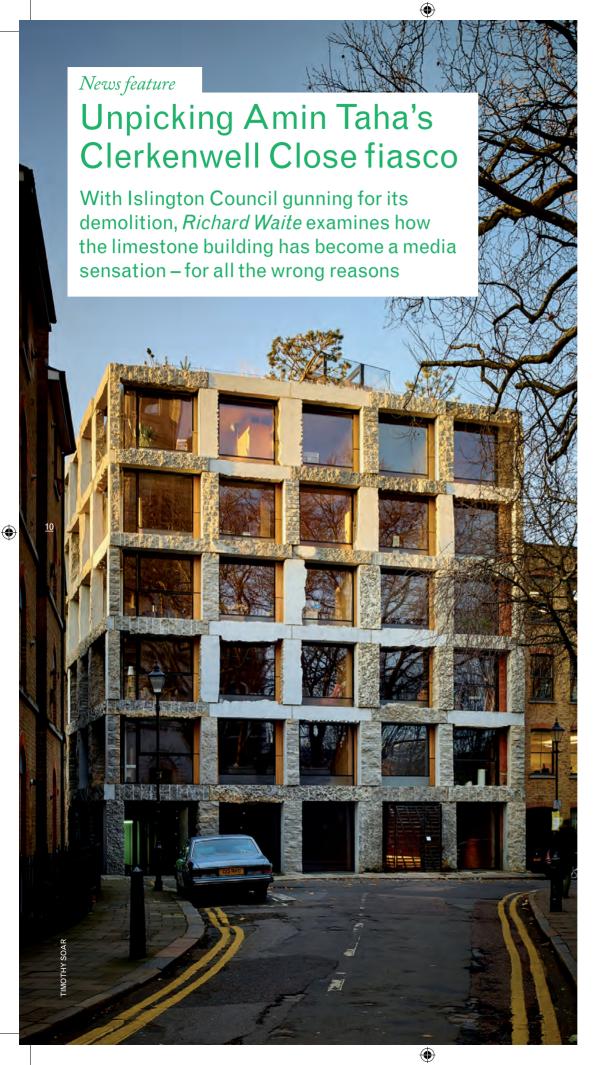
Feature writer of the year entry
Richard Waite, news editor, Architects' Journal

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Supporting material 1/3
Unpicking Amin Taha's Clerkenwell Close fiasco
1 October 2018

Much had been written in the nationals about the supposedly imminent demolition of Amin Taha's opinionsplitting but award-winning Clerkenwell building. Nobody had really got under the skin of this incredibly complex planning dispute, nor compile a true chronology of how the fiasco had unfolded. The tabloids wanted blood. However, from the evidence I uncovered, it was clear the architect had a paper trail of proof supporting his actions. Taha was eventually vindicated when a planning inspector overturned Islington Council's demolition order last month (although, given some of the conditions about the facade, he is not quite home and dry). The story proved to be incredibly popular and was the most read article on the AJ's website from the time it went online until the publication of the headline-grabbing 'wonky cinema' blockbuster in March (also written by myself). Our readers demand that the AJ's reporting always goes beyond the superficial. This indepth, heavily researched story remains the definitive guide to this fascinating saga.

www.architectsjournal.co.uk/news/unpicking-amin-tahasclerkenwell-close-fiasco/10035640.article



The recent media storm surrounding the supposedly imminent threat of demolition to Amin Taha's 15 Clerkenwell Close scheme has been incredible

The Evening Standard, The Times, The Sun, the Daily Mirror, the Daily Mail, the Southend Standard, even Spain's Elle Décor have written with relish about how bulldozers will soon be knocking down the six-storey block.

There has been a rubbing of hands over the fate of this award-winning (the RIBA judges described it as an 'astonishing architectural triumph') mould-breaking, central London building – which houses, among other things, Taha's family home and the studio for his practice Groupwork.

Taha, the architect perpetrator of this apparently unacceptable monstrosity, was even recently 'papped' by the tabloid press as he went out to get a sandwich.

Contrary to the doom-riddled headlines, though, the end is not yet nigh for the £4.65 million building with its loadbearing limestone exoskeleton.

While Taha does have a significant issue here, it is one that has been rumbling for some time – the AJ first reported on it in July 2017 – and it is not an easy situation to digest and unpick, especially for a newspaper with limited space.

In a nutshell: Amin Taha thinks he has permission for the 2,000m<sup>2</sup> structure as built; Islington Council does not.

The story began six years ago when the architect submitted plans for a loadbearing-brick design, having received negative feedback from the council's conservation team on his original proposal. Those initial plans had been for a 'column-free' building with a steel plate superstructure. However, the conservation officer is understood to have preferred stone.

As a result the practice put forward a number of different loadbearing options with differing materials. Finally a brick-clad option – effectively a compromise – was approved in 2013.

But soon after, the site's prospective buyer dropped out and Taha's practice took on the development itself.

