UNIVERSITY OF MANCHESTER

INSTALLATION OF NEW EXTRACTION SYSTEM, CHEMISTRY BUILDING, BRUNSWICK STREET, MANCHESTER

PLANNING AND DESIGN STATEMENT

10 JANUARY 2012

TURLEYASSOCIATES

CONTENTS

1.	Introduction	1
2.	The Proposal	3
3.	Site and Surroundings	10
4.	Planning Policy Framework	11
5.	Planning Appraisal	19

TA Ref:	UNIM2006
LPA Ref:	
Office Address:	1 New York Street Manchester M1 4HD
Telephone	0161 233 7676
Date of Issue:	10 January 2012

1. Introduction

1.1 This Planning Statement has been provided in respect of two full planning applications for the erection of external plant to the University of Manchester Chemistry Building located on the corner of Upper Brook Street and Brunswick Street within Manchester City Centre.

1.2 The proposal relates to the installation of a new ventilation extraction system to replace the existing aging system with a new system which will:

- improve the building's sustainability performance;
- improve the local air quality effects of the building's operation; and
- ensure the building continues to be fit for purpose as a chemistry research and teaching facility.

1.3 This joint Planning Statement is submitted in support of the two applications. It sets out the background to the proposals, the need for them and the improvements and enhancements they will deliver and assesses the proposals against the provisions of the statutory Development Plan and other material planning considerations.

1.4 Two separate planning applications are submitted. One relates to the installation of a new bespoke extraction system serving solely floor 4 of the building enabling this floor to be brought back into productive use a specialist research and teaching facility. The second relates to the installation of a new extraction system serving all other floors of the building.

1.5 In addition to this Planning Statement, the applications comprise the following:

- Application forms and certificates;
- Architectural Plans provided by Halliday Meecham and Pick Everard;
- Noise Assessment prepared by RPS Planning and Development;

1.6 The remainder of this Planning Statement is structured as follows:

- Chapter 2 – Background and Proposed Development
- Chapter 3 – Site and Surroundings

- Chapter 4 – Planning Policy Framework
- Chapter 5 – Planning Appraisal

2. The Proposal

The Chemistry School

2.1 The University of Manchester was created by bringing together the Victoria University of Manchester and UMIST on 22nd October 2004. Manchester has a long tradition of excellence in higher education. UMIST can trace its roots back to 1824 and the formation of the Manchester Mechanics' Institute, whilst the Victoria University of Manchester was founded as Owens College in 1851.

2.2 The existing chemistry building was built in the 1960s to provide a specialist chemistry teaching and research facility. It has continued to operate as such since its development.

2.3 The School of Chemistry is one of the largest within the country with around 650 students. The School has comprehensive academic coverage across the chemical sciences, and excellence in depth in all the core sub-disciplines of chemistry, with over 80 postdoctoral researchers.

2.4 The School has a world class reputation and attracts researching funding and students from across the world. The School is a key asset to the University and the ongoing academic success of the University is intrinsically linked to that of the Chemistry School.

2.5 The University is at the forefront of the development of the City's knowledge economy and plays a key role in the general economy of the City and its continued growth. A successful and thriving University is critical to the economic competitiveness and prospects of Manchester. Given the central role which the School plays in the University's own success, it follows that the economic success of the City is also intrinsically linked to that of the School.

The Proposed Development

The Need for the Proposals

2.6 The University has invested significantly in enhancing its teaching, research and student infrastructure over the last 15 years to ensure it remains globally competitive within the higher education and research sector. The School of Chemistry is no different and its own future success and ability to attract students

and research funding is dependent on the quality of its facilities. To this end, various works to the existing chemistry building have been undertaken over recent years to enhance this facility, to ensure it remains fit for purpose and is environmentally efficient.

2.7 The building was constructed to provide a chemistry research and teaching facility. The design of the building both internally and externally reflects this and the associated activities which take place within the building. The teaching and research space within the building includes fume cupboards within which chemical experiments are undertaken. Such processes generate gaseous material which needs to be appropriately extracted to ensure the building is safe to occupy internally.

