Application 15/1683/FUL **Agenda** Number **Item Date Received** Officer Mr Tony 10th September 2015 Collins **Target Date** 10th December 2015 Ward Trumpington Department Site Of Chemistry Lensfield Road Cambridge CB2 1EW Extension to the Department of Chemistry, to **Proposal** provide for additional academic research space, associated landscaping, infrastructure and other works (Chemistry of Health Building). Chancellor, Masters and Scholars, University of **Applicant** Cambridge SUMMARY The development accords with the Development Plan for the following reasons: ☐ The principle of an extension to an existing University academic building in this location is in accordance with local plan policy ☐ The scale, massing, materials and design detail of the proposal relate well to the site context ☐ The replacement of an unattractive car park area by a well-landscaped the courtyard would enhance conservation area. Mature trees lost will be appropriately replaced RECOMMENDATION **APPROVAL**

1.0 SITE DESCRIPTION/AREA CONTEXT

- 1.1 The Department of Chemistry and its satellite buildings occupy a large site filling the majority of the block enclosed by Lensfield Road, Hills Road, Union Road and Panton Street. To the east, the remaining part of this block is filled by the Scott Polar Institute, the Catholic Church of Our Lady and the English Martyrs, and St Alban's RC primary school, together with a small number of office premises.
- 1.2 The application site itself lies to the south of the main Chemistry building, between the Centre for Molecular Informatics (CMI) to the west, and the Cambridge Crystallographic Data Centre (CCDC or 'Crystallography') to the east. The space between these two buildings has until very recently, been used as a car park.
- 1.3 To the south of the site, a significant area is occupied by the Perse Girls' School, on the opposite side of Union Road. Otherwise, the areas to the south, west and north of the site are chiefly in residential use, containing both family houses and buildings in multiple occupation, generally housing students. Union Road, and Panton Street, the two streets adjoining the main works proposed in this application, are relatively narrow streets serving a significant residential population, but also carrying heavy flows of pedestrian, cycle and motor vehicle journeys to and from the many schools within the Newtown area.
- 1.4 A line of trees runs along the western and northern edges of the Chemistry site. These trees are the subject of Tree Preservation Orders.
- 1.5 The site lies within the Newtown and Glisson Road part of City of Cambridge Conservation Area No.1 (Central). There are no statutorily or locally listed buildings within the application site or immediately adjacent to it, but the terrace at 41-57 Lensfield Road, which contains houses and a hotel, and whose end gable faces the Chemistry main car park area across Panton Street, are listed Grade II. The Scott Polar Institute, which stands close to the Chemistry building, but is hidden from the relevant parts of this application site by that building, is also listed Grade II.
- 1.6 The site falls within the controlled parking zone.

2.0 THE PROPOSAL

- 2.1 The proposal seeks consent for the erection of a southward extension to the Department of Chemistry to create a Chemistry of Health Centre. The Centre would provide new specialised laboratories, analytical facilities, offices and meeting rooms. It would house the Centre for Protein Misfolding Diseases (CPMD) which would accommodate research on Alzheimer's disease, Parkinson's disease, and type II diabetes. It would enable research scientists from industrial partners and start-ups to work alongside staff from the University and collaborating institutions. It would also house a Molecular Production and Characterisation Centre, which would support in-house and UK-wide academic and industrial users.
- 2.2 The extension would occupy a large part of the area south of the main Chemistry building which is currently used for car parking. Visually, the building would be made up of two parts:
 - A western laboratory section, square in floorplan, filling the full depth of the site between the delivery access route immediately south of the Chemistry building and the footway on Union Road. This section would be of three storeys with an extensive plant enclosure above this in the rear part of the site. The ground floor of this section would be clad in a brick close in appearance to that used on the CMI building to the west. The main 'box' above this on the first second floors would be clad in copper shingles.
 - An eastern section, housing offices and meeting rooms. This section would be L-shaped in footprint, abutting the 'copper box' on its eastern side, and surrounding the west and north sides of a new landscaped courtyard facing Union Road. This section would be of two storeys, with a smaller plant area above this at the rear
- 2.3 The table below shows the heights above ground of a number of key elements of the proposed building, and of elements of the surrounding buildings.

Proposed extension	
'copper box' western section	16m
western section rear plant	20m
enclosure	20.00
flues and other plant protrusions	20.9m
eastern section parapet	11.6m
eastern section rear plant	15m
enclosure	
new oak tree at full height	13m
Existing buildings	
CMI eastern section parapet	10.2m
CMI western section parapet	14m
Crystallography parapet	15.8m
Crystallography plant enclosure	21.2m
Main Chemistry building roof	23.3m
Main Chemistry flues	30.4m
existing lime trees (approximate)	14 and 16m

- 2.4 All the trees within the car park area to the south of Chemistry at present, including the two large limes at the eastern edge, close to Crystallography, would be felled. The landscaping of the new courtyard would include a new large 'focus' tree at the eastern end (pin oak: *quercus palustris*) and three smaller multistem trees along the north edge of the Union Road footway (rowans: *sorbus aucuparia*).
- 2.5 The application is accompanied by a Design, Access and Heritage Statement, which includes the following supporting information.

Arboricultural Impact Assessment
Archaeological Assessment
Ecology Assessment
Drainage Statement
Land Contamination Assessment
Noise Impact Assessment
Public Art Delivery Plan

	 Sustainability Statement Transport Assessment Travel Plan Ventilation Statement Utilities Statement Retaining Structures Statement
2.6	Additional and revised information has been provided as follows.
	10 th September revised cycle parking provision 2015 28 th September revised Drainage Strategy (version 02) 2015
	6 th October 2015 Transport Assessment 13 th October 2015 further revision of the Drainage Strategy (version 03)
	3 rd November further revision to cycle parking provision 2105 3 rd November additional transport information
	November additional transport information 2015 22 nd December significant design changes, with new drawings and photomontages
2.7	The design changes submitted on 22 nd December 2015 followed a review by the applicants after comments had been made on 6 th and 7th October 2015 by Design Panel and the Urban Design and Conservation team. Draft design changes were submitted on 28 th October 2015, and discussed with officers at a meeting on 28 th October.
2.8	The December submission showed significant additional development from the draft scheme. The main changes were:
	 Complete removal of the perforated screen from the south elevation of the laboratory 'box' Alterations to fenestration of south elevation Introduction of reconstituted stone coping to parapet Reconfiguration of entrance area, including elimination of central pillar and introduction of signage placeholders

3.0 SITE HISTORY

3.1 The Department of Chemistry site has an extensive planning history, but most of the past applications are not of relevance to the present case. Those which are relevant are listed below.

3.2

Reference 11/0828	Description Installation of cycle parking hoops	Outcome Approved with conditions
15/0988	Relocation of liquid nitrogen tank, Denios unit and cycle parking facilities	Under consideration
15/1653	Relocation of liquid nitrogen tank, Denios unit and cycle parking facilities	Approved with conditions

4.0 PUBLICITY

4.1 Advertisement: Yes
Adjoining Owners: Yes
Site Notice Displayed: Yes

5.0 POLICY

5.1 See Appendix 1 for full details of Central Government Guidance, Cambridge Local Plan 2006 policies, Supplementary Planning Documents and Material Considerations.