Given this new start, Taha decided to submit reworked plans 'for a more intriguing [stone] direction', and later received the go-ahead, under delegated powers, for a scheme with a limestone exoskeleton.



The architect insists that all the pre-commencement conditions for materials, design and finishes – namely 'natural quarry finished, drilled split and saw cut' limestone – were signed off ahead of construction in 2015 by the same case officers under delegated powers. Even the location of the quarry (northern France) was included.

After work started, one neighbour immediately complained, but with all the documents seemingly present the grievance went no further and there were no more interruptions.

However, for whatever reasons, when the scaffolding began to come down in mid-2016 and the limestone façade emerged, only the original loadbearing brick submission was visible on the council's website, with none of the stone drawings uploaded.

Those drawings had apparently gone missing.

Some of the neighbours were shocked by what they saw. Councillor Martin Klute, then vice chair of Islington's planning committee and now chair, was particularly taken aback. Unaware of the changes under delegated powers, he took to the press to complain.

Klute, an architectural technologist at AHMM by day, slammed the 'bizarre' limestone cladding, claiming the building was in 'breach of planning policy' and demonstrated 'contempt for the planning process' and that Taha had never 'produced copies of approved drawings for the design he has built'.

In that respect, Taha has always maintained he both possessed and had submitted a full set of drawings for the scheme, a position backed up by his then local councillor at Islington, Raphael Andrews, who saw 'all copies of drawings and planning documentation and consequently supports my position'.

Taha says he also tried to explain this to Klute.

Taha claims an enforcement officer and conservation officer told him they had been instructed by the councillor to build a case for the building's demolition

Yet his protests fell on deaf ears and he failed to deter Islington Council from an unshakeable quest to get the building pulled down. Since 2016 the local authority has issued repeated enforcement notices.

The first was delivered in June of that year when a neighbour complained to Klute that the building appeared to be in 'concrete' not brick as per the initial 2013 submission.

An enforcement officer and conservation officer were sent to visit the site where, Taha claims, he was told they had been instructed by the councillor to build a case for its demolition. That notice was later withdrawn.

In June 2017, a second notice was issued calling for the building to be flattened and replaced in brick.

There were also concerns raised about the height (though the building is actually shorter than specificed in the brick submission).

In response Taha's solicitors sent the council's enforcement department a letter which asked to see the report backing this notice and demanding to know which council committee had met to sanction the notice.

Though the questions went seemingly unanswered, this notice was also withdrawn. Taha's demands for an apology were, however, ignored.

In February 2018, a new notice was issued. This document concedes that the design approval did cover the use of limestone and the height as built.

However, the council remains particularly unhappy about the fossils in the carved rock. It says the fossil finishes on part of the elevations differ to those rubberstamped on 7 August 2015 and that they look rough, 'haphazard and deleterious to the conservation area' and the Grade I-listed St James's Church.

The local authority also has six other main objections – all of which Taha is robustly defending.

- The office door has moved to the side: Taha says this is to lose three risers to the stairs down to the basement.
- The internal arrangements have changed: Taha claims this is to eliminate a dog-leg corridor.
- The roof is a private terrace: Taha insists this is not the case.
- An earlier drawing showed a neighbouring building at the

- wrong height: Taha says that was drafted pre-survey and that a post-survey drawing showed it at the correct height.
- Not all the ground-floor office space has yet been built: Taha says it is not all needed yet.
- The columns protrude from the neighbouring 1970s brick office building and are outside the building line: Taha maintains that the columns sit well within the old lightwell retaining wall and therefore well inside the site boundary.

The disagreements seem trivial, especially given the proposed sanction of demolition. Other battles over less architecturally thoughtful schemes would surely seem more pressing for the local authority and there are rumours of dissent inside the council over its course of action.

But the official line is unequivocally resolute. A council spokesperson said: 'After an investigation, the council has come to the view that the building at 15 Clerkenwell Close does not reflect the building that was granted planning permission and conservation area consent in 2013.

'In the council's view, the existing building does not benefit from planning permission, and the council issued an enforcement notice on 26 February 2018, to take effect on 9 April 2018.'

Perhaps Islington's ire has been driven by groups such as the Friends of Clerkenwell Green, which is objecting to the façade (and has been canvassing locals for support) and the Clerkenwell Green Preservation Society, whose founder Anne Pembroke told *The Times* that the block 'sticks out like a sore thumb'.

Yet support among the architectural profession has been strong.

AHMM's Simon Allford, Phil Coffey of Coffey Architects, Charles Holland, Hana Loftus and Chris Wilkinson have all offered their support. Taha is understood to have more than 700 backers, having canvassed those attending London's recent Open House weekend.

He has also entrusted PR agency Portland Communications to gather together any other voices supporting his fight.

Jeremy Dixon of Dixon Jones, who is among those to have written to the council to show solidarity with Taha, recently wrote: 'The stone in the new Jeremy Dixon has told the council that the building 'should be celebrated rather than subject to something so crude as an enforcement notice'

façade makes for a powerful and instructive comparison with the fine elevation and tower of St James's Church opposite.