2.8 The current extraction system of the building is no longer considered fit for purpose and, fundamentally, continued reliance upon it will undermine the continued growth and success of the school owing to a range of limitations. These limitations relate to the following areas:

a) Health and Safety;

b) Resiliency;

c) Energy Efficiency;

d) Air Quality.

2.9 The new extraction system will address these limitations.

2.10 As stated above, the installation of the new extraction system is being carried out as two separate projects, subject to two planning applications. Both projects will address the above limitations. However, the bespoke 4th floor extraction works will secure additional benefits to the University. The need for and benefits of each of the two projects are considered below.

Replacement of central extraction system

2.11 The building is currently serviced by a mixture of individual fume extract systems serving small areas or individual cupboards and a common centralised fume extract system which serves the vast majority of the buildings fume cupboards.

2.12 Externally, this central system consists of three large centrifugal fans located within a plenum chamber within a 9th floor plant room.

2.13 It is proposed to replace this central system with 2no, new fume extract system located on the 9th floor roof of the building, each consisting of 3no fans serving the majority of the fume cupboards with the exception of those on the 4th Floor. The key limitations of the existing system and the resultant benefits of this new system in respect of the three areas identified above are considered in turn below.

Health and Safety

2.14 In order to maintain the existing extraction equipment, it is necessary for the maintenance operative to shut down the whole system, which means it is no longer safe to use the vast majority of building's fume cupboards, and then physically enter the plenum chamber, exposing him or herself to potentially harmful contaminants while carrying out the necessary repairs.

2.15 Currently, the system is configured to operate two out of three fans, with the third fan being a standby unit. However the system cannot automatically switchover from the operational fans and this function has to be performed manually by shutting down the system and restarting the fans which are required. Once the system is shut down the containment of fumes within the laboratory can no longer be guaranteed, and any experiments currently running whilst the system wasn't operational could release fumes into the laboratory space. This would also be the case upon failure of a fan unit.

2.16 The replacement system is able to be maintained whilst the extraction the system remains operational through the use of dampers to isolate fans from the airstream. These fans will also automatically switchover upon failure of the fan unit to maintain the operation of the system. Although extremely unlikely, if two of the three fans failed, the system would still maintain 50% of the capacity which would mean critical experiments could still be carried out safely while the fans were repaired.

Resiliency

2.17 The School's ability to maintain its competitiveness in attracting students and research funding is reliant on offering students and academics reliable and accessible facilities which they can access 24 hours a day, 365 days per year.

2.18 Currently the building is served by one large central fume extract system serving the vast majority of the fume cupboards. In the event of catastrophic fan failure, all the fume cupboards on this system would be rendered out of action until the fans were repaired and operation resumed. Under the current system it would take only

one of the fans to fail to necessitate a shutdown of the whole system in order to repair this unit rendering the majority of the building inoperable.

2.19 The current proposals are to split the single system into two separate systems, each serving a smaller number of fume cupboards. Each system will contain 3 no. fans operating at 50% capacity each in a run/run/standby configuration. In the event of 1 no. fan failing, the system would remain 100% operational with the fan being capable of being repaired with system remaining live.

2.20 In the unlikely event of two fans failing simultaneously, the system would retain 50% of its capacity with the ability to repair the fans with system remaining live, and in the event of all three fans failing the second system would remain live effectively halving the disruption to the building users.

Sustainability

2.21 The current fume extract system is operational on full speed, 24 hours a day, 365 days per year. The fans are relatively old and inefficient meaning a vast amount of energy is being consumed by the building in operating the extraction system.

2.22 The replacement system includes the installation of state of the art fans and controls with energy efficient motors. These fans have the ability to switch off one of the fans when the demand is low and run at half capacity while maintaining the required discharge velocity from the terminal nozzle. Over the two systems this provides four levels of intensity of operation and the ability to drop system duty down to 25% operational when demand is low.

2.23 This will substantially reduce the amount of energy the extraction system uses through its operation delivering substantially energy efficiency and sustainability improvements to the building in line with the University's commitment to sustainability.

