legionella Awareness and Installation, Testing and Commissioning for Projects**

09 June, 09.30-12.30

● **Virtual Lunch & Learn sessions** 12.00-13.00

Financial Wellbeing

13 May, Financial spring clean

16 June, Health roulette (13.00-14.00)

08 July, Pensions & investments

● **IOSH Working with Environmental Responsibilities**

28 April, 09.00-17.00

24 June, 09.00-17.00

● **Records Management and Building Resources**

19 May, 09.30-10.45

17 June, 09.30-10.45

● **Estates Forum**

7 June, 13.30-15.00



Estates long-servers

Celebrating 180 years service by eight colleagues

The Estates Operations Long Servers Recognition Scheme celebrates those serving 10, 15, 20, 25, 30, 35, 40 or more years, and those who are retiring.

It's a local scheme, but recognising all continuous service with College, not only time spent within Estates. Those reaching the milestones receive a certificate along with a personal letter from their Head of Department at the time of their service anniversary.

The scheme began this year, however in recognition of a turbulent year when

things were cancelled, delayed or overlooked, it has been backdated for everyone who reached those milestones during 2020.

The long-servers will be celebrated through Estates communications channels including forums, the weekly 'What's going on' newsletter and this magazine, People, Places, Spaces.

Here we spotlight eight colleagues with anniversaries up until this April.

15 years

Dolores Formoso, Soft Services - 28 April

20 years

Roy Dickerson, Head of Strategic Infrastructure - 15 January

20 years

Andy Hammond, Head of Engineering, Energy and Environment - 1 January

25 years

Julie Bryant, Manager, Customer Services Centre - 1 January

James Kelly, Maintenance Technician Leading Hand - 12 March

Anne-Marie Clarke, PA - 10 April

35 years

John O'Brien, Maintenance Supervisor - 2 January

Gary Clements, Maintenance Technician Leading Hand - 29 January. Gary is one of our Mental Health First Aiders



A familiar face to all is Anne-Marie Clarke, PA to Estates Director Nick Roalfe. She first came to Imperial as a temp to the then Estates Manager while his PA was off. When the PA didn't return Anne-Marie, who is from Ireland, was offered the job, but was hesitant because she was only planning to stay in England for a year. She said: "Nearly 26 years later I'm still in England, and at Imperial." She has worked for a few directors since: "But Nick Roalfe is the 'best' – really!" Looking back she recalls in just her first month at College the then Head of Maintenance phoning for the Estates Manager and being asked to pass on a message. She laughs, "He told me to let him know that there were horses loose on the Queen's Lawn. I had no idea even where the Queen's Lawn was and that it was a joke."



Maggie Taylor, Assistant Building Manager, was nominated by Jan Carberry, Communications Officer.

"Maggie has been amazing through lockdown and continues to be so, stepping forward for assembling welcome packs and other volunteer calls; running between campuses

to deliver signage and support putting them up when other BMs/ABMs couldn't. She is the first to commend others for doing over and above, when more often, she is the one doing so. She stepped up quickly to offer her valuable administrative skills to serve the interim need and support her colleagues following the departure of the Head of Building Ops.

"Maggie stepped into the running of Tastes to support all Estates colleagues and continues to do so, providing the regular quiz on Fridays, will 'open' the cafe when others can't and tries to be there as often as possible, knowing that others might need a chat.

She's also got behind Tastes Charity initiatives and special events.

"What Maggie does is effortlessly 'do more' really supporting her colleagues without them even realising how much she is doing so. What is noticeable is the big-hearted way she does this. Even when it might actually be, nothing is ever too much trouble for Maggie."

Reece Shelley, Maintenance Technician, was nominated by James Penfold, Maintenance Technician Leading Hand.

"Being part of the Maintenance team can be a thankless and often overlooked task at times, but Reece has worked tirelessly on site throughout the pandemic. He has a constant positive attitude towards all our day-to-day tasks and is always looking to provide innovative solutions to any problems we need to overcome and is often the 'go to guy' when we need that sideways look at an issue.

"He is an eager team player and is a shining example to our younger team members even though he is relatively young himself. When needed, the team can always count on Reece to go that extra mile.

"He is a very effective listener, is very good at taking on board other points of view, he really cares about not only what you are thinking but how you are feeling and likes to provide feedback to bring about positive results. What surprises most is that many of the much more experienced team members look to Reece to resolve complex issues, work related and personal, with professionalism and compassion."