'The two play off each other in a truly poetic manner. [This] building is the work of a talented architect and this design should be celebrated rather than subject to something so crude as an enforcement notice.'

Taha has appealed against the notice, and the case (which will be costly for all involved) will go before a planning inspector next March or April.

Intriguingly, the reason the project has re-hit the headlines is partly because Taha has gone out to public consultation with a retrospective planning application for the scheme as built, which he expects to submit in the next few weeks – a backup plan in some ways, though whether the council will look on it favourably is debatable.

These new and laboriously put together belt-and braces drawings will even pick out exactly where all the fossils are.

Such efforts seem onerous and unnecessary, but the architect feels he must cover all eventualities given the twists and turns so far.

'A cynical and unhelpful lesson,'
Taha told the AJ, 'would be to
choose no materials whose form
and finishes cannot be precisely
predicted beforehand. Nothing able
to surprise or delight through the
unexpected but innate beauty of
that material.'

He added: 'A more helpful lesson is to perhaps ensure you carry the same planning team and interested neighbours from beginning to end and through sourcing, receiving and installing your materials.'

Despite the unexpected media spotlight cast on Taha, he has managed to remain, perhaps through gritted teeth, upbeat and objective.

Even so, it is understandable that he is apt to describe the whole affair as 'petty'. It would be hard to find many architects who would disagree with him.

See Owen Hatherley, page 74

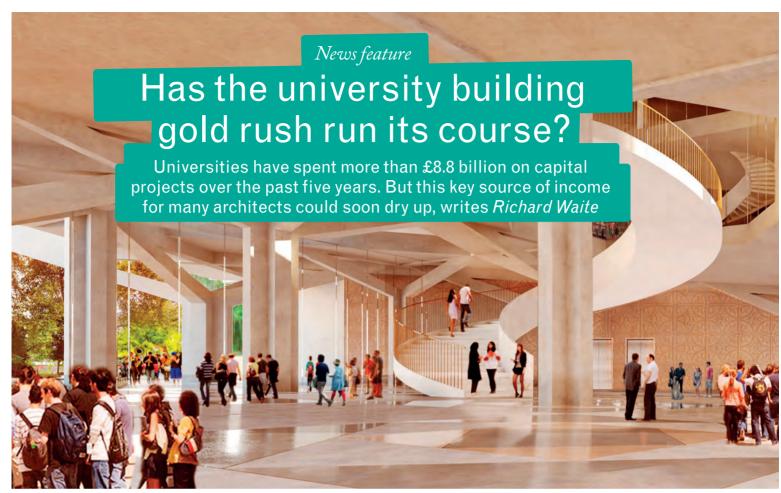


Feature writer of the year entry Richard Waite, news editor, Architects' Journal

Supporting material 2/3
Has the university building gold rush run its course?
31 January 2019

A number of my key sources had alerted me to a potential and worrying slowdown in new-build university work. Though we had regularly written about the more general impacts of Brexit on the profession, this rumoured (and subsequently confirmed) slowdown in the highereducation cash cow was something new and had gone unreported. Trying to find anybody who would talk openly about the issues proved incredibly tricky - indeed many of those within the university estate departments refused to go on the record. Yet what emerged, through scores of conversations, was a clear shift in development focus. Higher education organisations were shunning the shinier new builds and opt to rework their existing stock. This article gave a vital insight into a significant 'market' for architectural services. It also planted the seeds for our RetroFirst campaign, which champions the reuse of buildings and which launched later in the year.

www.architectsjournal.co.uk/news/has-the-university-building-gold-rush-run-its-course/10039393.article



The amount of money ploughed into university building projects over the past four or five years is staggering. Since June 2014 the UK's higher education golden goose has created more than £8.8 billion-worth of capital projects, according to industry tracker Glenigan, which compiled the data. This is nearly as much as the entire cost of staging the 2012 Olympic Games.

Over this period, construction began on 593 separate schemes for the 24-strong Russell Group of leading research universities, with the University of Manchester alone pumping £625 million into 47 projects, including the £350 million Mecanoo-designed Manchester Engineering Campus development. Other recent big-spenders include Swansea University (more than £550 million) and the universities of Edinburgh and Cambridge (both £330 million-plus)

But now there is a problem. Work in the university estates sector, so long a key source of income for many architects, is drying up. According to those commissioning and designing university jobs, the appetite for projects is cooling, especially for shiny new-builds.

Julian Robinson, director of estates at the London School of Economics (LSE) and chair of the independent Higher Education Design Quality Forum, says: 'While there is still a relatively long tail of higher education development in the pipeline, the halcyon days of [university] capital development are certainly over, in my view.'

Robinson is currently delivering big-budget schemes for the LSE by Rogers Stirk Harbour + Partners and Grafton. But he admits that another potential £100 million-plus scheme, details of which could be revealed soon, is likely to be 'the last for some time'.

