Application Number	16/0165/FUL	Agenda Item		
Date Received	2nd February 2016	Officer	Mr	Mark
_			Wadsv	worth
Target Date	3rd May 2016			
Ward	Queen Ediths			
Site	Land South Of Dame Ma	ary Archer W	ay Cam	bridge
	Biomedical Campus Cam	•	,	J
Proposal	Erection of a building for research and developme with associated support Logistics function a infrastructure to includrainage, electric and grancillary structures, car a and soft landscaping.	or Biotech a nt and produ orting Head along with ude; acces as infrastru	uction to lquarters asso ss, se cture, e	egether s and ociated rvices, xternal
Applicant	Cambridge Medipark L Hospitals NHS Trust C/O Agent.	td, Cambric	lge Uni	versity

SUMMARY	The development accords with the Development Plan and is considered acceptable for the following reasons:	
	The proposals are consistent with the outline proposals for CBC Phase 2 (16/0176/OUT).	
	The design of the development has been well considered with regard to its context and site constraints and is compatible with the other building and public realm design coming forward within the wider Cambridge Biomedical Campus.	
	The necessary mitigation measures, such as transport improvements have been secured and will be triggered as the development comes forward.	

	Objections to the scheme are noted and these representations have been carefully considered in reaching this recommendation. None of the objections provide sufficient planning justification to depart from the approved development plan.
RECOMMENDATION	APPROVAL

1.0 SITE DESCRIPTION/AREA CONTEXT

Site Location

1.1 The application site is located within Phase 2 of the Cambridge Biomedical Campus (CBC) being developed around Addenbrooke's Hospital, approximately 2 miles south of the centre of Cambridge. The CBC forms an integral part of a major urban extension on the Southern Fringe of the City comprising clinical facilities and biomedical and biotechnology activities, related higher education and research institutes, and new housing.

CBC Phase 1

- 1.2 CBC (including Addenbrooke's Hospital) has been developed to meet local, regional or national health care needs or for biomedical and biotechnology research and development activities within class B1(b), related higher education and sui generis medical research institutes.
- 1.3 Outline planning approval was granted in October 2009 for the development of up to 215,000 square metres of floorspace (excluding plant areas) comprising 60,000sqm of clinical research and treatment (D1), 115,000sqm of biomedical and biotech research and development (B1(b)), 15,000sqm of biomedical and biotech research and development (B1(b)) or clinical research and treatment (D1), and 25,000sqm of either clinical research and treatment (D1) or higher education or sui generis medical research institute uses, and including related support activities within use classes A1, A3, B1, D1 (crèches/nurseries) or sui generis uses, new areas of public

realm; landscaping; parking areas; highway works; drainage works and all other associated infrastructure (06/0796/OUT).

Cambridge Biomedical Campus Phase 2

- 1.4 To allow for the continuing growth of the Campus, and specifically of biomedical, biotech research development the application for CBC Phase 2 has been submitted (16/0176/OUT) which will deliver additional biomedical and biotech research floorspace (Refer Appendix A for a map of CBC).
- 1.5 Phase 2 land parcel is located on the southern edge of Cambridge and will contribute to a new developed edge of the City. Immediately to the south of the site is Green Belt land. The character of the land is well-managed farmland with open arable fields and scattered deciduous woodland on gently rolling countryside. The area has elevated views from the south which reveals almost the full extent of the city, including its historic core, with the Addenbrooke's site and CBC dominating the foreground. These views of Cambridge in its countryside setting are significant and valued.
- 1.6 The parallel outline is for development of up to 75,000 square metres of floorspace (excluding plant areas) of Research and Development (B1b) and Clinical (C2 and/or D1), sui generis and higher education uses, including related support activities within use class B1; ancillary uses in addition (A1, A3, A4, A5, D1 and/or D2); up to two multi-storey car parks; open space and landscaping and all other associated supporting infrastructure.
- 1.7 Two thirds of the floorspace which will be delivered will be for biomedical research and development, ancillary and related uses (50,000 square metres) and one third for clinical, ancillary and related uses (25,000 square metres).