Christopher Khan, Maintenance Supervisor, was nominated by his Manager, Herbie Lewis.



"Christopher Khan over the past year has proven to be an invaluable member of my team and well-liked by all on the campus. As a key member he has been on site for this complete lockdown period ensuring vital equipment is maintained and operational. He has taken on the statutory

requirement of testing all the 334 fume cupboards at MSRH whilst aiding with the ongoing witnessing and commissioning of new plants/floor refurbishments within the Michael Uren Building.

Employees of the Quarter



"His proactive approach has been valuable with the

complex plants that we look after which has ensured minimal disruption to the everyday operations at the White City Campus; whilst improving his skill set and relationships with specialist contractors. This has ensured the first point of contact at White City by Chris is a friendly one which normally has a timely resolution. With a can-do attitude he is an obvious choice to nominate."

Sangita Kerai, Health & Safety Advisor, was nominated by Denis Murphy, Head of Estates Health & Safety.

"Sangita provides not only an excellent service to Estates Operations, but through her enthusiasm to enhance her role and use her communications skills, to regular College events, as well as to Tastes Cafe to encourage dialogue on personal and College issues. She is also an active Mental Health First Aider."



Joining Estates during a pandemic

Three colleagues, Kirsty Scallan, Natalie Cain and Anna Talletti, have recently joined us. We asked them about their experiences of starting at a new organisation during lockdown.

Kirsty Scallan (below) joined the Projects Delivery team in January as a Project Manager.

"The experience of being interviewed virtually was rather daunting. First impressions go a long way in interviews, and I was worried how I'd translate on a screen! All the usual rules of good eye contact and a firm handshake went out the window.

"I was required to do a presentation, and as I shared my PowerPoint screen, all the interviewers disappeared from my view, so I was presenting to myself, talking away and convinced that everyone had left. I must have done something right though, because here I am!



"I have visited campus a few times and being nosy, I popped into fifth floor Sherfield on my first visit. There weren't many people around to meet though! The whole thing felt a bit surreal.

"Every new role takes some time to settle in to, lockdown or not. The unusual circumstances have certainly not helped, and not being able to pop over to someone's desk and ask a quick question has been challenging.

"The team have been very

welcoming and done their best to hold my hand and put up with my questions. I've been assigned a buddy and my buddy has been very helpful in guiding me through the processes and procedures.

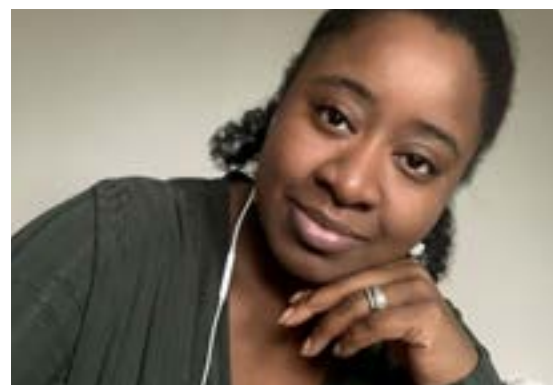
"I signed up to the Ice breaker system and have been 'matched' with a few staff outside of Estates. It's given me some insight into the various faculties and has helped me feel part of College."

Natalie Cain, (above) is providing secondment cover in Building Operations as Assistant Building Manager covering the medical campuses - Hammersmith, St Mary's, Charing Cross, Royal Brompton and Chelsea & Westminster.

"Settling into my new role has been (as some have said) 'a baptism of fire.' Already facing unusual circumstances because of the pandemic, my building manager at Hammersmith Hospital sadly fell ill with COVID on my first day and was absent for weeks.

"The Hammersmith assistant building manager at the time was in between roles with another department, after providing invaluable help she was eventually able to duck out after three weeks.

"I've since been swimming in the deep and been bashed by strong waves; however thankfully and most gratefully I have been thrown life buoys from various colleagues including Maggie Taylor and Anna McDadd who have shown so much patience and understanding.



"I am looking forward to building up a rapport with the team, learning who is who (for all those favours I'm about to ask) and finally getting to know my Building Manager, Darsi Wickham. This new role was a gift and I am embracing it with both hands excitedly as I begin this new journey."

Anna Talletti (below) is Building Facilities Manager at White City, responsible for the Molecular Sciences Research Hub (MSRH).