Only two years ago the AJ reported that the highereducation building boom, backed by increasingly competitive universities, was steamrolling through campuses and threatening a number of 1950s

 $\textbf{Below} \, \mathsf{LSE} \, \mathsf{building} \, \mathsf{by} \, \mathsf{Rogers} \, \mathsf{Stirk} \, \mathsf{Harbour} + \mathsf{Partners} \, (\mathsf{visualisation})$ 











and 1960s buildings (see 'Have post-war university buildings passed their sell-by date?', AJ 26.01.17.)

So what has caused this slowdown and created, as Robinson puts it, 'a distinct nervousness in the sector'? And what are the implications for the profession and the university estates themselves?

The situation is complex, and the factors differ widely between institutions. Of course, the uncertainty caused by Brexit and its potential impact on EU funding and the numbers of overseas students coming to study in the UK cannot be ignored. But the chaos surrounding the UK's impending departure from the EU is not the only reason universities have become jittery about continuing to invest so heavily in their estates. The sector is still anxiously awaiting the outcome of the prime minister's root-and-branch review of post-18 education, led by former investment banker Philip Augar, which was launched last

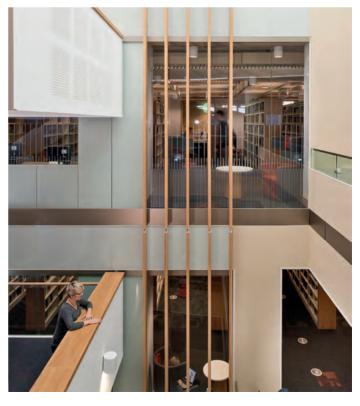
'Many universities that realised their campuses had to be of a higher quality to attract students have now done the majority of their major estate works'

February. University bursars fear the review will call for tuition fees in England to be cut to £6,500 (although fees may be hiked for some mainly non-arts subjects that lead to professions with higher earnings). This would potentially reduce universities' income and spending power.

'The combination of uncertainty over the Augar report and Brexit is creating a perfect storm,' says FaulknerBrowns Architects partner Andrew Kane. 'It is leading some institutions to exercise a great deal of caution in how they promote their emerging capital plans.'

The picture is complicated further by the significant

**Above** Grafton's Paul Marshall Building refurb for the LSE, set to complete in 2021, is likely to be one of the university's last big-budget projects **Below** University of Leeds' Library, by ADP





16



Number of projects Value of projects (£m)
June 2014-Sept 2018 June 2014-Sept 2018

60 600 500 50 40 400 300 30 20 200 100 10 0 University of Leeds University of Cambridge University of Warwick University of Birmingham mperial College London Swansea University University College London University of Liverpool University of Edinburgh University of Manchester

SOURCE: GLENIGAN



### COMMENT Jane White, executive director, Association of University Directors of Estates

The picture is complicated. The diversity of universities within the sector contributes to this. The UK's biggest universities – the ones with international reputations and significant research-based income – may well be in a very different position to a small teaching university in terms of their ability to raise and service loans for estates investment.

And we should remember that some universities – Huddersfield comes to mind – are building new without borrowing.

But across the sector there are many similarities: every university competes for both domestic and international students and staff; every university awaits the outcome of the Augar review with some nervousness as the potential for disruption to existing business models is so great; every university wishes the uncertainty associated with Brexit was over; and every university tries to balance an affordable mix of new builds and maintaining older buildings and repurposing their learning and accommodation spaces.

We [as directors of estates] are just as interested in this latter aspect – reshaping learning spaces to current need – as we are in the rather grander new-build 'statement building'.

increase in debt within the sector – prompting warnings of a university 'credit crunch'. This month *The Times* reported that the 'record borrowing spree' had seen the sector's debts balloon to £10.8 billion over the past year – three times more than before the global economic recession.

And that isn't all. One university director of finance, who wished to remain anonymous, told the AJ not to underestimate the fall-out as higher education 'effectively stopped being a quasi-public sector' with the abolition last year of the Higher Education Funding Council for England (HEFCE). The body, which used to provide grant funding for universities, has been replaced by the Office for Students – an organisation now focused more on 'the fee-paying client' (ie the student).

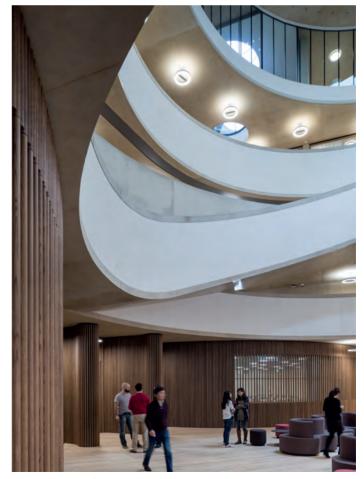
The Research England
Development fund is still open
to higher education institutions
that could have made bids for
funding through the HEFCE, but
this favours universities that

are research-focused. Also a factor is the natural life-cycle of the growth that began with the announcement in 2010 that £9,000 tuition fees could be charged to students.