5.2 Relevant Development Plan policies

PLAN		POLICY NUMBER
Cambridge	Local	3/1 3/4 3/7 3/11 3/12 3/14 3/15
Plan 2006		4/4 4/11 4/12 4/13 4/16
		7/5
		8/2 8/3 8/6 8/9 8/10

5.3 Relevant Central Government Guidance, Supplementary Planning Documents and Material Considerations

Central Government Guidance	National Planning Policy Framework March 2012 National Planning Policy Framework – Planning Practice Guidance March 2014		
Supplementary Planning Guidance	Sustainable Design and Construction (May 2007)		
	Planning Obligation Strategy (March 2010)		
	Public Art (January 2010)		
Material	Arboricultural Strategy (2004)		
Considerations	Cambridge and South Cambridgeshire Strategic Flood Risk Assessment (November 2010)		
	Strategic Flood Risk Assessment (2005)		
	Cambridge and Milton Surface Water Management Plan (2011)		
	Cambridge Walking and Cycling Strategy (2002)		
	Cambridgeshire Design Guide For Streets and Public Realm (2007)		
	Buildings of Local Interest (2005)		
	New Town and Glisson Road Conservation Area Appraisal (2012)		

5.4 Status of Proposed Submission – Cambridge Local Plan

Planning applications should be determined in accordance with policies in the adopted Development Plan and advice set out in

the NPPF. However, after consideration of adopted plans and the NPPF, policies in emerging plans can also be given some weight when determining applications. For Cambridge, therefore, the emerging revised Local Plan as published for consultation on 19 July 2013 can be taken into account, especially those policies where there are no or limited objections to it. However it is likely, in the vast majority of instances, that the adopted development plan and the NPPF will have considerably more weight than emerging policies in the revised Local Plan.

For the application considered in this report, there are no policies in the emerging Local Plan that should be taken into account.

6.0 CONSULTATIONS

Cambridgeshire County Council (Highways Development Management)

First comment (14th September 2015)

6.1 Requires Transport Statement.

Second comment (10th December 2015)

- 6.2 It is noted that the Dept. of Chemistry has 88% of staff travelling by non-car modes.
- 6.3 Information supplied indicates the proposal will result in an additional 105 trips in the peak hours and an additional 390 trips over the whole day. The highway authority is concerned that this will result in an increase in the already high number of collisions and resulting cyclist casualties at the Lensfield Road / Trumpington Road / Fen Causeway junction. The applicant is asked to contribute J26,925 towards the County Council's planned safety-based scheme at this junction in order to reduce collisions. A Travel Plan is also required.

Third comment (30th December 2015, following amendments))

6.4 No additional comment.

Environmental Health

6.5 Acceptable subject to conditions to control: construction hours, construction deliveries, construction noise, dust, contaminated land, plant insulation and lighting impact.

Urban Design and Conservation Team

First comment (6th October 2015)

Scale and massing

- 6.6 Overall approach stepping down to 3 and 2 storeys in the southeast corner around the entrance forecourt is supported. Stepped height of the building together with the setback around the edge of the forecourt maintains a degree of separation between the CMI and Crystallography buildings either side and reduces the scale of the proposed building from views looking north along Bentinck Street.
- 6.7 Overall height is acceptable but concerned that the projecting 'copper box' element may appear prominent from street level views and create a canyon effect along Union Road. Vital that the copper box appears as a lightweight element to reduce its prominence along Union Road.

Elevations and material treatment

6.8 Proposed palette of materials supported and has the potential to relate well to the neighbouring research buildings: red/orange facing bricks, copper cladding, grey window frames and louvre panels and colour coated steel/aluminium louver cladding for the plant level.

Laboratory projection/'copper box'

6.9 Concerned that the treatment of the side elevations of the 'copper box' creates a heavy and prominent appearance from oblique street level views given that it projects forward of the south elevation of the CMI and CCDC buildings either side. Further detailed design of the treatment of the 'copper box' is needed to reduce its prominence and ensure that the box reads as a lightweight addition.

6.10 Further details of the perforated cladding cassettes needs to be provided. Increasing the number of perforations, for example, could help the box appear more lightweight and less prominent from street level views. The treatment of the soffits/underside and fastening structure of the overhang of the 'copper box' also needs to be confirmed.

Main entrance & south elevation

- 6.11 Concerned that the orientation of the entrance at 90° to S elevation reduces the legibility of the building from Union Road. Doors should be positioned on the south elevation between the brick pillars. Details of signage placeholders required.
- 6.12 Vertical slot windows and brick recesses are supported and relate to the existing brick recesses on the CMI and CCDC buildings. Full height vertical slot windows are proposed for the 1st floor laboratory corridor. A similar approach is needed for the ground floor corridor.
- 6.13 The brick-on-edge course proposed for the roof copings is not supported. An alternative coping which relates better to the roof copings on the CMI and CCDC buildings is needed.
- 6.14 Conditions required to control details of access gates adjacent to the CCDC building and fire exit adjacent to the CMI building.

Roof access

6.15 Arrangements for roof maintenance must avoid the need for handrails and other 'clutter' that could undermine the simple and unbroken parapet lines.

Forecourt and landscaping

- 6.16 Width of forecourt occupies approximately half of Union Road site frontage and provides a 'green break' between proposed Chemistry of Health and CCDC buildings when looking east and west along Union Road. Position of courtyard also responds to key views looking north from Bentinck Street.
- 6.17 Welcome removal of car parking shown at pre-app stage this approach which improves the overall quality and appearance of the courtyard space.

6.18 Concerned that crane access will have an impact on the proposed single large tree in the centre of the entrance plaza; it should be relocated further west to avoid this problem.

Conclusion

- 6.19 Overall approach supported. However, 'copper box' element on the laboratory block has the potential to appear overly prominent from street level views. Development of design of the copper box is needed to ensure that it forms a lightweight addition.
- 6.20 In addition, the following are needed before officers could support the application:

Details of underside/soffits and fastening structure of copper
box;
Repositioning of main entrance doors to south elevation to
improve legibility;
Recessed window to the ground floor laboratory corridor;
Replacement of brick on-edge parapet copings;
Details of roof access and maintenance arrangements;
Relocation of courtyard tree;
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Second comment (11th January 2016)

Copper box detail

- 6.21 The proposed amendments to the south (Union Road) elevation are supported. The bulk and prominence of the 'copper box' is reduced. The copper cladding should be conditioned and a sample panel erected on site.
- 6.22 Other amendments to the south elevation include moving the slot windows between the 'box' and brickwork at first floor level away from the copper box. The window is instead shown as a punched slot window within the brickwork, with a similar punched window (serving the corridor) at ground floor level. The size and spacing of the punched slot windows at ground floor level below the copper box has been reviewed in relation to the slot windows and cladding pattern above. These amendments are acceptable.

Parapet detail

6.23 Recon stone coping, flush with the brickwork is now proposed, which matches the coping on the adjacent CMI building. This is supported. The colour and profile of the copings will need to be agreed as part of a material condition.

Entrance detail

- 6.24 Accept the technical reasons why the entrance doors could not be relocated to the south elevation which include providing a safe means of escape from the existing transformer and substation and the location of the high voltage cable route.
- 6.25 Revised drawings propose to remove the central brick pier beneath the covered entrance and introduce a grey metal facia (300mm deep) below the brickwork lintel to the opening. We support these amendments which improve views of the back wall and the entrance doors from Union Road and also improves circulation around the covered entrance. The introduction of the metal facia frames the entrance opening and provides a place for signage which further improves the legibility of the building.