"Having acquainted myself with the COVID-19 Risk Assessment and the College web pages, I felt very safe going to campus. My priority was to familiarise myself with the COVID-19 safety measures in place and to ensure these are observed for the safety and wellbeing of all the building users. I am now attending once a week mainly to familiarise myself with the building.

"I am looking forward to becoming fully conversant with all the processes & procedures of both Estates and Chemistry, and to see the MSRH building coming back to life at full occupancy levels!"



Building the Commonwealth

In a College as large as Imperial across its many sites there is always a need for space. In the Commonwealth building, Hammersmith, there was an abandoned and dilapidated plantroom used just for storage.

The space it offered was almost exactly the same as the gross area of the Queen's Tower.

Clearly it needed to be utilised. Following the College decision to sell St Mary's Medical School, the Faculty of Medicine (FoM) needed to decant its staff and operations and this space looked ideal.

The area - 1S1 - was allocated to the FoM to enable the first of a multi-stage chain of moves to free up prime space within Sir Alexander Fleming building at South Kensington campus.

So in August 2020 a five week programme of demolition began, to remove the internal walls, and multi size heavy concrete plinths formerly used to support plant equipment. The entire area was screeded to attain a flat surface, facilitating the creation of a new doorway to the level 1 main landing and the re-opening of blocked windows and ventilation openings.

This then created an open area which enabled project design development.

Next came the design development and procurement during September-October (first two weeks) with the project

re-start on the construction/fit out in the middle of October 2020.

The project delivered additional open plan workspace and closed offices for FoM support services. The phase, completed in January, features:

- A new heating ventilation and air conditioning system that will ensure the best possible thermal comfort
- New metal ceiling
- New LED lights
- New power and data installations
- New flooring
- Windows for natural light

The planned phase 2 at level 2 and basement are currently on progress to be delivered in the coming month (April 2021).

All works were completed By Oakland Building Services Ltd, who went the extra mile to be able to deliver this project on time despite the many adverse circumstances during the national lockdown.

Cain Consultants Group provided project management assistance, mechanical and electrical and architectural design and the overall specifications.

Going with the flow

In mid-November 2020 it was confirmed by the NHS that Imperial would receive sufficient tests to take part in trial university COVID asymptomatic testing to enable us to offer Lateral Flow Testing (LFT).

It was decided to utilise the scheme to offer to our service partners and contractors as we were already in the fortunate position of having sufficient capacity to test all Imperial staff and students through our Polymerase Chain Reaction (PCR) testing.

The additional resource allowed College to further manage and control the spread of COVID across our campuses specifically with the contractors who work within and across our academic buildings and residencies.

A small team Rod Coppard, Building Manager; Chris Banks, Assistant Provost (Space) Director of Library Services; Beth Wallis, Bioengineering Laboratory Technician, and Kieron Creagh, Education Strategy Officer; set about familiarising ourselves with all of the protocols and site requirements, preparing



the testing space in Flowers building, South Kensington, and recruiting and training the 10 Test Processing Operatives.

The testing took place from the 7 - 14 December 2020, with 753

tests booked, 675 tests taken, of which six were positive. All bookings were managed and scheduled through Anne-Marie Clarke, Estates Director PA, via personal contact with our Contractors.

Behind the scenes the Soft Services team set up the room daily, providing cleaning and clinical waste removal while South Kensington stores gave logistical support.

Everyone involved worked hard to enable us to take up this trial opportunity to an exceptionally tight timeline. The trial was successful and our contractors were really appreciative. The trial ended, but we are now completing pooled testing of Noonan's staff, a system which allows only those within a small group testing positive to have to isolate and individuals affected to remain anonymous.

Testing times need testing labs

Project Manager Paco Villegas Ruiz gives a personal account on how it feels to be playing a small part in a project which plays a big part in the national and international interest

“A world pandemic. Not from a science fiction movie but very real and scary. No matter if you are from the UK, Spain or Japan, everyone understands what COVID-19 is and the impact it has had on every level of society.

With that in mind, when the possibility of contributing to the battle against it came to Estates Operations in the form of a refurb project, everyone focused all their efforts in helping getting this one over the line, no excuses.

With a programme literally stating ‘Complete ASAP’ the challenge landed on us last September (2020). We knew we had to build a testing facility, part of a partner programme with the Department of Health and Social Care (DHSC), but we had to find a suitable location and refurbish it in record time. In a matter of days, and after a good many emails, dozens of phone calls and a lot of work in the background we found the answer, Level 6 Flowers building. An existing lab though needing considerable alterations/upgrades ‘convertible’ enough to be the perfect candidate.