'Many universities that realised a few years ago that campuses had to be of a higher quality to attract students in the future have now done the majority of their major estate works,' says the university director of finance.

One university that has completed a range of capital projects is the University of Lincoln. In 2017 it spent £53 million on capital projects and reported a £61.9 million debt. Last year its capital spend had dropped to £10.8 million while its net debt had risen to £64.7 million.

The unnamed director of finance, who works at a separate university, adds: 'The sector is now operating in a highly competitive and regulated environment, with the government stating that it will not assist any university that



**Above** Blavatnik School of Government, Oxford University, by Herzog & de Meuron







### COMMENT Fionn Stevenson, professor of sustainable design, University of Sheffield School of Architecture

Over the past seven years capital expenditure across the higher education sector has increased by 34.9 per cent, while staff expenditure has been cut by 1.9 per cent (source HESA).

For some time, universities in the UK have been in a race to the bottom to produce shinier, newer, more attractive individual buildings to attract students, believing that investing more in buildings (at the expense of investing in teaching staff) is the way to grow.

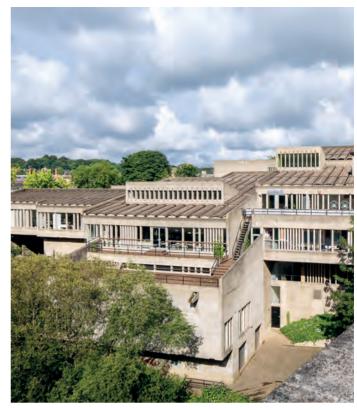
This is a chimera, since richer universities in the USA and Far East are easily able to outgun most UK institutions when it comes to delivering flashy, fashionable icons. It has also resulted in a plethora of second-rate buildings in the UK, put up rapidly and with little accountability in

terms of genuine economic, environmental and social sustainability, compared with when we had more considered, holistic and integrated wholecampus planning, such as is found in the work of Feilden Clegg Bradley Studios.

Universities are now paying the price for this 'Liquorice Allsorts' approach as the financial chickens come home to roost

It is far more resilient to invest precious university resources in nurturing good staff and looking after or repurposing their existing buildings properly, particularly in times of budget cuts and austerity.

Hopefully this will happen now, and there will be more work for architects that specialise in retrofit or reuse – which is often better for the planet, in any case.



Above Dunelm House (1966), Durham University

fails financially. Combine [this cyclical dip] with the 15 per cent drop in the number of 18-year-olds in the country compared with 10 years ago – and hence a drop in intake – then there may be a short-term lull, at least for a number of universities.'

For architects, the threat of reduced funding has resulted in changes to what their higher-education clients are asking them to do. This includes new ways to deliver students' education more efficiently.

BDP's northern region education lead, Sue Emms, believes current thinking on how to deliver teaching could be called into question.

She says: 'We may see a move away from the smaller, collaborative, active learning pedagogies, which are now commonplace but exert a high demand for space and resources. Just when many thought the lecture theatre was dying, we may see its renaissance.'

Emms adds that the biggest consequence of the shifting economy of higher education is an emerging move from new-build to rebuild.

She says: 'Universities are choosing to repurpose existing buildings, rather than demolish and build new. Given the extent

of 1960s and 70s building within university estates, we will see an increase in this. It has to be the right approach.'

Tony Skipper of 5Plus
Architects agrees, saying:
'I would always advocate a
review of the existing estate
before embarking on significant
plans for expansion. After
all, the sector still operates
at inexcusably low rates of
utilisation, which, if addressed,
could save significant capital
and revenue expenditure.'

This reuse-first approach is applauded by Catherine Croft, director of The Twentieth Century Society, which has been battling to save a growing number of post-war buildings, including Durham University's threatened but unlisted Dunelm house, built in 1966 by the Architects Co-Partnership. She says: 'If the slowdown encourages more considered decision-making about existing buildings, it could be good news, particularly for those examples of Brutalism which are not yet listed and which hover on the edge of being widely accepted as historically significant.

'The more time that passes, the more likely it is that their merits will be recognised, and refurbishment rather than redevelopment will seem the obvious solution.'

Croft adds: 'In the meantime universities should be urged not to slap paint on to board-marked concrete as a short-term measure, and to be careful not to drill into fair-faced concrete when fixing extra services. Both cause damage that is tricky and expensive to sort out once funds for major refurbishment have been found.'

Of course, many universities are still forging ahead with overhauling and expanding their estates. Only this week the Royal College of Art launched the next phase of its Battersea campus masterplan, featuring a building by Herzog & de Meuron.

And universities are increasingly looking at hooking up with the private sector.

Emms says: 'Placing academic researchers side by side with industry ensures research is focused on industry's challenges at the same time as ensuring students develop the right skills for industry – it's a key recruitment tool, too. With this blurring of academia, industries and businesses, we are also seeing the impact on estates from the growth of new flexible "learn and earn" pathways.'

In the longer term, universities

will still have to keep investing in their estates and find different ways to leverage money and assets from new sources.