Air Quality

2.24 The new extraction system includes the use of Patented Strobic Air Tri-Stack Fans. These fans are fitted with a bespoke nozzle assembly which entrains a large volume of outside air with the primary exhaust stream resulting in a substantially diluted exhaust stream emitting from the system and into the atmosphere.

2.25 The exhaust nozzle design also enhances flow and pressure to increase stack outlet velocities while minimizing energy consumption requirements. The resultant discharge plume produces an effective stack height sufficient to safely disperse

exhaust into the free air stream. Once there, it cannot be re-entrained into building inlets or the adjacent buildings.

2.26 Compared with the current extraction system the proposal, utilising the latest technology, will improve the local air quality. This is achieved by both dispersing gases at a higher physical level meaning the gases released will be more diluted by the time they are dispersed to ground level whilst also emitting more diluted gases in the first instance. Additionally, the current system has fume extract discharges at 3m above the highest point of the roof, whereas the effective stack height of the Strobic fans is in excess of 10m above the highest point of the roof providing additional physical release height.

Provision of new fourth floor extraction system

2.27 The fourth floor is currently extracted through the existing central extraction system summarised above. The limitations of this system in respect of the operation and efficiency of the fourth floor apply equally to this part of the building and there is therefore also a clear need to provide a new extraction system for this part of the building.

2.28 It is proposed to disconnect the fourth floor from the central extraction system and provide a new standalone extraction system. This will comprise a single unit containing 3 no. Patented Strobic Air Tri-Stack Fans. The same type of extraction system will therefore be installed to serve the fourth floor as that for the remainder of the building as described above. This will be located on the seventh floor roof.

2.29 The new system proposed to serve the 4th floor will therefore deliver the same benefits as that which will be provided by the new system serving the remainder of the building with respect to health and safety, resiliency and sustainability.

Air Quality

2.30 With respect to air quality, whilst the 4th floor will extract at a lower level than is currently the case, this reduction in height will be offset by the increased velocity of the exhaust stream and the increased dilution of gases at the point of emission. As a result, the new extraction proposals for the fourth floor will not have any additional impacts on air quality compared to the extraction of the fourth floor through the existing extraction system. This, combined with the air quality improvements that the replacement of the existing central system to serve the remainder of the building will provide, will ensure an overall improvement of local air quality. This will be achieved whilst delivering substantial benefits for the School

and its ability to continue to compete for investment and provide its students with access to high quality facilities.

The need for a separate extraction scheme for the fourth floor

2.31 Notwithstanding the above, the fourth floor extraction proposals are being brought forward as a standalone scheme to deliver a specific new facility for the School. There is a critical requirement for the new extraction system for the fourth floor to be in place by September 2012. In contrast the replacement of the central system is not programmed to take place in the short term but is something which the University is seeking to bring forward beyond 2012 subject to funding.

2.32 In the circumstances, the new fourth floor extraction system cannot be provided as part of the new central extraction system and is therefore subject to its own standalone proposal and a separate planning application. However, it is clear that there remains a need to overhaul the entire extraction system. As such it is entirely appropriate, in the interests of ensuring a comprehensive and coherent proposal for the entire building is put forward and that all parties understand the long term strategy for the building, to submit both applications at the same time.

Appointment of Professor Leigh

2.33 The need to deliver the fourth floor proposals by September 2012 relates to the University's appointment of Professor David A Leigh FRS to the School.

2.34 Professor Leigh's research in synthetic chemistry is regarded as of high international importance and will be a huge asset for the School and University. This appointment will raise the profile of the University on the international stage, putting the City at the centre of the synthetic chemistry research, and enabling the School to compete for new research funding and for new students from across the world. The research work that Professor Leigh is funded by the UK and European Research Councils and will bring an initial additional investment of £5.5 million to Manchester.

2.35 Professor Leigh's appointment is seen a huge step towards the School cementing its high standing place in this field of chemistry. More widely, this appointment will ensures the School and wider University continues to contribute to the ongoing growth of the knowledge economy within the City.