Application Site

1.8 The site of this full application lies within the red line boundary of the parallel outline application for CBC Phase 2. The site presently forms part of an agricultural field which continues to extend to the east where it includes a temporary helicopter landing facility associated with the Addenbrooke's Hospital, the field as a whole, including the site, is allocated in the

- development plan for the expansion of the Cambridge Biomedical Campus, known as Phase 2.
- 1.9 To the north the site abuts and includes sections of Dame Mary Archer Way, beyond which is Phase 1 of CBC. To the west the site is bordered by an existing Foul Water Pumping Station within a landscaped setting, elements of which are included within the application site to enable the provision of utilities, beyond this is an existing agricultural track providing access to land to the south which runs adjacent to an embankment of the Addenbrooke's Access Road where it rises to bridge across the London-Cambridge railway line, beyond which is the newly formed Clay Farm country park. To the south the site abuts an existing field ditch beyond which, and parallel to, is a Sustrans cycle route on the edge of agricultural fields interspersed with woods and copses of trees.
- 1.10 The site does not fall within a Conservation Area, and has no Listed Buildings or trees covered by Tree Preservation Orders. It is outside the Controlled Parking Zone.

2.0 THE PROPOSAL

Abcam Plc

- 2.1 Abcam Plc, whose origins lie in the University of Cambridge, are a Biotech Research and Development focused company with expertise in the development of specialist life science products that are used by research scientists to analyse living cells in order to improve the understanding of health and disease. Abcam are currently headquartered at the Cambridge Science Park with nine global subsidiary offices. Since the company was established in 1998 the company has grown into a company currently employing approximately 436 staff.
- 2.2 The company is currently housed within three buildings at the Cambridge Science Park. The company now requires a new research, development and production and global headquarters building that will consolidate the various functions under one roof. Abcam are also keen to move to the Cambridge Biomedical Campus to be part of the important research and development (R&D) and medical science cluster with a view to identifying opportunities for collaboration.

2.3 The Abcam Building will include laboratory based activity including research and development of new products and production of primary and secondary antibodies, proteins, peptides, lysates, biochemicals, immunoassays and other kits for distribution to third parties for use in clinical and biotech research.

Overall Proposal

- 2.4 This is a full planning application within the red line of the parallel outline application for CBC Phase 2 (16/0176/OUT). It therefore needs to mitigate its own impacts and be determined on its own merits. The application will also need to be consistent with the parallel outline proposals.
- 2.5 The proposed development will comprise 11,495.34 square metres of Gross External Floorspace (GFA) of a building for Biotech and Biomedical research and development and production together with associated supporting headquarters and logistics function along with associated infrastructure to include: access, services, drainage, electric gas infrastructure, external ancillary structures, car and cycle parking and hard and soft landscaping. The footprint of the building will be 3,609.45 square metres. The specifications for the proposed new Abcam building are set out below in Table 2.0.

Description	Quantums
Gross Internal Area*	10,988.47 square metres
Gross External Area*	11,495.34 square metres
Cycle parking	200 spaces
Car parking	144 spaces
Motorcycle parking	5

Table 2.0 – Specifications for proposed new Abcam building

2.6 It is anticipated that 533 staff will be accommodated at the proposed new Abcam building with first occupation planned for

- 2018, with 20% of that number visitors. This staffing number is based upon Abcam business forecast for the year 2020.
- 2.7 The new building will comprise two blocks (Blocks A & C) linked by a glazed atrium building (Block B). Block A which is almost square in plan form would be three storeys in height with a plant room at third floor level. Block C which has a more linear rectangular plan provides four floors of office laboratory floorspace with a plant room at fourth floor level.
- 2.8 The proposed new building would be 37.0 metres Above Ordnance Datum (AOD) to the top of the plant screen and 40:00 metres AOD to the highest point on the building; the top of the flue. The existing ground level is approximately 12.25 metres with the main body of the building approximately 27:75 metres high to the top of the flue. The plant rooms on Blocks A & C are set back from the edge of the main structure to help reduce the bulk and massing of the proposed new structure. The servicing area is on the southern elevation of Block A and will provide easy access from the nearby Dame Mary Archer Way.
- 2.9 It should be noted that an Environmental Impact Assessment (EIA) has been submitted together with the outline planning application for Phase 2 CBC. There is, however, no EIA for this application as it did not exceed the Town and Country Planning (Environmental Impact Assessment) Regulations 2011threshold. However, as a component of a larger scheme (the Phase 2 Outline), it is necessary to give consideration to the assessment of how this scheme fits within the overall cumulative impacts of the overall CBC Phase 2 site.

