

Case Study – Hadrian’s Tower

Submission to the RTPI Awards for Planning Excellence 2021

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Project Background

Hadrian’s Tower is a bold city centre regeneration scheme located on Rutherford Street in Newcastle. The building is a unique and extraordinary 27-storey residential development with a new concept of community and urban living at its heart; unlike anything seen in the North East before, Hadrian’s Tower meets resident’s lifestyle needs through 159 luxury one, two and three-bedroom apartments, a bespoke resident’s lounge, using technology to deliver an innovative concierge experience and connect residents together, providing meeting space with a coffee shop and is topped off with an exclusive champagne lounge on the 27th floor. It introduces a whole new type of modern urban community living to the Northeast region.

Visible on the skyline from around the city and beyond, the building provides unrivalled, never before seen views across Newcastle and beyond and integrates high-quality bold architecture into a dilapidated historic part of the city centre. Hadrian’s Tower has become a beacon for the city, completing during the uncertain times of the Covid pandemic and instilling confidence in investment and self-assured design.

The small plot lies on the western edge of the City Centre and the Central Conservation Area. Formerly occupied by a derelict three-storey warehouse building, the site was in desperate need of redevelopment, footfall to this part of town was low and needed to change. Alongside the core project brief, the aspiration was to improve the streetscape, encourage ground floor activity and pedestrian movement.

The core project brief was to deliver a residential development to meet the aspirations of national and international investment markets, particularly aimed at the Private Rental Sector residential market and of a typology not seen before in the northeast. The position of the plot, at a strategic key gateway into the city and on the outer edge of the iconic Helix development, led to the natural aspiration for the building to be a new urban landmark.

Extensive pre-application discussions with the LPA and statutory consultees, such as Historic England, commenced in December 2014; during which time the scheme evolved significantly. Formal written pre-app responses were received from the LPA in 2015 and 2016. A full planning application and Environmental Impact Assessment was submitted in February 2016 and planning permission was granted in May 2017. Construction of the project began in 2018 but the later phases of the build were impacted by the COVID-19 pandemic in 2020 which resulted in delays to completion. Nonetheless, the project was completed in later 2020 and is now occupied and the coffee shop and champagne bar are open to the public.

Comprehensive and robust planning input from DPP was required throughout the project, from the initial pre-application discussions, throughout the planning application process given the LPA were initially resistant to a tall building in this location, and also throughout the construction process in relation to agreeing matters which were subject to conditions and amendment applications as well as change of use application to accommodate the champagne bar which was added into the scheme at a later stage.

Outcomes for People and Communities

Prior to the development of Hadrian's Tower, the site had been vacant and derelict for over a decade and had a negative impact on this part of the city. The site forms part of a wider urban area that lost its purpose and identity during the 1990's when St James' Boulevard, a four-lane traffic artery into the city, was constructed. This changed the character of the most westerly edge of the conservation area forever. Since its implementation, the Boulevard has failed to meet its original vision of a European scale Boulevard in the truest sense, although a number of developments such as Citygate and Dance City have appeared along its eastern edge. However, the context of the Boulevard is changing with large scale permitted developments at Helix and Strawberry Place that will create a whole new city quarter along the boulevard's western edge. Rutherford Street previously sat in a forgotten part of the city, a street largely cut off from its historic context by the Boulevard and one which was simply used for car parking and access to a small number of businesses and apartments to the north of the Street. Hadrian's Tower however, has significantly transformed Rutherford Street, breathing life and vibrancy back to the street, delivering an active frontage and safer urban spaces to provide a more attractive environment for residents, local people and visitors and create a whole new community in the sky. The positive outcomes of the project are detailed below:

- Sets a benchmark for good quality residential development in the city and the Northeast, offering a unique 'hometel' experience which is new to the region and allows the Northeast to compete with other regional cities.

- The building provides a high-quality frontage onto Rutherford Street and St James' Boulevard as well as improving connections between the city centre and the western city quarter giving the area a new use and sense of purpose within the city.

- With no on site car parking and each apartment having safe cycle storage, the site's central location reduces transport requirements, encouraging walking and cycling.