Tree position

6.26 Tree position acceptable; species needs to be agreed with landscape colleagues as part of a relevant planning condition.

Roof access and maintenance

6.27 Man-Safe is acceptable

Conclusion

6.28 The submitted amendments have addressed previous concerns; scheme is now acceptable in design and conservation terms.

Senior Sustainability Officer (Design and Construction)

6.29 A number of measures have been incorporated into the scheme as follows:

Ш	write the scheme is no longer utilising the bespoke solar
	shading screen on the south elevation to reduce the risk of
	overheating, the use of deep window reveals and an
	enhanced glazing specification on the south elevation has
	been included to reduce excessive summer solar gain;
	Achievement of BREEAM 'excellent' for the scheme;
	The use of areas of green roof on the link bridge;
	The use of phase change material to act as a thermal buffer
	and assist with night cooling of the building, with provision
	made for secure night time ventilation to facilitate night
	cooling;
	The consideration given to climate change adaptation, and
	the inclusion of a Climate Resilience Study;
	The provision of natural ventilation to offices and meeting
	rooms within the eastern section of the building with natural
	ventilation louvres proposed to be incorporated into the
	window openings:

- 6.30 These measures are all supported.
- 6.31 The scheme uses a hierarchical approach to reducing carbon emissions, an approach which is fully supported. It is proposed to utilise photovoltaic panels for renewable energy, which will be located on the existing CMI Building. These panels are predicted to lead to a 14.87% reduction in emissions. This approach is fully supported as it exceeds the minimum requirements of Policy 8/16.
- 6.32 It is unclear whether the recent changes to the scheme have led to any changes in the energy strategy for the scheme. For example, whether there is a need to increase mechanical cooling to some parts of the building or whether additional lighting will be required to offset any changes as a result of the enhanced glazing specification. If it is not possible to obtain this information prior to determination, then a planning condition is suggested, which would require an updated energy strategy to be submitted.
- 6.33 Conditions required on renewable energy and BREEAM.

Access Officer

6.34 Good application. A platform lift on the stairs in the link corridor would be desirable.

Head of Streets and Open Spaces (Tree Team)

(Comments made at the time of application 15/1653 for enabling works)

- 6.35 15/1683/FUL, while a separate application, is part of the development proposals at the same site. This application does require the removal of all trees within the site as seen from Union Road. The loss of these trees, and especially the two mature Limes that are a prominent feature will have a significantly detrimental impact on amenity.
- 6.36 Should case officers be satisfied that there are demonstrable public benefits accruing from the proposal which outweigh the current and future amenity value of the trees and grant permission for the applications, replacement tree planting must be required as part of the landscape proposals. Accommodation must be made for the planting of at least one large tree to replace the Limes.

Head of Streets and Open Spaces (Landscape Team)

First comment (1st October 2015)

6.37 Green roofs on corridors will be too much in shade to be successful. Queries about tracking of service vehicles. Replacement tree in courtyard too close to line of access for vehicles. Also, conditions required to ensure appropriate tree and climber species, tree and planting pits and boundary treatment.

Second comment (26th November 2015 following amendments and additional information)

6.38 Scheme now supported subject to conditions.

Head of Streets and Open Spaces (Walking and Cycling Officer)

First comment (6th October 2015)

6.39 Locating most of parking in Area 4 is problematic because it is not covered. Some spaces are too close together. It would be

better to expand cycle parking area 3. There should be more visitor spaces in the new courtyard.

Second comment (19th November 2015)

6.40 4 visitor spaces in the courtyard is inadequate. Suggest 8 spaces minimum are required off Union Road.

Cambridgeshire County Council (Flood and Water Management)

First comment (30th September 2015)

6.41 Object. No surface water strategy.

Second comment (12th January 2016

6.42 Now acceptable. Condition required to secure implementation of surface water strategy.

Head of Streets and Open Spaces (Sustainable Drainage Officer)

First comment (21st September 2015)

6.43 Could potentially increase flood risk by formalising currently inadequate drainage infrastructure within the car park. Cambridge Strategic Flood Risk assessment also requires a minimum of 20% reduction in peak flow leaving site (calculated on actual flows leaving the site).

Second Comment (18th January 2016)

6.44 Content with revised scheme.

Anglian Water

6.45 Requires condition to ensure acceptable surface water strategy

Cambridgeshire Constabulary (Architectural Liaison Officer)

6.46 Previous consultation between police and architects to ensure appropriate security measures. No further comment. No objection.

Cambridgeshire County Council (Archaeology)

6.47 Scheme of investigation already submitted and approved. Condition necessary to ensure submission of results.

Design and Conservation Panel: Meetings of 10th June 2015 (prior to submission of the planning application) and 7th October 2015

6.48 The conclusions of the June Panel meeting were as follows:

Site plan and perspectives

6.49 The Panel commented on the lack of engagement with the site in the scheme as presented. They questioned the accuracy of the site plan provided, the poor site photographs and lack of analysis of the surroundings. There was also felt to be a lack of consistency between the easterly and westerly perspective views

Site options analysis

6.50 Although the Panel understand the constraints and necessary linkages in function and activity with the main Chemistry building, they queried whether a wider site search had been undertaken. The Panel asked whether the viability of the nearby car park could have been examined in greater detail as the proposed site seems very tight. With activity increasing on the West Cambridge site, the Panel also questioned whether there was sufficient flexibility built into the design to allow for a future change of use should the department re-locate. Some assurance was provided regarding these issues.

<u>South elevation to Union Road (projecting cladding/solar shading)</u>

6.51 The Panel expressed strong reservations on the design and functionality of the proposed solar shading screen. Projecting significantly over the pavement at head height, the Panel felt the cladding would create an awkward space underneath for passing pedestrians and it would likely become a litter trap. The need for solar shading at lower levels was also questioned, as was the use of copper that could be vulnerable to either accidental damage or vandalism at this level.

<u>Unilever (CMI) and Crystallography buildings</u>

6.52 These two buildings by Sorenson and Zibrandtsen are regarded as examples of exceptional architectural achievement. It was felt this new, demonstrative addition to the street needed to be more recessive to avoid crowding its crisp, well-disciplined neighbours. Whilst the courtyard configuration of the scheme appears appropriate, the building elevations appear poorly conceived for this context.

<u>Trees</u>

6.53 The Panel note that a survey to establish the value of the trees earmarked for removal is currently underway. Any loss of trees within this area would need to be justified. Specific concern was expressed regarding the proposed new mature tree to the east and the impact of a tall crane on its overhanging canopy.

Courtyard element

6.54 The planted courtyard is an important element along this 'urban canyon'. Opportunities to extend the route across Union Road from Bentinck Street, possibly with a pedestrian crossing, should be explored. On-going dialogue with plans for The Stephen Perse Foundation opposite is encouraged.

Conclusion

6.55 The Panel felt there was an absence of consideration for its context throughout the scheme. This is shown, not only in terms of the loss of trees, but with its Union Road façade appearing dominant and oppressive on a street already known for its

narrow pavements. The building, as designed, appears as a poor second to its more refined neighbours. Significant further work is needed before this proposal can be said to either preserve or enhance the character of the Conservation Area.