3.0 SITE HISTORY

3.1 It should be noted that there is no planning history for the site. However, there is listed below details of significant applications which impact upon the application site.

Relevant history for adjacent Phase 1 site:

Reference 16/1078/OUT	Description Outline Application with all matters reserved for up to 14,193 sqm (excluding plant areas) of biomedical and biotech research and development (Use Class B1(b)); landscaping; car and cycle parking areas and all other associated infrastructure.	Outcome Pending
16/0653/REM	Reserved matters pursuant to outline approval 06/0796/OUT (varied by S73 application reference 14/2094/S73) for a 9,033sqm (Gross External Area excluding plant) Biotech and Biomedical Research & Development building, including associated car and cycle parking, hard and soft landscaping, internal access roads, supporting facilities and ancillary infrastructure.	Pending
15/1171/REM	Resurfacing of land at Keith Day Road to provide new public realm with 0.22ha associated landscaping.	Approved with conditions
15/1141/REM	Reserved matters application for public realm (known as circus/piazza) totalling 1.57ha in area, pursuant to outline application 06/0796/OUT.	Approved with conditions
14/2094/S73	Section 73 to vary condition 63 (to extend the timeframe for submission and agreement of Off-Site Highway Works) of planning approval 06/0796/OUT	Approved with conditions
14/1633/REM	Reserved matters application pursuant to outline approval 06/0796/OUT for a total of 59,821sqm (Gross External Area excluding plant) Biotech and Biomedical Research & Development floorspace, to include	Approved with conditions

11/0780/REM

application Reserved matters (access, appearance, landscaping, layout and scale details) for a 1,228 space multi-storey car park (33,141sqm gross external floor area) and perimeter access road at the south west corner of Addenbrooke's campus, to serve Addenbrooke's as it expands and the new Papworth Hospital (pursuant to outline approval 06/0796/OUT).

Approved with conditions

14/0120/FUL

Redevelopment of existing parking area to provide education centre (3,985 sqm), private hospital (10,405 sqm), hotel and conference centre (12,540 sqm), ancillary hot food takeaway (Class A5, 605 sqm) and ancillary D1 (530 sqm) and associated car parking & public realm works known as The Forum Cambridge

conditions

with

Approved

14/1411/REM

Reserved matters application pursuant to approval 06/0796/OUT for New outline Papworth hospital & associated amenity space, planting, vehicle drop off area, cycle parking, energy centre/plant room servicing area.

Approved with conditions

C/05009/12/C W

Erection of Energy Innovation centre (EIC) of 2,675sqm GEA as part of the wider expansion of Addenbrooke's Hospital to form part of the Cambridge Biomedical Campus authorised under planning application ref:06/0796/OUT

(B1(b)),

biomedical and biotech research and development (B1(b)) or clinical research and treatment (D1 and/or clinical in-patient treatment), and 25,000sgm of either clinical research and treatment (D1 and/or clinical

development

Approved with conditions

06/0796/OUT

Approved Up to 215,000sqm floorspace (excluding with plant areas) comprising 60,000sqm of conditions clinical research and treatment (D1 and/or

15,000sqm

clinical in-patient treatment), 115,000sqm of biomedical and biotech research and in-patient treatment) or higher education or sui generis medical research institute uses, and including related support activities within use classes A1, A3, B1, D1 (creches/nurseries) or sui generis uses, with no individual premises used for support activities to exceed 500sqm; new areas of public realm; landscaping; parking areas; highway works; drainage works & all other associated infrastructure.