Fourth floor refurbishment requirements

2.36 In order to accommodate Professor Leigh's research group it is necessary to completely refurbish the existing 4th floor Dover Street wing of the chemistry building. This refurbishment will accommodate at least 30 students and 5 postdoctoral researchers. The provision of this teaching and research space refurbishment is a prerequisite of Professor Leigh moving to the University.

2.37 The fourth floor has been untouched so far by the phased upgrading of the chemistry building which commenced in 1998. The current building services are nearly 50 years old and no longer fit for purpose due to age, related wear and tear and increased requirements in respect of health and safety.

2.38 The proposed refurbishment includes for the installation of 32 no. 2m wide fume cupboards. For the reasons outlined above, the existing extraction system serving the building, including the fourth floor, is affected by a number of limitations which mean a new system is needed. This will be delivered as part of the comprehensive refurbishment of the fourth floor to ensure that Professor Leigh and his teaching and research group are provided with a safe, efficient, modern and resilient facility within which to work. Put simply the existing extraction system is not fit for purpose and continued reliance would affect the University's ability to provide Professor Leigh and his students and researchers to undertake their work.

3. Site and Surroundings

Site

3.1 The application site comprises the existing Manchester University Chemistry building associated car parking, hardstanding and landscaping areas. The site is bounded by Brunswick Street to the north, Upper Brook Street to the East, Dover Street to the south and an access road to the west.

3.2 The existing building is irregular in shape and dates from the 1960's with architecture typical of this era. The building ranges from a single storey to a maximum of 9 storeys in height. The site is surrounded by buildings of similar style and height and that are also in use as educational facilities.

3.3 Externally the building contains a variety of plant and related equipment as required for its operation and reflecting its use as chemistry building. This includes a specific plant room located on the 9th floor roof to the building.

3.4 The site is visible from all four streets that bound it, mature trees within an areas of landscaping offer some screening to the north of the site. A grassed area runs along the southern boundary of the site.

3.5 The building is not listed and the site does not lie within a Conservation Area.

Surroundings

3.6 The site is surrounded to the north, south and west by educational buildings of similar height, style and function. These surrounding buildings form part of the Manchester University Campus which extends from Whitworth Street to the north down to Grafton Street to the south.

3.7 An area of residential housing lies to the east of the site on the opposite side of Upper Brook Street beyond an area of landscaping. To the north east of the site lies a supermarket.

4. Planning Policy Framework

Introduction

4.1 In accordance with the provisions of Section 38(6) of the Planning and Compulsory Purchase Act 2004, this application falls to the considered against the provisions of the development plan for the area, which in this case comprises the adopted North West of England Plan Regional Spatial Strategy to 2021 (RSS) (2008) and the adopted Manchester City Council Unitary Development Plan (UDP) (1995).

4.2 The City Council is currently in the process of preparing an emerging Local Development Framework, the Manchester Core Strategy was submitted to the Secretary of State on 18th July 2011 and the Examination in Public (EIP) commenced on 22nd November 2011. The Inspector's Report and formal adoption is expected early 2012. Upon formal adoption the various documents of the LDF will form part of the Development Plan. However, at this time, the LDF is not part of the adopted Development Plan and should, therefore, be afforded reduced weight as a material planning consideration.

4.3 Other planning policy and non-statutory documents of relevance to the determination of this planning application comprises national planning policy guidance and statements (PPS and PPGs), informal policies and studies, and Government statements.

National Planning Policy

Planning Policy Planning Policy Statement 1: Delivering Sustainable Development (2005)

4.4 PPS1 reaffirms the plan-led approach that planning decisions should be taken in accordance with the development plan unless material considerations indicate otherwise as required under Section 38(6) of the Planning and Compulsory Purchase Act 2004.

4.5 It underlines the Government's commitment to a planning system that creates sustainable development with emphasis on protection and enhancement of the natural and historic environment, and ensuring high quality development through good and inclusive design and efficient use of land and resources.

4.6 Development on previously developed land, and in sustainable locations, such as town centres and those well-served by a variety of public transport, is encouraged, to create sustainable and safe, mixed and liveable communities.