6.56 JUNE VERDICT - RED (5) AMBER (3)

6.57 The changes made after the June presentation, before the submission of the planning application, were broadly welcomed by the October Panel meeting. Detailed comments made were as follows:

Union Road façade scale and massing

6.58 The Panel expressed particular concern about the experience of the pedestrian walking along past this façade. Although the stepping back of the elevation to align with the CMI is an important improvement, this is still a large building on a relatively narrow street. Future development on the Perse Foundation site opposite is likely to contribute even further to an oppressive 'canyon' effect, particularly during the winter months. Street views into the building and an active façade at street level would be encouraged. Better street lighting is also suggested to help enliven the elevation and improve safety.

Perforated copper screen

6.59 The Panel questioned the impact of the metal screen on the streetscape. In oblique views from street level, the patterning and sense of it as a shading screen would currently be lost as it is an integrated plane to the solid form of the building. If the screen is to be appreciated as transparent, the clearer expression of its function would be, for example, to continue the perforations around the return corners. It was generally felt that this was potentially an element that could be seen as an empty gesture. The Panel would encourage the design team to reconsider both its environmental function and impact on the street frontage. A more modest solution to shading this southfacing fenestration might also mean that the new façade would better reflect the simplicity of the neighbouring buildings.

Clarity of expression

6.60 Seen as a relatively low key building positioned between the more demonstrative CMI and Crystallography buildings, the Panel felt the multiplicity of textures and shapes and the use of various materials to define volumes jarred with the coherence of its neighbours along Union Road. The Panel would like to call for greater clarity of architectural expression of the various elements, as it was felt that the various parts of the building struggled to tie together as a coherent single entity. The Panel also queried how dominant some of the plant elements at roof level might be when seen from the street.

Courtyard and cycle parking

6.61 The importance of the courtyard is central to the scheme. It will act as valuable sunlit breakout space and a welcome green insertion in a tight street environment. Further detail is needed with the emphasis on high quality, robust landscaping with minimal cycle storage.

Future adaptability

6.62 Particularly in the context of the potential future redevelopment of the Chemistry Faculty, this building should be designed now for adaptive reuse.

Conclusion

6.63 The designers have responded well to the comments made last time with considerable improvements made despite the constraints of the site. Concerns remain regarding the expression and detailing of the copper screen and the clear architectural articulation of the different volumes. Within the presentation material, the two neighbouring buildings attributed to Sorenson are described as neither listed nor noted as 'of interest' in the Conservation Area. The designers are reminded that this position could change in the future and should include this among their considerations. Qualitative improvements that need to be made that at this stage could be subject to planning conditions.

6.64 OCTOBER VERDICT - GREEN (4), AMBER (4)

Disability Consultative Panel: Meeting of 29th September 2015

- 6.65 Panel praised the high quality Access Statement submitted with the application.
- 6.66 Some re-orientation within the WC cubicle would allow for both left and right handed transfer. Communal spaces need induction hearing loops. Accessible parking bays are needed for disabled staff, students and visiting lecturers.

7.0 REPRESENTATIONS

- 7.1 The owners/occupiers of the following addresses have made representations:
 - 33 Brookside
 - 1 Brookside Lane
 - 12 Panton Street
 - 35 Panton Street
 - 57 Panton Street
 - 3 Pemberton Terrace
 - 16 Russell Court
 - 2 St Eligius Street
 - 2 Saxon Street
- 7.2 The representations can be summarised as follows:

Principle of development

Department sl	hould	be moved	l elsew	here i	n the	city
Overdevelopn	nent					

Design and context

Excessive mass
Chemistry department already a blot on the landscape
Adverse impact on the conservation area
Detract from the terrace in Panton Street
Dwarf Annesley House
Tunnel effect in small street
Will shade existing building
Nitrogen tank should be accommodated within building
Loss of open space

□ Loss of breathable space
<u>Highways</u>
□ Increased traffic
Environmental health
□ Noise from extractors
Procedural issues
 Application should not have been separate from that for nitrogen tank Insufficient consultation of neighbours No engagement with Perse School about possible shared surface in Union Road No timescale for development given
<u>Others</u>
 May be insufficient power available Damage to buildings from piling Possible accidental release of disease
The above representations are a summary of the comments that have been received. Full details of the representations can be inspected on the application file.
ASSESSMENT
From the consultation responses and representations received and from my inspection of the site and the surroundings, I consider that the main issues are:
 Principle of development Context of site, design and external spaces (and impact on heritage assets) Public Art Renewable energy and sustainability Amenity of neighbouring users Highway safety Car and cycle parking Third party representations

7.3

8.0

8.1

9. Planning Obligations (s106 Agreement)

Principle of Development

- 8.2 Policy 7/5 permits further development of University of Cambridge faculty sites in the central area if this allows improved facilities, a reduction in car parking space, improvements to the external environment and better use of land. This scheme creates new research space in an area until very recently occupied by car parking spaces. There would be a reduction in openness, but the courtyard space retained would in my view be of higher quality, and contribute more positively to the quality of the conservation area than the existing car park.
- 8.3 In my opinion, all four criteria above are met by this scheme. There is no conflict with local plan policy in the retention or expansion of the Department in this location, and the principle of the development is acceptable and in accordance with policy 7/5 of the Cambridge Local Plan 2006.

Context of site, design and external spaces (and impact on heritage assets)

- 8.4 In my view, the proposed extension, in its amended form, would respond well to its context in terms of scale, massing and materials. It would remain clearly subsidiary to the main Chemistry building; its scale would relate harmoniously to the parameters established by the neighbouring CMI and Crystallography buildings; and it would have an appropriate relationship with the street, which would be enhanced and enlivened by the quality of the proposed courtyard, and the relatively open and active frontage of the proposed extension.
- 8.5 The principal design criticisms levelled at the proposed building in representations are that it is too large for its context, that it will create a 'canyon' effect in Union Road, and that the open space which it will fill is important to the character of the area, and should not be lost. I do not consider any of these to be well-founded. The table in paragraph 2.3 shows that the scale of the building would be in line with that of its neighbours on either side (the CMI building and Crystallography), and would be very much subsidiary to the main Chemistry building when seen from Bentinck Street.