With architect Penwarden Hale, we developed the initial sketches in close collaboration with the user group, led by the professor who played a key part in the success, Graham Taylor. With just a rough idea of what was required in terms of ‘General

Arrangement’, pretty much drafted on a napkin, we needed a contractor that could take us from a primitive stage 1 to a completed lab in as few weeks as possible and on budget. Working closely with Amy Shaw from Procurement, we engaged and appointed Russell Cawberry, who employed a full design team to take our sketches to a buildable package. Penwarden Hale and Crofton (Mechanical and Electrical Designer) worked hard to make



also key in the process; as keeping costs under control in such a fast-moving project was not an easy task.

The team met significant challenges on the way. Following an initial review with Maintenance Manager Ian Day, it became apparent that the proposed layout would not work due to the distance of the proposed labs to the existing services riser. The team had to quickly alter the layout. Also, with the Flowers’ goods lift under refurbishment, we had to come up with a scaffold/hoist design and install it very quickly to have full access to the floor for the strip out and construction (left). The assistance from Denis Murphy (Health & Safety) and Alan Castleman (Car Parking) in getting the logistics working were of crucial importance in this process, which was a little victory on its own.

Fresh air and heating continued to be provided through existing plant, although three new fan coil units were introduced to supplement existing ones. New lighting was installed throughout together with access control to key rooms, new lab furniture and new wiring for power and data. The team also spent time detailing the design and specification of a transfer

this happen, with regular meetings and phone calls to develop the design to Stage 4. Meanwhile the strip out had already started on site - there was no time to lose! Quantity Surveyors Mortimer Isaacs were



PHOTOS:
TOP LEFT: TESTING, TOP RIGHT AND COVER: THE NEWLY FITTED OUT LAB,
FAR LEFT: THE SPECIALLY ERECTED SCAFFOLD AND HOIST, LEFT: THE
HATCH LINKING THE LAB AND ROBOTICS, BELOW: BEFORE THE REFIT



hatch required to enable the staff in the high level of security (CL2) lab and the robotics room to pass on tests without needing to go through the corridor. College supplied four Microbiological Safety Cabinets; with vinyl, carpet and decorations this completed a package that provided 217m² with the lab, supporting rooms and an office that will now be able to process thousands of COVID tests each day.

Alongside this space, in case the challenge was not big enough, the same team delivered a new lab (187m²) for the Department of Infectious Disease (DoID) on the same floor and concurrent to this project, gaining efficiencies in both design and construction activities while keeping the COVID lab as a priority.

The total project cost, including the additional lab from DoID, was £1.12m including VAT, (£937k corresponding to the COVID lab was funded in full by the DSHC). The project achieved Practical Completion on 7 December after working on site

seven days a week since the start. Completing with under five snags registered, which were sorted pretty much instantly, was the icing on the cake of what has been, without doubt, one of the fastest turn arounds on this size of project I have seen at the College; a complete success that would not have been possible without the outstanding team we have at Imperial and the magnificent supply chain with which we work.

Personally, it was a real pleasure and privilege to be able to actively participate and play a part in this global fight against the virus. I felt honoured being part of this project and overall, part of Imperial, a community that has once more shown that we can make the impossible happen and that collaboration is at the heart of what we do.”

Doing things differently (1)

Project Manager, Stuart Henniker-Smith, describes a project which to keep costs down moved away from the traditional full consultant design team approach and embraced in-house skills and expertise

Following a masterplan study for Chemistry in 2018 and an options appraisal for refurbishment and new build scenarios in 2019, a proposal to create an interdisciplinary learning hub with a 10 year lifespan was ratified by College.

The project responded to the need for multi-faculty teaching facilities and the shortage of flexible flat floor teaching space and project breakout space.

However costs based on the traditional approach to projects - assuming a full strip and demolition to an empty shell and then redesign and build - were estimated at £6m. Given the ‘temporary’ nature of the spaces this was not considered value for money.

To reduce cost a decision to use in-house expertise was made, and the project moved away from the traditional full consultant design team approach.

In conjunction with the Space Management Team, Chemistry Level 5 and 6 was agreed as the best location for the project. The remaining chemistry 1 and 2 building users were relocated to new premises to enable the areas to be transformed.