Planning Policy Statement 4: Planning for Sustainable Economic Growth (2009)

4.7 PPS4 was adopted on 29 December 2009 and sets out the Government's priorities and objectives for delivering development which contributes to economic growth. It provides the national policy framework for economic development.

4.8 It confirms that, for the purposes of the policies in the PPS, 'economic development' includes main town centre uses as well as development which contributes to one or more of three specified objectives including providing employment opportunities.

4.9 Policy EC10.1 encourages Planning Authorities to adopt a positive and constructive approach towards all applications for economic development.

4.10 In accordance with Policy EC10.2 all proposed economic development must be considered against a range of impact considerations relating to energy efficiency and resilience to climate change, accessibility, the achievement of a high quality and inclusive design, and impact upon physical and economic regeneration and local employment. The proposed redevelopment scores highly in this regard.

The Development Plan

North West of England Plan Regional Spatial Strategy to 2021

4.11 RSS for the North West was formally adopted in September 2008. By virtue of the provisions of the Planning and Compulsory Purchase Act 2004 it forms part of the statutory development plan for Manchester. The Coalition Government has indicated that the RSS will be revoked although the exact timescale for this is not yet known, but it is expected to be in early-mid 2012. Until then RSS continues to form part of the adopted Development Plan.

4.12 The core principles of RSS seek sustainable patterns of development and physical change including focusing new development within existing centres and in sustainable locations; promoting the efficient use of land and resources; reducing

the need to travel; and delivering attractive, well designed neighbourhoods (Policies DP1-5).

4.13 Policy L1 encourages the provision of educational facilities and in the supporting text states that:

"Good access to cultural, education and training provision will empower individuals and provide a more skilled workforce to meet the demands of local businesses. As well as helping to promote social inclusion, this policy aims to support North West educational institutions and encourage the retention of students and staff for the benefit of the regional economy"

4.14 This policy approach underlines the importance of educational facilities and organisations being able to attract the top students and staff for the benefit of the wider economy, especially if the region can retain students once graduated.

Manchester UDP (1995)

4.15 With regards to economic and employment development the UDP states that the higher education sector is a key strength to build upon to promote future growth in the City.

4.16 In order to maximise job opportunities the UDP encourages the growth of higher education facilities

4.17 Policy L1.5 states that the Council will promote and support development which will enhance the City's role as an international centre of excellence for learning and research. This is in order to retain existing jobs and maximise the opportunities for the generation of new employment consistent with the need to protect residential and environmental amenity.

4.18 The supporting text to this policy argues that:

"One of the strengths of the City is the wealth of expertise in its higher educational establishments which comprise the largest concentration of such facilities in Europe."

It goes on to state that:

"The Council wishes to work closely with the various higher education establishments to encourage the further growth of higher education facilities. The

economy of the City and of the region will be strengthened if close links are developed between these institutions and the business community."

4.19 Policy RC20 (Area 30) outlines the policy approach for the City's University Area, it is explicit in its support for Higher Education provision in the city and the importance of such facilities to the people and economy of Manchester and the Region.

4.20 Policies for the University Area are designed to sustain and enhance its educational role and maximise the spin-off benefits from the concentration of scientific and technological resources.

4.21 It goes on to state that:

"The Council recognises the need for the educational institutions to respond to changing pressures and will respond favourably to necessary development and redevelopment proposals"

4.22 There will be a presumption in favour of development which supports the area's educational function.

Core Strategy Publication Submission (2011)

4.23 Strategic Objective 2 (Economy) states that the Council support further improvement of the City's economic performance and aim to spread the benefits of this growth across the City to reduce economic, environmental and social disparities, and to help create inclusive sustainable communities.

4.24 In support of this objective the Core Strategy states that the economic priorities for Manchester are to increase productivity, develop the market and labour force, attract investment, improve skills and provide businesses with the right support.

4.25 Manchester is identified as the economic driver of the City Region largely due to the location of key assets within the City area including the regional centre, world class universities, knowledge economy, strong financial and professional services sector, and access to a skilled labour force

4.26 Policy EC1 (Employment and Economic Growth in Manchester) states that the Council will support significant contributors to economic growth and productivity including health, education, retailing, cultural and tourism facilities, mainly in the City Centre and Eastlands.