- 8.6 I accept that Union Road is a narrow street. The building opposite the proposed extension on the south side of the street has three storeys to the eaves below a substantial pitched roof. The Stephen Perse Foundation has permission to erect a new four-storey building alongside this, which would partially face the proposed building, but mainly face the CMI building. In my view, however, the narrowness of the street and its flanking by buildings of some height are part of the character of Union Road, and I do not consider these elements to create any negative impact. I do not consider that the additional visual restriction in the street created by the proposed building would be unacceptable.
- 8.7 The existing open space to the south of the Chemistry building is not attractive. It is used for car parking and it is backed by ground level plant. The Newtown and Glisson Conservation Area Appraisal does not identify it as making any contribution to the conservation area. In my view, the proposed new courtyard, whilst only half the size of the existing space, would make a positive contribution to the character of the conservation area, and the quality of both Union Road and Bentinck Street would be improved by the insertion of the proposed development between the street and the existing Chemistry building. The loss of the two mature lime trees, which do make a positive contribution to the townscape here, is regrettable, but in my view, this loss is outweighed by the overall benefits of the scheme, and I do not consider that the two trees should constrain this development. A large replacement tree is proposed, and it is my view that in time, the positive impact of the new tree would be greater, both in Union Road, and from Bentinck Street, than that of the two existing trees. I have sought, but not yet received, advice from the arboricultural officer on the appropriateness of the tree species, but this issue is in any case covered by my recommended condition 23.
- 8.8 The copper shingles selected to clad the laboratory 'box' section of this proposal have been selected deliberately to form a contrast to the two different red bricks used on the CMI and Crystallography buildings (The former is a darker red brick with some variegation, the latter a more uniformly coloured orangered brick). The remainder of the elevations would be covered in a brick similar to CMI. In my view, these are appropriate choices which would give the new extension its own identity, but at the

- same time lend coherence to the three buildings as a harmonious group.
- 8.9 Both Design Panel and the urban design and conservation team had serious reservations about the extent to which the perforated copper screen originally proposed for the Union Road elevation would dominate views along the street. I shared these concerns. The latest amendment to the design has removed the screen from this frontage, leaving windows set in deep reveals in a copper shingle cladding the same as that proposed on the sides of the 'box'. In my view, this amendment, which has the additional benefit of pulling the elevation further back from Union Road, is a major improvement, and addresses the reservations expressed by Design and Conservation Panel reported in paragraphs 6.58, 6.59 and 6.63 above. The urban design team's advice is that the amended version, without the screen, is an appropriate response to the context, and I concur with this view.
- 8.10 I recognize that the building would be used as an extension to the main Chemistry building, and would be accessed primarily through the main Chemistry entrance alongside the Lensfield Road car park. However, I shared the concerns of the Urban Design team that the Union Road entrance to the building should be legible. The applicants have been constrained in their response to this concern by the position of the electricity substation, but in my view, the removal of the central pillar of the south-facing undercroft is successful in opening up this area visually and providing greater legibility to the entrance. It would also increase the visibility of public art if it is located in this position as the applicants currently intend.
- 8.11 I also shared the urban design and conservation team's reservations about the brick-on-edge parapet originally proposed. In my view the revised detailing is an improvement and would respond satisfactorily to the detailing of neighbouring buildings, particularly CMI. Similarly, I concur with the urban design and conservation team's view that the revised fenestration is an improvement.
- 8.12 In my opinion the proposal is compliant with Cambridge Local Plan (2006) policies 3/4, 3/7, 3/11, 3/12.

Public Art

8.13 Conditions are necessary to secure submission of a Public Art Strategy. In my opinion, subject to such conditions (22 and 23), the proposal is compliant with Cambridge Local Plan (2006) policies 3/7 and 10/1 and the Public Art SPD 2010

Renewable energy and sustainability

8.14 The sustainable development officer supports the application. Her advice is that the information submitted with the application shows a carbon saving well in excess of the Council's requirement. She has one reservation: that the recent amendments might result in increased consumption of energy. Her advice is that unless additional information on the impact of the amendments can resolve this concern before the application comes to Committee, a condition requiring a new energy statement is necessary. In my view, subject to such a condition (19) (or the additional information sought by the Sustainable Development Officer), and a further condition (20) to secure implementation, the applicants have suitably addressed the issue of sustainability and renewable energy and the proposal is in accordance with Cambridge Local Plan (2006) policy 8/16 and the Sustainable Design and Construction SPD 2007.

Disabled access

8.15 Disability Panel and the Access officer have both agreed that the proposal has responded well to the needs of disabled users. I recommend an informative to alert the applicants to the three minor concerns expressed by Panel. In my opinion the proposal is compliant in respect of disabled access with Cambridge Local Plan (2006) policies 3/7 and 3/12.

Neighbour Amenity

8.16 The application is surrounded on three sides by existing buildings of the Chemistry Department. The Department is presumably content that any impact on the working environment of staff and students and visitors using the existing buildings is acceptable, and in this context I do not have any concern about amenity for such users. Buildings to the west along the north side of Union Road and in Panton Street would be screened from the proposed building by the mass of the CMI building, and

- I do not consider that the proposal would have any impact in this direction.
- 8.17 The building immediately to the south of the site, on the opposite side of Union Road, which is within the Stephen Perse Foundation site, is of three storeys, with additional rooms in the roof. Rooms on the Union Road side of this building, especially on the ground and first floors, would enjoy a less open outlook were the proposed scheme to be constructed, but the application site lies to the north, so there would be no loss of sunlight. In my view, and negative impact would be relatively small, and, given that this is an educational building, not a residential one, I do not consider it would justify refusal of the application.
- 8.18 I have recommended conditions to limit construction hours (9), to limit construction deliveries (10) and to ensure use of a banksman for deliveries. My recommended Condition 10 prescribes slightly different delivery hours from the standard condition, in recognition of the need to minimise conflicts with school start and finish times. In my opinion, subject to these conditions, the proposal adequately respects the amenity of its neighbours and the constraints of the site and I consider that it is compliant with Cambridge Local Plan (2006) policies 3/4 and 3/7.

Highway Safety

- 8.19 As car parking spaces are to be removed from this area, and motor vehicles will no longer be entering the site from Union Road, there would be fewer motor vehicle movements in Union Road, and a consequent improvement in highway safety. The highway authority is of the view that increased cycle trips to the site as a result of the development would increase the risk of accidents at the Lensfield Road/Trumpington Street junction, and has therefore sought a contribution form the applicant to the improvement of junction safety here.
- 8.20 In my opinion the proposal is compliant with Cambridge Local Plan (2006) policy 8/2.

Car and Cycle Parking

- 8.21 The removal of all the existing car parking from this part of the Chemistry site is in accordance with policies 7/5 and 8/10
- 8.22 The cycling and walking officer is of the view that insufficient cycle parking spaces for visitors are provided. However, as I have stated above, the access to this building will be overwhelmingly from the main Chemistry building. Given this pattern of use, I do not consider there to be a basis for seeking to clutter the new courtyard with further cycle parking spaces. The application states that the extension is intended to provide space for existing users who are working in cramped conditions rather than to bring additional users in. Nonetheless, the proposal provides 66 additional cycle parking spaces. In my opinion the proposal is compliant with Cambridge Local Plan (2006) policy 8/6.

Third Party Representations

8.23 I have listed the issues raised in third party representations below. In the right-hand column I have either addressed the issue or indicated the paragraph in it has already been addressed.