- The development has resulted in a £44 million inward investment in the City, which demonstrates the strength and attractiveness of Newcastle and the North East to developers; particularly within the context of surrounding regeneration projects at Science Central.

- The creation of new residential units within the city also generates benefits for the local economy. It is estimated that the new households will generate approximately £3.6 million of additional household expenditure per year being spent in the area. The new homes will also contribute approximately £230,000 per annum to Council Tax and a new homes bonus of approximately £222,000.

- Significant contributions have been secured through Section106 planning obligations for infrastructure improvements. This includes public realm improvements on Rutherford Street, Bath Lane and adjacent to the Town Walls and the Town Wall gardens, a new informal crossing on Bath Lane and improvements to the junction at Westgate Road/St James Boulevard to facilitate improved pedestrian and cycling infrastructure.

Planning Contribution

The project presented complex planning and heritage issues due to the ambition of the scheme, its location within Newcastle Central Conservation Area and its proximity to various heritage assets including; the Grade II listed Print Works building, the Grade I listed and Scheduled Ancient Monument historic Town Walls and Blackfriars and the Grade II listed Charlotte Square. At the time of submission, the development would be the tallest building within the City Centre. It was therefore crucial that the proposals took account of the historical context to avoid significant harm to these heritage assets, and to ensure that the design was striking yet sensitive to the character of the city and would impact positively on the city's skyline. As such, the experienced multi-disciplinary project team, led by DPP and Faulkner Browns engaged with Newcastle City Council and other statutory consultees, including Historic England, from the outset of the project. This iterative dialogue between all parties led to evolution of the design of the building over

several months, resulting in an end development which is sensitive to its surroundings whilst also providing an iconic new landmark residential development in the city. A number of technical documents were prepared and submitted as part of the planning application, including a townscape and landscape visual impact assessment which assisted with demonstrating the positive impacts of the development and highlighted that it would not adversely impact on key views.

The demonstrable social, economic and environmental benefits that would arise through the redevelopment of a longstanding vacant and dilapidated site in the city centre, and which would revitalize and bring life back to this part of the city were acknowledged through the planning process and played a significant role in the grant of consent.

The original scheme approved, included a planning requirement to provide public access on to the roof to capitalize on the unique views offered by the scheme. However, this brought with it practical issues due to plant on the roof and the design of the cladding making views difficult. However, this was mitigated by incorporating an additional floor to create a sky lounge which has provided a means for a safer, warmer and more practical environment which achieves better public access than originally planned for. This allows the public to benefit from the building as well as residents of the building, draws in tourists and day visitors and creates more new jobs within the city. Further planning inputs were required to secure this change to the scheme and in order to reduce the impact, the additional floor was achieved by reducing each of the lower floor levels slightly which meant the overall height of the building was not increased.

Outcomes for climate action

During the design phase consideration was given to the materials that would be used and the waste that is produced during their manufacturing and where appropriate recycled materials were specified. The BRE's Green Guide was also used to select materials and products with a low environmental impact.

The development utilises a large amount of glazing however, the glazing was carefully selected to provide high levels of light transmission along with low solar radiation to increase the contribution of natural daylight and reduce solar gains.

The correct selection and energy efficiency of services systems, plant and distribution was of great importance to the energy efficiency strategy of the development. As well as some standard measures to optimise the efficiency of the services it was decided that measures over and above the norm would be necessary to achieve the client's requirements:

- **Reduced Specific Fan Powers:** All ventilation systems were designed to provide the lowest possible specific fan powers which are practically achievable. Current building regulations require that for central extract fans within refurbished buildings, specific fan powers of 2.0 W/l/s or better are provided. As the building is largely mechanically ventilated, significant energy savings can be made by the reduction of the specific fan powers.
- **Variable Speed Pumps:** Variable volume pumped systems were provided in order to maximise the energy savings afforded by the use of variable speed pumps. Automatic balancing valves were provided in order to alleviate as much as possible any problems associated with variable volume water systems. As the building will operate under part load conditions for the vast majority of the year, large reductions in energy use can be provided by the use of variable speed pumps.
- **High Efficiency Lighting:** High efficiency lighting was installed to reduce electrical energy consumption while maintaining the desired lighting levels. In addition to efficient light sources, luminaires with high light output ratios using high efficiency optic and reflector technology will be used to optimise the useable output from the lamps.