4.27 Within the supporting text of Policy EC1 it is acknowledged that there is a significant concentration of high technology manufacturing and knowledge based services related to Manchester's hospitals and universities particularly within the Oxford Road Corridor and University Hospital South Manchester.

4.28 Paragraph 8.23 which supports Policy CC1 (Economy and the City Centre) states that the City Centre contains many of the assets driving growth in the City-Region such as:

- a dynamic private sector including a strong financial and professional service sector.
- highest concentration of higher education facilities in the North West, providing a highly.
- skilled population attractive to businesses.
- a cluster of hospitals and health and medical research.
- a complex infrastructure network - transport, digital, utilities, flood defence and open spaces.
- high quality residential accommodation.

4.29 The Core Strategy identifies the area of land that the proposal site sits within as The Corridor; a key large scale regeneration area, and states that:

"The Corridor: is characterised by the redevelopment of the big institutions, namely, University of Manchester, Central Manchester and Manchester Children's University Hospital Trust. The area offers opportunities related to research and development linked to the big institutions. Major employment areas include Great Jackson Street and First Street but also smaller sites including the BBC building and Manchester Science Park."

4.30 The supporting text that accompanies Policy EC8 (Central Manchester) argues that the most successful agglomeration economies include top flight universities. In Central Manchester the University of Manchester complex has expanded within The Corridor (Manchester) and Manchester Metropolitan University will be developing a new Campus at Birley Fields and spin off research and development industries are expected to locate at the Techno Park and Manchester Science Park. These small and medium sized businesses will complement and provide business development to some of the largest employers in The Corridor, namely, Central Manchester NHS Trust, the universities and City Centre businesses.

4.31 The Oxford Road Corridor (The Corridor: Manchester) is considered to have significant potential to attract inward investment over the short to medium term. Demand for employment space in Central Manchester is expected to be driven by healthcare and biotechnologies and creative industries and media. The vision for this area is that a step change in economic activity will occur in the period to 2020 thereby encouraging growth within Manchester and the North West region.

Other Non-Statutory Policies and Documents

The Central Manchester Strategic Regeneration Framework (SRF) (2009)

4.32 One of the key opportunities identified by this framework centres around the Southern Gateway; the location of the proposed developments. It states that the major expansion of the University and Hospital activity on the Oxford Road Corridor can both provide additional employment opportunities for existing residents and act as a means of attracting new economically mobile populations to live and work in the area.

4.33 It adds that the Knowledge Corridor that exists along Oxford/Wilmslow Road is a major asset to the area. Home to the University of Manchester, MMU, Manchester Science Park as well as strong and expanding hospital and BBC facilities, this area has a major role to play in shaping the city's economic future.

4.34 This vital role in the city's economy is recognised and reinforced by the 'Knowledge Capital' Initiative's future plans for an 'Arc of Opportunity' through the area. Employment and economic growth opportunities will be attracted to Central Manchester, with the potential for this to significantly benefit local residents as well as the wider city.

4.35 The framework identifies the Oxford Road Knowledge Corridor as one of four growth corridors stating that it is the single most important driver of economic change within the area. Activity should be strengthened around the expansion of the University of Manchester, hospitals expansions as well as MMU expansion at Southern Gateway. It argues there is a real need to translate the economic power of investment in this area into local economic benefit.

Corridor Manchester – Strategic Vision to 2020

4.36 The Corridor Manchester is a partnership between Manchester City Council, The University of Manchester, Manchester Metropolitan University and the Central Manchester University Hospitals NHS Foundation Trust. The partnership aims to build on the partners' investments in the 243 hectare area known as the Corridor, which runs south from St Peter's Square to Whitworth Park along Oxford Road, Manchester. The partnership is committed to generating further economic growth and investment in the knowledge economy for the benefit of the city region.