Department should be moved elsewhere in the	8.3
City	0.5
Overdevelopment	8.5
Excessive mass	8.5
Chemistry department	The merits or otherwise of the
already a blot on the	existing building are not at issue
landscape	in the determination of this
·	application.
Adverse impact on the	8.4 and 8.6-8.9
conservation area	
Detract from the terrace	8.16
in Panton Street	
Dwarf Annesley House	8.16
Tunnel effect in small	8.6
street	
Will shade existing	8.16
building	

Nitrogen tank should be	A new location for the nitrogen			
accommodated within				
building	permission under 15/1653/FUL.			
	8.7			
Loss of open space	-			
Loss of breathable space	8.7			
Increased traffic	8.19			
Noise from extractors	This issue is covered by the			
	plant insulation condition sought			
	by the environmental health			
	team, which I recommend be			
	applied.			
Application should not	, ,			
have been separate from	enabling works application			
that for nitrogen tank	should not have been considered			
	separately from this application.			
	The local planning authority must			
	determine applications as they			
	are presented.			
Insufficient consultation of	There is no requirement on the			
neighbours	applicant to carry out			
	consultation with neighbours.			
No engagement with	There is no requirement on the			
Perse School about	applicant to carry out			
possible shared surface	consultation with neighbours			
in Union Road	Any proposal for a shared			
	surface in Union Road would be			
	a matter for the County Council.			
	It would be an entirely separate			
	issue from this planning			
	application.			
No timescale for				
development given	require the submission of a			
	timescale for development.			
May be insufficient power	•			
available	to resolve with UK Power			
	Networks. It is not a planning			
	consideration, unless a new			
	substation is required. In that			
	case, a new planning application			
	would be required			
Damage to buildings from	•			
piling	2 12 21 21 11 21 21 2			

Possible	accidental	Biosecurity	is	covered	by	other
release of disease		regulatory authorities.				

Planning Obligations (s106 Agreement)

- 8.24 The Community Infrastructure Levy (CIL) Regulations 2010 have introduced the requirement for all local authorities to make an assessment of any planning obligation in relation to three tests. Each planning obligation needs to pass three statutory tests to make sure that it is
 - (a) necessary to make the development acceptable in planning terms:
 - (b) directly related to the development; and
 - (c) fairly and reasonably related in scale and kind to the development.

In bringing forward my recommendations in relation to the Planning Obligation for this development I have considered these requirements.

8.25 In line with the CIL Regulations, councils can pool no more than five S106 contributions towards the same project. The new 'pooling' restrictions were introduced from 6 April 2015 and relate to new S106 agreements. This means that all contributions now agreed by the city council must be for specific projects at particular locations, as opposed to generic infrastructure types within the city of Cambridge.

Transport

8.26 As I have indicated above, the County Council has sought a contribution to the improvement of junction safety at the west end of Lensfield Road. I have sought confirmation that this scheme will not be funded through pooled contributions from more than five sites, and I will report the County Council's advice on this point to Committee. The County Council also requires a Travel Plan. Subject to the completion of a S106 planning obligation to secure the contribution to highway safety improvements, and a condition (28) to secure the Travel Plan, I am satisfied that the proposal accords with Cambridge Local Plan (2006) policies 8/3 and 10/1 and the Planning Obligation Strategy 2010.

Planning Obligations Conclusion

8.27 It is my view that the planning obligation is necessary, directly related to the development and fairly and reasonably in scale and kind to the development and therefore the Planning Obligation passes the tests set by the Community Infrastructure Levy Regulations 2010.

9.0 CONCLUSION

9.1 In my view, the amended design responds well to its context and would enhance the conservation area. The extension of an academic department in this location is in accordance with policy and would bring wider benefits locally and nationally.

10.0 RECOMMENDATION

APPROVE subject to completion of the s106 Agreement and the following conditions:

1. The development hereby permitted shall be begun before the expiration of three years from the date of this permission.

Reason: In accordance with the requirements of section 51 of the Planning and Compulsory Purchase Act 2004.

2. The development hereby permitted shall be carried out in accordance with the approved plans as listed on this decision notice.

Reason: In the interests of good planning, for the avoidance of doubt and to facilitate any future application to the Local Planning Authority under Section 73 of the Town and Country Planning Act 1990.

3. Submission of Preliminary Contamination Assessment:

Prior to the commencement of the development (or phase of) or investigations required to assess the contamination of the site, the following information shall be submitted to and approved in writing by the local planning authority:

- (a) Desk study to include:
- -Detailed history of the site uses and surrounding area (including any use of radioactive materials)
- -General environmental setting.
- -Site investigation strategy based on the information identified in the desk study.
- (b) A report setting set out what works/clearance of the site (if any) is required in order to effectively carry out site investigations.

Reason: To adequately categorise the site prior to the design of an appropriate investigation strategy in the interests of environmental and public safety in accordance with Cambridge Local Plan 2006 Policy 4/13.

4. Submission of site investigation report and remediation strategy:

Prior to the commencement of the development (or phase of) with the exception of works agreed under condition 3 and in accordance with the approved investigation strategy agreed under clause (b) of condition 3, the following shall be submitted to and approved in writing by the local planning authority:

- (a) A site investigation report detailing all works that have been undertaken to determine the nature and extent of any contamination, including the results of the soil, gas and/or water analysis and subsequent risk assessment to any receptors
- (b) A proposed remediation strategy detailing the works required in order to render harmless the identified contamination given the proposed end use of the site and surrounding environment including any controlled waters. The strategy shall include a schedule of the proposed remedial works setting out a timetable for all remedial measures that will be implemented.

Reason: To ensure that any contamination of the site is identified and appropriate remediation measures agreed in the interest of environmental and public safety in accordance with Cambridge Local Plan 2006 Policy 4/13.

5. Implementation of remediation.

Prior to the first occupation of the development or (or each phase of the development where phased) the remediation strategy approved under clause (b) to condition 4 shall be fully implemented on site following the agreed schedule of works.

Reason: To ensure full mitigation through the agreed remediation measures in the interests of environmental and public safety in accordance with Cambridge Local Plan 2006 Policy 4/13.

6. Completion report:

Prior to the first occupation of the development (or phase of) hereby approved the following shall be submitted to, and approved by the local planning authority.

- (a) A completion report demonstrating that the approved remediation scheme as required by condition 4 and implemented under condition 5 has been undertaken and that the land has been remediated to a standard appropriate for the end use.
- (b) Details of any post-remedial sampling and analysis (as defined in the approved material management plan) shall be included in the completion report along with all information concerning materials brought onto, used, and removed from the development. The information provided must demonstrate that the site has met the required clean-up criteria.

Thereafter, no works shall take place within the site such as to prejudice the effectiveness of the approved scheme of remediation.

Reason: To demonstrate that the site is suitable for approved use in the interests of environmental and public safety in accordance with Cambridge Local Plan 2006 Policy 4/13

7. Material Management Plan:

Prior to importation or reuse of material for the development (or phase of) a Materials Management Plan (MMP) shall be submitted to and approved in writing by the Local Planning Authority. The MMP shall:

- a) Include details of the volumes and types of material proposed to be imported or reused on site
- b) Include details of the proposed source(s) of the imported or reused material
- c) Include details of the chemical testing for ALL material to be undertaken before placement onto the site.
- d) Include the results of the chemical testing which must show the material is suitable for use on the development
- e) Include confirmation of the chain of evidence to be kept during the materials movement, including material importation, reuse placement and removal from and to the development.

All works will be undertaken in accordance with the approved document.

Reason: To ensure that no unsuitable material is brought onto the site in the interest of environmental and public safety in accordance with Cambridge Local Plan 2006 policy 4/13.

8. Unexpected Contamination:

If unexpected contamination is encountered whilst undertaking the development which has not previously been identified, works shall immediately cease on site until the Local Planning Authority has been notified and/or the additional contamination has been fully assessed and remediation approved following steps (a) and (b) of condition 4 above. The approved remediation shall then be fully implemented under condition 5

Reason: To ensure that any unexpected contamination is rendered harmless in the interests of environmental and public safety in accordance with Cambridge Local Plan 2006 Policy 4/13.