The Active Learning Suite to be created comprised a mix of fixed and adaptable flat floor teaching rooms (684m²), independent study spaces (385m² and 339 new seats) along with a media production suite (245m² and 174 new seats) and two self-contained recording pods at South Kensington campus.

Communal areas were upgraded with an additional 13 unisex WCs across the two floors along with two new



fully accessible WCs to meet current standards.

Architectural scope and specifications were developed by the Project Manager and end user representative, Craig Walker, to enable the creation of a number of white box spaces suitable for subsequent fit out and services scope.

Performance specifications were developed by the Estates Engineering, Andy Hammond, Stephen Ng, David Larbie & Mark Reader. College IT, Tania Bozinovska, developed the design for wi-fi and scoped the requirements for the media suite and College networks, and new Audio Visual (AV) solutions for all the space were specified and scoped by College AV expert Caroline Carter.

These specifications were utilised to tender for the contractor through a competitive two stage design and build process which allowed the selected contractor, Quest Interiors, to commence strip out of the project areas whilst still negotiating the contract

details and build specifications.

A key driver was to work within the building's existing constraints and to retain and reuse fabric and services wherever possible. Examples were the reuse of LED lighting, carpet finishes to certain areas, space planning around structural walls so only partitions were removed, and agreeing the extent of existing services strip out to reduce cost and programme.

The project also utilised demountable partitions within the adaptable teaching spaces to allow for flexibility on configuration (2 - 19 spaces). The system selected was less expensive and less structurally dependant than traditional folding wall partitions and selected on the basis of termly reconfiguration requirements.

The project also fully utilised Mechanical Ventilation Heat Recovery (big white boxes in front of the windows) that will hopefully improve the conditions in the summer by bringing more natural ventilation, removing the old Air Handling Unit plant, which freed up space for the new toilet block and some for future use.

Notably, all spaces contain loose furniture, none fixed, enabling quick reconfiguration of the space and reuse in the future when the facility reaches its end life.

Key to success were the inputs of Building Manager, Rod Coppard, and Maintenance Manager, Ian Day, which contributed to an excellent level of collaboration and flexibility throughout the scheme. Particularly given the speed of the project and the overlap of design and construction programmes their contribution to logistical solutions, isolations and daily troubleshooting of problems was invaluable.

The scheme was delivered on programme from initial briefing to handover in eight months, and within the approved budget of £2.8m, around half the feasibility approach cost.

Craig Walker, Strategic Lead for Education Infrastructure explained: “These new spaces incorporate the features that our students and teachers have told us are most important.”

Professor Neil Alford, Associate Provost (Academic Planning) said: “The Estates team to do a remarkable job in converting poor spaces into space that is attractive, functional and fit for purpose.”



PHOTOS: FAR LEFT, L6 ADAPTABLE TEACHING SPACE, BELOW LEFT L5 MEDIA PRODUCTION STUDIO, ABOVE L5 SILENT STUDY BELOW, LEVEL 5 INDEPENDENT STUDY



KEY LESSONS LEARNED

- On a project ‘less specialist’ than a lab, utilising in-house knowledge for specifying and scoping works saves both cost and programme
- A design to budget, working with the constraints of the building rather than starting with a blank canvas, saved cost and programme
- Early engagement with a contractor to help work up the client-led scope and specification added value to the process
- The use of structured Value Engineering options and costing components allowed quick value judgements to be made and project scope to be amended to suit
- Regular and ongoing communication with both the building management and maintenance teams is vital
- Multi faculty facilities require a single point of client-side liaison – it would have been far harder to deliver the project without this in place

PROJECT FILE

PROJECT MANAGER: STACE LLP
QUANTITY SURVEYOR: HENRY RILEY LLP
ARCHITECT: FOX & JAY DESIGN (CONTRACTOR LED)
M&E ENGINEER: ENERGY LAB (CONTRACTOR LED)
PRINCIPAL CONTRACTOR: QUEST INTERIORS



Doing things differently (2)