Jerry Tate, co-founder of Tate Harmer, which is designing a 200-seat venue and teaching space for York St John University, concludes: 'There have been some fantastic recent university buildings, but in this global competition we still [trail] some other countries for facilities – particularly new types of collaborative spaces.

'Although some institutions may have overreached, inevitably ambitious universities that want to attract the best talent will feel the need to invest in their estate or risk lagging behind.'

It is unlikely anything will stop the build-out of existing projects over the next couple of years but it is the subsequent wave of super schemes that is in potential jeopardy.

A cleverer approach to reworking existing stock is already becoming a preferred option for many universities. Architects willing to reimagine ageing estates, including the Brutalist post-war goliaths, should be well-placed to keep their higher education workload ticking over.





Feature writer of the year entry Richard Waite, news editor, Architects' Journal

Supporting material 3/3
Can Manchester grow and go green?
16 May 2019

This year the AJ has put the climate emergency at the top of its agenda. How the profession can reduce the amount of carbon in its projects now informs every part of our coverage.

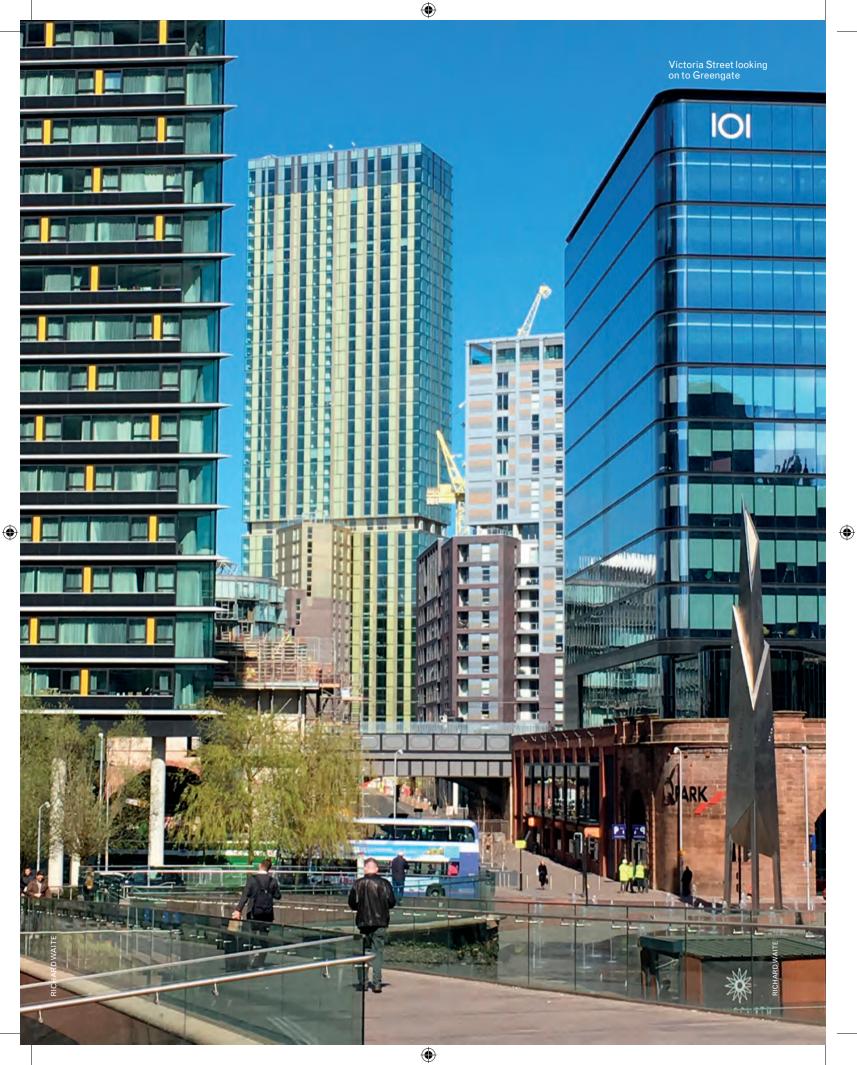
In the last six months there have been some hugely ambitious claims from individuals, organisations and even cities who have announced similar environmentally driven goals.

At MIPIM in Cannes, I heard the Manchester delegation vowing to make all new development net zero carbon by 2028. At the same property jamboree, I also talked to those who were crowing about the city's unstoppable growth plans. But how were those two compatible?

On my return I visited Manchester and talked to raft of people who knew about what was going on in the city [and took photos as I walked around]. I also scoured the mass of policy documents to what was being called for and where it had all come from.

The AJ has made its own pledge to hold to account all those who have promised to make significant changes in a bid to combat climate change. As well as setting out the challenges current facing the city, this piece is also a vital reference point to see whether Manchester actually delivers.

www.architectsjournal.co.uk/news/can-manchester-grow-and-go-carbon-zero/10042545.article





### News feature

# Can Manchester grow and go green?

Richard Waite investigates the challenges faced by the city region in meeting its ambitious carbon target while continuing to grow upwards and outwards

t is a symbol of our growing economic strength that we've got a skyline that looks US style,' said the Manchester City Region's first elected mayor, Andy Burnham, at this year's MIPIM in March. 'It sends a message.'