 No construction work or demolition work shall be carried out or plant operated (apart from collections and deliveries) other than between the following hours: 0800 hours and 1800 hours on Monday to Saturday, and at no time on Sundays, Bank or Public Holidays.

Reason: To protect the amenity of nearby occupiers and users. (Cambridge Local Plan 2006 policy 4/13)

10. Collections and deliveries to the site during the demolition and construction stages shall take place only between 0900 hours and 1530 hours and between 1700 hours and 1930 hours on Monday to Friday, and between 0800 hours and 1800 hours on Saturday. Deliveries and collections on Sundays, Bank or Public Holidays during the construction and demolition stages shall take place only where prior written approval of the local planning authority has been given for the specific day(s) and time(s) concerned.

For the purposes of this condition, 'collections and deliveries' includes vehicles waiting on the street to deliver to, or collect from the site, in any of the following streets: Union Road, Corporation Street, Bentinck Street, Bentinck Terrace, George IV Street, Panton Street, Pemberton Terrace and Lensfield Road.

Reason: To protect the amenity of nearby occupiers and users. (Cambridge Local Plan 2006 policy 4/13)

11. Deliveries to the site and collections from the site during the demolition and construction phases shall not take place without the use of a banksman.

Reason: To protect highway safety and the amenity of users of Union Road. (Cambridge Local Plan 2006 policy 8.2)

12. Prior to the commencement of the development hereby approved (including any pre-construction, demolition, enabling works or piling), the applicant shall submit a report in writing, regarding the demolition / construction noise and vibration impact associated with this development, for approval by the local authority. The report shall be in accordance with the provisions of BS 5228:2009 Code of Practice for noise and vibration control on construction and open sites and include full details of any piling and mitigation measures to be taken to protect local residents from noise and or vibration. Development shall be carried out in accordance with the approved details.

Due to the proximity of this site to existing residential premises and other noise sensitive premises, impact pile driving is not recommended. Reason: To protect the amenity of nearby properties (Cambridge Local Plan 2006 policy 4/13)

13. No development shall commence until a programme of measures to minimise the spread of airborne dust from the site during the demolition / construction period has been submitted to and approved in writing by the Local Planning Authority. The development shall be implemented in accordance with the approved scheme.

Reason: To protect the amenity of nearby properties Cambridge Local Plan 2006 policy4/13

14. Before the development/use hereby permitted is occupied, a scheme for the insulation of the plant in order to minimise the level of sound emanating from the plant shall be submitted to and approved in writing by the local planning authority and the scheme as approved shall be fully implemented before the use hereby permitted is commenced.

Reason: To protect the amenity of neighbouring occupiers and users. (Cambridge Local Plan 2006 policies 3/4 and 4/13)

15. Prior to the installation of any artificial lighting, an artificial lighting scheme shall be submitted to and approved in writing by the local planning authority. The scheme shall include details of any artificial lighting of the site and an artificial lighting impact assessment with predicted lighting levels at proposed and existing residential properties shall be undertaken. Artificial lighting on and off site must meet the Obtrusive Light Limitations for Exterior Lighting Installations contained within the Institute of Lighting Professionals Guidance Notes for the Reduction of Obtrusive Light - GN01:2011 (or as superseded).

The approved lighting scheme shall be installed, maintained and operated in accordance with the approved details / measures.

Reason: To protect the amenity of neighbouring occupiers and users. (Cambridge Local Plan 2006 policies 3/4 and 4/13)

- 16. No installation or erection of any of the following materials shall take place on site until details of that material have been submitted to and approved in writing by the local planning authority. Subsequent installation of each of the materials shall take place only in accordance with the approved details.
 - (a) bricks
 - (b) coping
 - (c) copper shingles
 - (d) joinery
 - (e) plant screen louvres
 - (f) fritted and other glass
 - (g) cladding, infill and bridge panels

Reason: To ensure appropriate external surface materials are used. (Cambridge Local Plan 2006 policies 3/4, 3/12 and 4/11)

17. Before starting any brick or stone work, a sample panel of the facing materials to be used shall be erected on site to establish the detail of bonding, coursing and colour, type of jointing shall be agreed in writing with the local planning authority. The quality of finish and materials incorporated in any approved sample panel(s), which shall not be demolished prior to completion of development, shall be maintained throughout the development.

Reason: In the interests of the visual amenity of the Conservation Area and to ensure that the quality and colour of the detailing of the brickwork/stonework and jointing is acceptable and maintained throughout the development. (Cambridge Local Plan 2006 policies 3/12 and 4/11)

18. No work shall be started on the external elevations of the building until full details of designed locations for signage for the building been submitted to and approved in writing by the local planning authority. Thereafter the development shall be undertaken in accordance with the agreed details.

Reason: To ensure appropriate locations for signage which do not detract from the design of the building or harm the conservation area. (Cambridge Local Plan 2006 policies 3/4, 3/7, 3/12 and 4/11.)

- 19. Prior to the commencement of development, a renewable energy statement, which demonstrates that at least 10% of the development's total predicted energy requirements will be from on-site renewable energy sources, shall be submitted to and approved in writing by the local planning authority. The statement shall include the following details:
 - a) The total predicted energy requirements of the development, set out in Kg/CO2/annum.
 - b) A schedule of proposed on-site renewable energy technologies, their respective carbon reduction contributions, location, design and a maintenance programme.

Reason: In the interests of reducing carbon dioxide emissions. (Cambridge Local Plan 2006 policy 8/16).

20. The approved renewable energy technologies set out in the Renewable Energy Statement shall be fully installed and operational prior to the first occupation of the development and shall thereafter be retained as and remain fully operational in accordance with the approved maintenance programme.

Reason: In the interests of reducing carbon dioxide emissions. (Cambridge Local Plan 2006 policy 8/16).

21. All non-residential buildings shall be constructed to meet the applicable approved BREEAM "Excellent" rating as a minimum. Prior to the occupation building, or as soon as practicable after occupation a certificate following a post-construction review, shall be issued by an approved BREEAM Assessor to the Local Planning Authority, indicating that the relevant BREEAM rating has been met. In the event that such a rating is replaced by a comparable national measure of sustainability for building design, the equivalent level of measure shall be applicable to the proposed development unless otherwise agreed in writing by the Local Planning Authority.

Reason: In the interests of reducing carbon dioxide emissions and promoting principles of sustainable construction and efficient use of buildings (Cambridge Local Plan 2006 policy 8/16 and Supplementary Planning Document 'Sustainable Design & Construction' 2007).

22. The building hereby permitted shall not be occupied until a scheme of public art for the site, which shall include a timetable for implementation, has been submitted to and approved in writing by, the local planning authority. The approved scheme of public art shall be implemented in accordance with the approved timetable.

Reason: To ensure appropriate public art. (Cambridge Local Plan 2006 policy 3/7)

- 23. Prior to the occupation of the development, a Public Art Maintenance Plan shall be submitted to and approved in writing by the local planning authority and shall include the following:
 - -Details of how the Public Art will be maintained:
 - -How the Public Art would be decommissioned if not permanent;
 - -How repairs would be carried out;
 - -How the Public Art would be replaced in the event that it is destroyed;

The approved Public Art Maintenance Plan shall be fully implemented in accordance with the approved details. Once in place, the Public Art shall not be moved or removed otherwise than in accordance with the approved Public Art Maintenance Plan.