4.37 The Strategic Vision states that:

- 43% of activity in the Corridor is in knowledge-intensive sectors, higher than the national (22%) and regional (21%) averages.
- Today the Corridor generates £2.8 billion (22.5% of the city's GVA)
- 55,000 people work on the Corridor (18% of the city's workforce)

4.38 The Vision's aim is that by 2020 the Corridor will generate £4.7 billion GVA and have a workforce of 77,000.

4.39 There are five key themes running through the vision including:

- **Research and Innovation-** The area will be nationally and internationally renowned for the strength of key knowledge sectors – bio and life sciences, healthcare, creative and digital industries, and medical devices. There is a specific vision for the University of Manchester to be in the top 25 of their peers globally by 2020; and
- **Employment, Business and Skills** - The Corridor will be a place of quality employment, skills training and education at all levels.

4.40 The Partnership recognises there are a range of projects and activities that will contribute to the achievement of the Corridor vision. This includes the development plans of individual partner that can be aligned with the vision, creating additional value for the Corridor.

4.41 The University of Manchester is identified as one of the major institutions in the Corridor and is acknowledged as one of the country's top research universities and a leading teaching institution. It states that the research undertaken by world class academics has produced many of the high value businesses located on the Corridor, as well as having a wider impact on the performance of companies across the region and indeed the UK.

4.42 The Corridor vision highlights the importance of the research and development and the educational capacities of Manchester University in contributing to achieving the overall vision. It is also made clear that the success of the Corridor has wider benefits for the Manchester and Regional economies respectively.

5. Planning Appraisal

5.1 This section of the Planning Statement provides a brief appraisal of the proposal against the prevailing policy and related material considerations.

5.2 There are a number of key areas to consider through this appraisal as follows:

- The need for the proposals and their benefits;
- The visual impact of the proposals;
- The air quality impact of the proposals;
- The noise impact of the proposals.

Need and benefits

5.3 Section 2 of this Planning Statement sets out the need for the proposals and the benefits they will deliver. The replacement of the existing ventilation system will contribute to a number of the key strategic policies contained within the Manchester UDP, the emerging Core Strategy and other non-statutory policy by virtue of the sustainability and energy efficiency benefits provided and the positive contribution made to the success and competitiveness of the Chemistry School and the continued growth of the knowledge economy in Manchester. In respect of the last point, the development will specifically:

- Enable the School to provide high quality teaching and research facilities into the future which are both efficient and resilient;
- Enable the School to attract a leading professor in synthetic chemistry and substantial new research funding opportunities;

5.4 The very clear need for and benefits derived from the scheme to both the University and the City should weigh substantially in favour of the proposed development.

Visual Impact

5.5 The additional proposed external plant has been sited so as to avoid being visually prominent. Notwithstanding this, whilst the plant will be visible to a degree, this is not inappropriate for this building given its historic and current use. As a chemistry building, the use and purpose of the building is inherent within its design and should be celebrated. The extent to which the proposed development will be visible

within the street scene is therefore wholly appropriate. Most importantly, the siting of the plant will not detract from the quality of the local environment, nor will it impact on the amenity of surrounding residential properties.

Air Quality Impact

5.6 As set out in Section 2, the proposed development will deliver significant air quality improvements compared to the continued operation of the existing central extraction system. This will be achieved by providing a system which releases emissions at a more diluted level and at a higher velocity, resulting in lower concentrations of gases released upon dispersion to ground level.

5.7 The activities taking place within the building and the gases emitted from these processes will not change as a result of the proposed development. Therefore compared to the baseline position (i.e. retention and continued use of the existing extraction system), the proposals will deliver substantial air quality improvements. In the circumstances, the development will have a positive effect on the local environmental quality.

Noise Impact

5.8 The submitted noise assessment demonstrates the highest noise levels at which the proposed extraction system will be able to operate to ensure it does not have an impact on surrounding residential amenity. Compliance with the maximum design limits identified in the Noise Assessment would not lead to a perceptible increase in the future noise environment and there will be no impact upon residential amenity. These noise levels would also comply with local authority requirements.

TURLEY ASSOCIATES

BELFAST

BIRMINGHAM

BRISTOL

CARDIFF

EDINBURGH

GLASGOW

LEEDS

LONDON

MANCHESTER

SOUTHAMPTON

www.turleyassociates.co.uk