- **Lighting Controls:** Lighting controls, in the form of presence detection have been added within circulation spaces throughout the development.
- **Power Factor Correction:** Equipment was installed to ensure that the power factor has a minimum value of 0.95.
- **Metering Strategies:** Metering of the building energy systems will be provided as recommended by CIBSE TM39.

The measures undertaken to make the building both lean and mean, i.e. careful selection of building fabric and form (lean) and energy efficient services and equipment (mean) have resulted in a building that will produce a CO2 reduction below the Part L target building under 2013 regulations.

Outcome and sustainable development

The project meets the following UN Sustainable Development Goals:

- Goal 3: Good health and well-being– The site is centrally located, close to a wide range of facilities and services. The development is also car free, encouraging walking and cycling and provides cycle parking for all residents.
- Goal 8: Decent work and economic growth– The site’s central location provides residents with access to work opportunities within the city and surrounding areas due to its proximity to key rail and bus links. The on-site coffee shop and bar provide job opportunities and increased spend within the local area. The creation of new residential units also generates benefits for the local economy; it is estimated that the new households will generate c.£3.6million of additional household expenditure per year and the new homes will contribute c.£230,000 per annum to Council Tax. The development has resulted in significant investment within the city to bring this vacant site back into use and acts as a beacon of investment for the city.
- Goal 9: Industry innovation and infrastructure- Significant contributions were secured through S106 planning obligations for infrastructure improvements, including public realm improvements on Rutherford Street, Bath Lane and adjacent to the Town Walls and the Town Wall gardens, a new informal crossing on Bath Lane and improvements to the junction at Westgate Road/St James Boulevard to facilitate improved pedestrian and cycling infrastructure. Given the tight and constrained nature of the site, innovative construction methods were required during the build process; including the installation of a 90m crane and the project utilised innovative bathroom pods which were installed via a crane onto a cantilever deck before the partitions and façade were installed. This highly efficient process, enabled 10 pods to be integrated into the building each day.
- Goal 10: Reduced inequalities– All apartments within the building are wheelchair accessible, providing high-quality accessible accommodation within a city centre location.
- Goal 11: Sustainable cities and communities– The project has regenerated a long-standing vacant site. In its previous form, the site contributed nothing to the city centre and had a negative impact visually. The building has brought life and vibrancy back into Rutherford Street, providing city centre housing in a sustainable location. Hadrian’s Tower has created a new and cohesive urban community within one building and to the benefit of the wider surrounding businesses reflecting the changing dynamic of a city centre, meeting people’s lifestyle needs and creating a positive step change to retain young people in the NorthEast, changing a historic demographic trend of young people migrating to London and Manchester. -
- Goal 12: Responsible consumption and production and Goal 13 Climate action: During the design phase consideration was given to the materials that would be used and the waste that is produced during their manufacturing and where appropriate recycled materials were specified. The BRE’s Green Guide was also used to select materials and products with a low environmental impact. A range of measures have also been incorporated to reduce energy consumption and ensure efficiency within the building.

Community Engagement

During the design process and prior to submission of the planning application, a robust public consultation exercise was undertaken to engage with the local community on the proposals. A public exhibition was held near to the site to introduce the vision and proposals for the site; various consultation boards were on display providing information, a scaled model of the proposal was provided to help people visualise the proposals and members from the various technical disciplines of the project team were available to answer any queries.

In addition to the public exhibition, a website was also set up which included information on the proposals, a copy of the exhibition boards and key questions and answers.

To advertise the event and website, over 1,000 leaflets were distributed in the surrounding area and information was also issued to local councillors.

The proposals attracted a lot of attention, given its central location, its long term vacancy and the scale of the proposals. There was a lot of support for the regeneration of the site and the provision of high-quality housing within the city centre however a number of concerns were raised regarding the scale on the basis that the Newcastle city skyline contains very few tall buildings compared to other UK cities. All comments were responded to with a Statement of Community Involvement and where necessary, additional information was provided to explain the design rationale for the building and the impacts it would have on the surrounding area.