Engineering demonstrate the value they add to projects



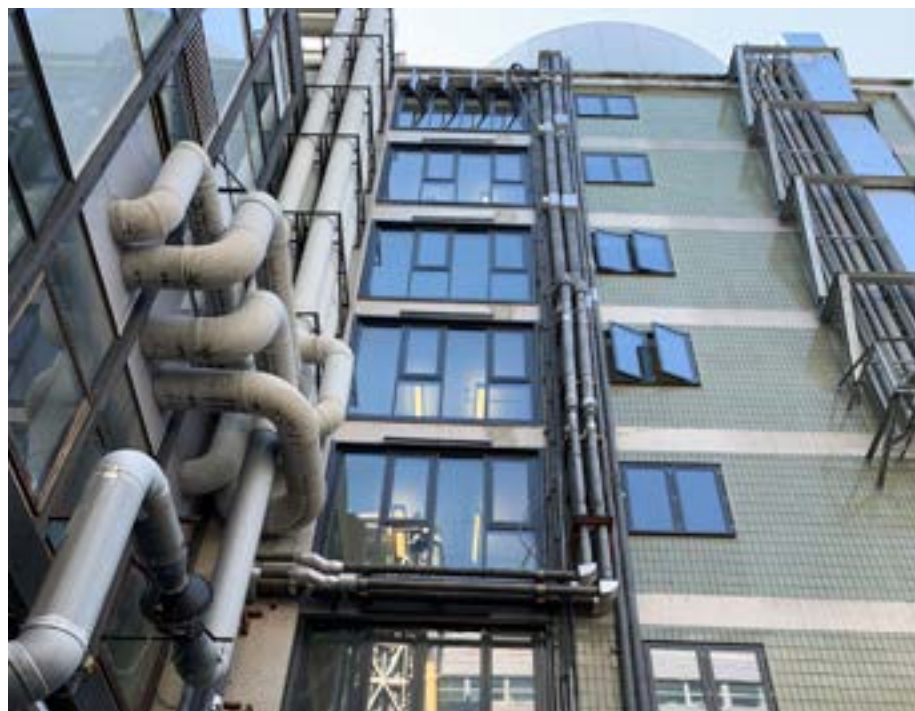
Owen Everall, Chief Engineer, takes us through a project which perfectly illustrates the value that Estates Operations' collaborative working brings to College, in cost saving, space saving and better utilising existing infrastructure

The Materials Department on the ground floor of the Royal School of Mines (RSM) had long wanted to make improvements to its laboratory space on the south side of the building which suffered with high temperatures because of the aspect and large south-facing ceiling height windows. In 2018 they decided to go ahead.

The Department wanted to cool four labs - G15, G15A, G16 and G17 to make summer working conditions more bearable and to provide more stable conditions for equipment. The Buildings Manager, Guy Fairhurst, in conjunction with engineering input from the Engineering, Energy and Environment (EEE)

Team was asked to work with engineering consultant Cain Consulting to provide an initial scheme.

Two options were proposed, a new chilled water package unit or an air conditioning package unit. The RSM Courtyard was proposed



as the location for either of the new cooling units rather than the more usual roof.

Stephen Ng from the EEE team reviewed the proposal, carried out diligence checks using the Building Management System (BMS) and a check on existing assets to ensure the proposal was the right solution and that all options had been explored.

These revealed an existing chiller on the roof of RSM serving the Electron Microscopy Suite for Materials and other users. Data checks from the BMS established the load on the system and a physical water flow check confirmed that the chiller was significantly underutilised and could accommodate the proposed additional cooling. Google Earth was an invaluable addition to the armoury when looking at roofs and external pipe runs.

Cains reworked the proposal to



PHOTOS: TOP LEFT THE CHILLERS ON THE ROOF, BOTTOM LEFT THE PIPEWORK RUNNING UP THE BUILDING, ABOVE THE NEW LAB INSET LEFT THE COOLING PANELS IN THE CEILING

utilise the spare capacity and the solution proved even simpler as the chilled water pipes already ran through the ceiling space in the labs. The original designer had had the foresight to make the pipes large enough to carry extra load.

Easier maintenance on the Air Handling Units (AHUs) was made possible by specifying finless frost batteries (they don't get clogged with leaves and dirt) and differential pressure indicators for the air filters which are visible on the BMS (so filters only need to be changed when they are dirty) resulting in an improved service for the laboratory users and less intervention from Maintenance.

The adopted scheme benefits both Materials department and Estates through:

- cost saving - no extra chiller to purchase or install
- space saving - the courtyard remains clear
- efficiency - the existing chiller will run more efficiently because of the extra load

- maintenance saving (from a chiller perspective) - no additional maintenance has been added.