Reason: To accord with the provisions of Cambridge City Council Public Art SPD (2010) and policies 3/4 and 3/7 of the Cambridge Local Plan 2006.

24. The building shall not be occupied until full details of both hard and soft landscape works have been submitted to and approved in writing by the local planning authority. Hard landscape details shall include paving and ground surfaces, means of enclosure; and seating. Soft landscape details shall include planting plans, written specifications; schedules of plants, noting species, plant sizes and proposed numbers/densities where appropriate and an implementation programme.

Reason: In the interests of visual amenity and to ensure that suitable hard and soft landscape is provided as part of the development. (Cambridge Local Plan 2006 policies 3/4, 3/11 and 3/12)

25. No work on the external elevations of the building hereby permitted shall commence until there has been submitted to and approved in writing by the local planning authority a plan illustrating tree pit design for all new tree planting. details shall include all root cell designs in section and plan so that the full extents of the area of root volume provided can be assessed. The details shall also include all other features such soil irrigation methods. guying/staking, type quality/quantity, drainage (where needed), tree protection methods, tree furniture, and any other features needed to ensure establishment and continued thriving of the proposed tree. Development shall be carried out in accordance with the approved details.

Reason: In the interests of visual amenity and to ensure that suitable hard and soft landscape is provided as part of the development. (Cambridge Local Plan 2006 policies 3/4, 3/11 and 3/12)

26. The building hereby permitted shall not be occupied until:

either, a scheme of surface water drainage in accordance with the Ramboll document 'Chemistry of Health Drainage Strategy' revision 03, by Sujal Parikh, dated 5th October 2015 has been implemented in full,

or, an alternative scheme of surface water drainage for the site, which has been submitted to and approved in writing by the local planning authority, has been implemented in full.

Reason: To ensure satisfactory drainage of surface water from the site. (Cambridge Local Plan 2006 policy 4/16)

27. The building hereby approved shall not be occupied until the approved scheme of archaeological work (including codification, summary, submission to the County Council and publication of results) has been completed.

Reason: To ensure that an appropriate archaeological investigation of the site has been implemented before development commences. (Cambridge Local Plan 2006 policy 4/9)

28. The building hereby approved shall not be occupied until a Travel Plan for users and visitors has been submitted to and approved in writing by the local planning authority. The provisions of the approved Travel Plan shall be implemented prior to occupation and maintained thereafter.

Reasons: To ensure no adverse impact on the transport network, and to limit pollution. (Cambridge Local Plan 2006 policies 3/1, 4/13 and 8/2)

INFORMATIVE: Approved remediation works shall be carried out in full on site under a quality assurance scheme to demonstrate compliance with the proposed methodology and best practice guidance.

INFORMATIVE: Any material imported into the site shall be tested for a full suite of contaminants including metals and petroleum hydrocarbons prior to importation. Material imported for landscaping should be tested at a frequency of 1 sample every 20m3 or one per lorry load, whichever is greater. Material imported for other purposes can be tested at a lower frequency (justification and prior approval for the adopted rate is required by the Local Authority). If the material originates from a clean source the developer should contact the Environmental Quality Growth Team for further advice.

INFORMATIVE: The application should take into account British Standard BS7258: 1994 Laboratory Fume Cupboards which sets out heights that are required for adequate dispersion.

INFORMATIVE: Dust condition informative

To satisfy the condition requiring the submission of a program of measures to control airborne dust above, the applicant should have regard to:

-Council's Supplementary Planning Document - "Sustainable Design and Construction 2007":

http://www.cambridge.gov.uk/public/docs/sustainable-design-and-construction-spd.pdf

-Guidance on the assessment of dust from demolition and construction

http://iaqm.co.uk/wp-content/uploads/guidance/iaqm_guidance_report_draft1.4.pdf

-Control of dust and emissions during construction and demolition - supplementary planning guidance https://www.london.gov.uk/sites/default/files/Dust%20and%20Emissions%20SPG%208%20July%202014_0.pdf

INFORMATIVE: To satisfy the plant noise insulation condition, the rating level (in accordance with BS4142:2014) from all plant, equipment and vents etc (collectively) associated with this application should be less than or equal to the existing background level (L90) at the boundary of the premises subject to this application and having regard to noise sensitive premises.

Tonal/impulsive noise frequencies should be eliminated or at least considered in any assessment and should carry an additional correction in accordance with BS4142:2014. This is to prevent unreasonable noise disturbance to other premises. This requirement applies both during the day (0700 to 2300 hrs over any one hour period) and night time (2300 to 0700 hrs over any one 15 minute period).

It is recommended that the agent/applicant submits a noise prediction survey/report in accordance with the principles of BS4142: 2014 "Methods for rating and assessing industrial and commercial sound" or similar, concerning the effects on amenity rather than likelihood for complaints. Noise levels shall be predicted at the boundary having regard to neighbouring premises.

It is important to note that a full BS4142:2014 assessment is not required, only certain aspects to be incorporated into a noise assessment as described within this informative.

Such a survey / report should include: a large scale plan of the site in relation to neighbouring premises; noise sources and measurement / prediction points marked on plan; a list of noise sources; details of proposed noise sources / type of plant such as: number, location, sound power levels, noise frequency spectrums, noise directionality of plant, noise levels from duct intake or discharge points; details of noise mitigation measures (attenuation details of any intended enclosures, silencers or barriers); description of full noise calculation procedures; noise levels at a representative sample of noise sensitive locations and hours of operation.

Any report shall include raw measurement data so that conclusions may be thoroughly evaluated and calculations checked.

INFORMATIVE: The site investigation, including relevant soil, soil gas, surface and groundwater sampling should be carried out by a suitably qualified and accredited consultant/contractor in accordance with a quality assured sampling, analysis methodology and relevant guidance. The Council has produced a guidance document to provide information to developers on how to deal with contaminated land. The document, 'Contaminated Land in Cambridge- Developers Guide' can be from the City Council website downloaded on https://www.cambridge.gov.uk/land-pollution. Hard copies can also be provided upon request

INFORMATIVE: Electricity substations are known to emit electromagnetic fields. The Radiation Protection Agency has set standards for the release of such fields in relation to the nearest premises. The applicant should contact The National Grid EMF unit on 0845 702 3270 for advice regarding the electric/magnetic fields that are associated with electric substations.

INFORMATIVE: The Council's document 'Developers Guide to Contaminated Land in Cambridge' provides further details on the responsibilities of the developers and the information required to assess potentially contaminated sites. It can be found at the City Council's website on

http://www.cambridge.gov.uk/ccm/content/environment-and-recycling/pollution-noise-and-nuisance/land-pollution.en. Hard copies can also be provided upon request.

INFORMATIVE: New development can sometimes cause inconvenience, disturbance and disruption to local residents, businesses and passers by. As a result the City Council runs a Considerate Contractor Scheme aimed at promoting high standards of care during construction. The City Council encourages the developer of the site, through its building contractor, to join the scheme and agree to comply with the model Code of Good Practice, in the interests of good neighbourliness. Information about the scheme can be obtained from The Considerate Contractor Project Officer in the Planning Department (Tel: 01223 457121).

2. In the event that the application is refused, and an Appeal is lodged against the decision to refuse this application, delegated authority is sought to allow officers to negotiate and complete the Planning Obligation required in connection with this development