Leading Practice

The project brief to deliver a tall landmark building within the city centre presented a number of complexities given the site's location within the Newcastle Central Conservation Area and its proximity to various heritage assets; including the Grade II listed Print Work building, the Grade I listed and Scheduled Ancient Monument historic Town Walls and Blackfriars and the Grade II listed Charlotte Square.

As such, substantial work was undertaken to prepare the proposals for the site and DPP, alongside the design team, undertook and engaged in an extensive pre-application process with the LPA and statutory consultees, such as Historic England between 2014 and 2016. Regular meetings were held to discuss the development of the scheme and overcome any key issues. This process although intensive was considered extremely important for the development, particularly given the sensitive nature of the site. It also helps to ensure a more collaborative approach to planning whereby the LPA and statutory consultees are fully involved throughout the design process. This approach allowed for a smoother determination period and meant that the main issues were dealt with before submission and consultees were already very familiar with the proposals which enabled a greater understanding for a positive statutory consultation process.

In terms of creative techniques, it was acknowledged from the onset that the site was sensitive in terms of its heritage impacts and as such the design of the building took account of views analysis to minimise the overall impact of the development and to assist with breaking up the mass. The design team explored a range of options, testing the visual impact of each on the surroundings, using both physical and digital models and once the proposed scheme had been agreed upon, a physical scaled model was produced which aided discussions with the LPA and statutory consultees as well as with the local community. The planning process took a considerable amount of time, with the planning application itself exceeding the 16-week determination process, instead taking over a year. However, this enabled time to address the key issues associated with the complexities of the project to ensure the delivery of a successful scheme.

Does the scheme or project have particular significance to the region?

Hadrian's Tower has become a beacon for the city, instilling confidence in investment and bold design. The unique building also complements the adjacent Helix Masterplan, which has a vision to create a sustainable urban quarter combining living, working and recreation space in this part of the city.

Hadrian's Tower sets a high standard in luxury urban living, introducing a new concept to the north east and making it a highly sought-after address in the City. From the moment you step into Hadrian's Tower you are surrounded by the latest technology and an exclusive concierge service. The Hadrian's Tower Exclusive Residents' App is the leading technology in the building, which is like no other in Newcastle or the North East. Each resident has access to the App and can access facilities to ease the everyday routine. The Hadrian's Tower exclusive resident app links to the 24/7 concierge services, residents support, and everything that helps to create the 'Hometel' experience. From booking a cleaner, arranging a dog walk, turning up the heating, booking a table at a restaurant, the app allows residents to free up their time and has a mission of building a community in Hadrian's Tower where people love to live. Residents also have access to the champagne lounge on the 26th floor as well as a coffee shop and residents lounge area and meal preparation service. These exclusive services include:

- Room service: just like a 5* hotel, a range of tasty treats and weekly specials freshly prepared on-site can be delivered straight to resident's doors.
 - Dry cleaning and laundry: each apartment has an integrated washing machine but through the app laundry can be collected and re-delivered fresh, pressed and ready to go.
 - Housekeeping: a flexible housekeeping service ensures residents have more time to enjoy life in the city without the hassle of everyday chores.
 - Pet friendly apartments and pet care services: unlike many apartments in the city, pets can live in the building and residents can also benefit from dog walking and grooming services through the exclusive onsite pet care service.
 - Holiday and travel: with a tailored travel service, residents can access exclusive deals and have a dedicated agent to take the hassle out of booking a holiday.
 - Taxi and car service: a door-to-door taxi service offers priority booking to all residents and also provides access to an executive car range.
 - VIP experience: all residents are able to access exclusive offers and priority booking to all High Street Group bars, restaurants and hotels both in and outside the city.
 - Rewards: a rewards system allows residents to collect points against the products and services booked which are redeemable against future purchases.
 - Natural enhancement clinic: residents can access an exclusive menu of skincare products and services with the option for resident's to order treatments straight to their apartment.
- The building also provides public access to the champagne bar on the top floor, providing unrivalled, never before seen views across the city and beyond and integrates high-quality architecture into the city centre.