The cooling has now been completed to the four labs. RSM G16/17 project was completed in November 2019 and cost £128k. RSM G15/15A was completed October 2020 at a cost of £193.4k.

The end user is delighted. Cora O'Reilly, Materials Departmental Operations Manager, said: "The project ran to time and to budget and was very well overseen by Engineering and the Building Manager to ensure the scope of the project was appropriate and the work completed well."

Jason Hoadley, Materials Departmental Services Manager, said: "Keeping the downtime to a minimum for the lab users was achieved, and the project was delivered on time with the utmost professionalism. The cooling has made the labs more comfortable for the users to carry out vital research and student teaching."

One of those unnoticed projects

The Blackett laboratory building on South Kensington campus still has lighting system wiring dating back to the 1960s.

The wiring type, known as concentric, is being removed at every opportunity and replaced to meet current electrical safety regulations. Work is being carried out in ten stages and includes new lighting, replacement wiring and LED fittings; plus new ceilings and ceiling heating panels in most of the rooms.

The project entailed 250 spaces being decanted, isolated, rewired with new lighting and ceilings. Multiple areas required asbestos to be removed and subsequent decontamination.

Negotiation with occupants to decant them from offices and labs has been required to enable progress, even though the work is generally being undertaken out-of-hours and in vacations, as the building is fully occupied by the Department of Physics.

Where possible offices, labs and corridors have also been improved by redecorating and replacing flooring, and replacing furniture and equipment.

The project started in 2016 and has now reached stage eight. There have been 70 electric test certificates issued, and a progress set of Operation & Maintenance Manuals completed. The final stages are being planned that will complete the project in September 2021, including the refurbishment of five High Energy Physics labs.

Holidays, celebrations, diversity days and events

● Ramadan	12 April - 12 May	● Mental Health Awareness Week	18-24 May
● Deaf awareness week	4-9 May	● Spring Bank Holiday	31 May
● Early May Bank Holiday	3 May	● World Refugee week	20 June
● Intl.Day against Homophobia, Transphobia & Biphobia	17 May	● Windrush Day	22 June

Championing Health & Safety

Mike Kent has stepped up as a new voluntary champion of Health & Safety (H&S) within the Maintenance team.

Mike, an Engineer in the North Team on South Kensington campus has taken on the role of H&S Representative to support the Maintenance Team and the Estates Health & Safety Team to step up efforts to achieve even greater standards than they are reaching already.

He took up the challenge in February, after a call for support from Health & Safety Advisor, Sangita Kerai. This followed up on the introduction of new H&S guidance in 2018 and an annual inspection in 2019, it was felt the eyes and ears on an operational level would be the best way to progress.

Sangita said: “Mike has the full support of his supervisors and is being given some diverted work time when possible, but the idea is as a champion he is an exemplar that H&S is not something ‘above and beyond’ but part of everyday duties. So far it is working really well.”

Mike has a monthly meeting with Sangita to update

her on his activities from the to do list they have agreed, plus anything he has become aware of.

Mike’s experience before joining Imperial two years ago makes him a good fit for the task. He has a background in risk assessments and has Institute of Occupational Safety and Health training and had responsibilities across five sites in his last job. He was already an advocate of plantroom tidiness, something which recently appointed Head of Maintenance Rak Patel is also keen to promote.

Mike said: “There’s quite a bit to do. For example, a workshop inspection identified 21 issues to address, we’re about three-quarters of the way through. We’ve looked at things such as ear defenders and goggles, and new chemical safety cabinets. The main thing is to get people on board.”

He added: “This was something I was interested in anyway, so I’m pleased to help with it.”

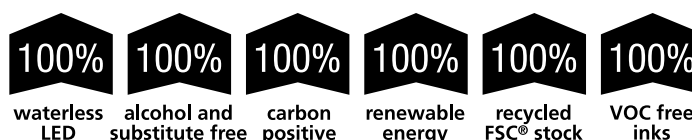


Sustainability Statement

This magazine has been produced using methods which support our values on sustainability. It is printed on 100% FSC certified recycled paper, using 100% waterless offset printing which is 100% alcohol / VOC free. It has been produced in a carbon positive factory, using 100% renewable energy, with zero waste to landfill.

Imperial College London Estates Operations is committed to the environment.

This document is printed using processes that are:



Zero
0%
waste
to landfill

Printed by **seacourt** – proud to be counted amongst the top environmental printers in the world