But what kind of message?
Burnham has a dilemma.
As well as wanting to drive forward the region's massive development expansion – the number of towers under construction in Manchester continues to increase – he has pledged to deliver a supertough strategy to combat climate change.

Last summer, well ahead of April's Extinction Rebellion protests and declarations of a climate emergency, the Labour politician launched a plan to make the region zero carbon by 2038. This is 12 years ahead of the national target recently demanded by the government's Climate Change Committee (see 'Watershed moment as government climate change watchdog targets net zero by 2050' AJ 02.05.19).

What's more, the region has vowed to make all new development net zero carbon by 2028.

These are admirable sciencebased targets. Yet the fine details of this road map to zero carbon remain vague.

'There's no doubt that this is a political headline grabber from the mayor's office and let's not forget he's up for re-election next year,' says former deputy chief executive of Urban Splash Nick Johnson.

'But it doesn't pack any

punches about how [zero carbon by 2038] is going to be delivered and who is going to pay for it.'

So is the delivery of a zerocarbon future for the Manchester city region really feasible? What does it even mean? And how compatible is this supergreen target with the Northern Powerhouse's growth agenda?

Manchester City Region, with its population of more than 3 million, was set up in 2011 to give more power and control to its 10 local authorities.

According to Burnham, it is the fastest growing city region in the country.

Today there are 11,000 homes on site within Manchester City Council's boundaries alone and a further 10,000 homes with full planning permission.

Indeed, if all the current plans are realised, there could soon be 25 towers taller than 100m across Greater Manchester.

Meanwhile Manchester
Airport is undergoing a massive
£1 billion transformation while
its neighbouring enterprise zone
is also set for expansion. And,
earlier this year, Transport for
the North lobbied government
for £39 billion of funding for
Northern Powerhouse Rail – an
improved rail network with the
region at its core.

Yet against this backdrop of business and development, Manchester wants to cap its total annual carbon emissions at 15 million tonnes. To do this the region will have to make a 13 per cent year-on-year reduction in its current emissions.

A quick look at the Manchester's high-rise, mainly concrete, steel and glass, construction scene suggests this could be a tough ask. Many of these were designed and approved years ago under different policy frameworks driven by growth rather than green agendas.

As Aisling McNulty, development director at developer Bruntwood, says: 'The industry has been constantly evolving since the inception of projects like those, and it will take a while for the net-zero buildings being developed now to come to the fore. That said, there is still a significant shift which we need to make to reduce carbon in the design and operation of buildings.'

The task is undeniably massive.

Gavin Elliott, a director at BDP's Manchester office, admits that the practice's own efforts over the last few years seem to have been 'dwarfed by the scale of the challenge'.

He estimates that to hit the proposed carbon budget targets, every existing home in Manchester would need to be brought in line with low-carbon standards within the next 10 years, meaning a huge retrofit programme.

Every commercial building in the city will also have to significantly lower its energy and 'be using 100 per cent renewable electricity from local generation and a decarbonised National Grid' by 2038.

Most of this change, he says, will have to 'be front-loaded

To hit the targets, every home in Manchester would need to be brought in line with low-carbon standards within the next 10 years over the next five to 10 years to give us space in our carbon budget for the even more difficult challenges between 2030 and 2038'.

Effectively, more will have to be done to minimise carbon emissions at the construction stage rather than waiting for reductions through in-use energy.

However to date that shift has been hampered by developers and consultants 'hiding behind the existing regulative framework' – a framework admittedly aligned with the UK's increasingly outdated 2008 Climate Change Act.

Elliott adds: 'There's still a massive amount of self-denial among politicians and policy-makers in trying to pretend we are moving quickly enough.

'However, the truth is the science has moved on and people are only now, belatedly, waking up to the true scale of the challenge and the real urgency to act now before it's too late.'

In some ways Manchester was ahead of the game. In 2010 the Manchester Climate Change Board was founded – an independent advisory panel which includes Manchester City Council as a partner organisation. Bruntwood's chief executive Chris Oglesby is a member too.

The current Zero Carbon Framework was drafted by the board's operational arm, the Manchester Climate Change Agency. This was then passed to the city council which formally endorsed it, including the 2038 target.

The 2028 ambition for all new developments is enshrined in the Greater Manchester Spatial Framework, which is still in draft status. The revised 2019 document is being drawn up in



BDP's Ordsall Chord system of viaducts, bridges and public space



collaboration with URBED and is expected to go to public inquiry. It also focuses heavily on the environment, aiming to reduce the amount of land in the green belt earmarked for development.

In terms of leading by example, Manchester City Council is driving its own super-eco housing agenda with plans for a prototype modular 75-home council house scheme on an as yet unnamed plot. The project, designed by Sixtwo Architects, is being backed by George Clarke and will feature in a new Channel 4 series.

This authority-led drive was hinted at in September when former custom-build chief at Igloo Regeneration Jon Sawyer – now Manchester City Council's director of housing and residential growth – told the AJ he was pushing for greater use of offsite construction methods and was speeding up its sustainability drive (see Manchester's new housing chief: 'We want to lead on modular' AJ 20.09.18).

That modular journey has already begun in the private sector with efforts such as Urban Splash and ShedKM's 72 houses at Irwell Riverside in Salford. Another 156 flats are also proposed there.

Then there is City of Trees
– an initiative to reinvigorate
Greater Manchester's landscape
by transforming 'underused,
unloved woodland and planting
a tree for every man, woman
and child who lives there' over

the next 25 years. That's around three million trees.

Plans are underway too for the Beelines system – a city-region-wide cycling and walking network featuring around 1,000 miles of routes and 75 miles of 'Dutch-style' segregated bike lanes.

A proposed clean air zone, due to go out to public consultation later this year, will cover all 10 local authority areas in Greater Manchester and introduce charges for the biggest polluters. Lorries and coaches would have to pay £100 to enter the zone – the largest outside London – though private cars would be exempted.

Yet while progress is being made, there remain significant challenges to reaching a carbon-free future; not least what zero carbon means on a regional scale.

Katie Tonkinson, a partner at Hawkins\Brown who set up the practice's Manchester office, admits zero carbon remains a 'confusing term'.

'Burnham needs to co-ordinate with the groups currently working up the definition of zero carbon to ensure the industry knows what he means by the terminology,' she says. 'It is only then we can start to achieve it and compare apples with apples.'

At the moment, she adds, the term is only really being applied to energy use. For Tonkinson, the region needs laser-like attention on whole-life carbon.

'We need to reduce [carbon] from all sectors of the economy by 2030 to meet the goals of



Irwell Riverside housing by ShedKM for Urban Splash

## Reusing existing stock rather than bulldozing ahead with shiny new schemes will need to be spearheaded by a committed leadership

the most recent IPCC report,' she says.

'This would naturally result in certain things such as large areas of glass curtain walling and complex aluminium façades being rejected.'

Johnson agrees that there are a wide range of interpretations of 'carbon neutral' and while 'capturing the political zeitgeist' it is a hugely complex issue. 'You can carbon-offset your development by absolving your carbon sins in the form of buying carbon credits,' he says. 'But is that acceptable?

'For new development to be truly carbon neutral you would have to be specific about how users get to their homes or workplace and remove car parking, except for electric vehicles. [And remember electric cars] are not carbon neutral themselves, they're only zero emission at the point of use.'

Once understood, it will then be a question of motivating the development world to alter its traditional models.

According to Jason Eccles, co-founder of Manchester's Artform Architects, the zero-carbon commitment 'must be driven by strong leadership at council level'. Pledges made by developers before consent must be monitored and followed through.

Eccles says: 'As more towers are proposed and get built in Manchester, there certainly needs to be a tall buildings policy which sets out environmental standards for towers and skyscrapers and ensures these high-rise schemes are developed in a sustainable way, taking into account both demand and the effect on surrounding environments across the city.

'Taking the approach akin to New York, where glass towers have been banned, could certainly form part of this. However this would only have a fairly minimal effect in the grand scheme of achieving zero-carbon development across the entire Greater Manchester region, most of which has no towers.'

For councillor Derek Antrobus, lead member for planning and

sustainable development at Salford City Council, it 'is only lack of regulation that stands in the way' of delivering net-zerocarbon homes, given the technologies that already exist.

'Unless there is a level playing field, developers will be forced by the market to 'play it safe' and stick with existing standards and regulations,' he says. 'The challenge now is in the government's hands. Will they uphold our proposed planning policies at the public inquiry into the Greater Manchester Spatial Framework?'

Antrobus insists the proposed policy only demands that buildings achieve a certain standard; it doesn't prescribe how that should be achieved, 'giving architects and designers scope for their own creativity and for new techniques and technologies to be taken on board'.

He adds: 'But let's not run away with the idea that what is being done with the spatial framework is significant. It merely replaces what had been government policy until [then communities secretary] Eric Pickles abandoned the commitment to zero-carbon homes. It only deals with new development when by far the greater challenge is retrofit.'

For a city driven forward by growth and finding space for new people and business, reusing existing stock rather than bulldozing ahead with shiny new schemes will need to be spearheaded by a convincing and committed leadership.

Asked whether retrofit should be the architect's default position in the region, Burnham told the AJ in Cannes: 'It's about finding that sweet spot where good design meets the highest environmental standards, so by designing it a certain way you're not only making it as carbon neutral as possible but you're also giving it the longest life possible.'

He concluded: 'In the 50s and 60s we built a lot of buildings that quickly went out of fashion and lost public support. We don't want to make those mistakes, we want to build for 100 years.'