4.0 PUBLICITY

4.1 Advertisement:

Adjoining Owners:

Site Notice Displayed:

Public Meeting/Exhibition

Yes

DC Forum:

Yes

- 4.2 On Wednesday 30 September 2015 proposals for both the Abcam project and the CBC Phase 2 expansion were exhibited at the Southern Fringe Community Forum held at Trumpington Village Hall.
- 4.3 A presentation was made to the Cambridgeshire Quality Panel on 13th October 2015.
- 4.4 On Wednesday 14 October 2015 both the Abcam and CBC Phase 2 projects were presented to the members of the planning committee as part of an officer organised preapplications briefing.
- 4.5 The Abcam Building application was presented to the Cambridge Disability Consultative Panel on Tuesday 26 January 2016.

5.0 POLICY

5.1 Relevant Development Plan policies

PLAN		POLICY NUMBER	
Cambridge Plan 2006	Local	3/1 3/2 3/3 3/4 3/6 3/7 3/8 3/9 3/11 3/12 3/13	
		4/1 4/2 4/3 4/4 4/6 4/8 4/9 4/13 4/14 4/15	
		5/14 5/15	
		6/10	
		7/1 7/2 7/4	
		8/1 8/2 8/3 8/4 8/5 8/6 8/8 8/9 8/10 8/11 8/16 8/17 8/18	
		9/3 9/5	
		10/1	

5.2 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 Circular 11/95
Supplementary Planning Guidance	Sustainable Design and Construction (May 2007)
	Cambridgeshire and Peterborough Waste Partnership (RECAP): Waste Management Design Guide Supplementary Planning Document (February 2012)

	Cambridge City Council (March 2010) – Planning Obligation Strategy		
	Cambridge City Council (January 2010) - Public Art		
	Cambridge Walking and Cycling Strategy (2002)		
	Air Quality in Cambridge – Developers Guide (2008)		
Material	City Wide Guidance		
Considerations	Cambridge Landscape and Character Assessment (2003)		
	Cambridge Southern Fringe Area Development Framework (2006)		
	Cambridge City Nature Conservation Strategy (2006)		
	Cambridge and South Cambridgeshire Strategic Flood Risk Assessment (November 2010)		
	Strategic Flood Risk Assessment (2005)		
	Cambridge City Council (2011) - Open Space and Recreation Strategy		
	Cambridgeshire Quality Charter for Growth (2008)		
	Cambridge City Council - Guidance for the application of Policy 3/13 (Tall Buildings and the Skyline) of the Cambridge Local Plan (2006) (2012)		
	Cambridge Walking and Cycling Strategy (2002)		

Protection and Funding of Routes for the Future Expansion of the City Cycle Network (2004)Cambridgeshire Design Guide For Streets and Public Realm (2007) Air Quality in Cambridge – Developers Guide (2008) Cambridgeshire County Council Local Transport Plan (2014) Transport Strategy for Cambridge and South Cambridgeshire (2014) **Transport** Cambridgeshire Long Term Strategy (2014) Greater City Deal programme (2014) Area Guidelines Cambridge City Council (2002)–Southern Corridor Area Transport Plan

<u>Status of Proposed Submission – Cambridge Local Plan 2014</u>

- 5.3 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.
- 5.4 For Cambridge, 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.
- 5.5 For the application considered in this report, the following policies in the emerging Local Plan are of relevance:

 □ Policy 16 – Cambridge Biomedical Campus (including Addenbrooke's) Area of Major Change

6.0 CONSULTATIONS

Urban Design Team

- 6.1 The Abcam proposals have been progressed alongside the outline application for CBC Phase 2 (Ref. 16/0176/OUT) through a series of constructive pre-application discussions and the overall approach to the site layout and response to the context is consistent with the outline application (16/0176/OUT). The Urban Design Team supports the scheme and is of the view that the Abcam scheme will play an important role in defining the western end of the CBC Phase 2 land and that this is reflected in the approach to the scale and massing of the building and materiality to create a pavilion type laboratory building backed by the office function to the east.
- 6.2 The Urban Design Team has requested the following conditions;
 - approval of a sample panel of the materials to be used in the construction of the external surfaces
 - ii. full details of the design of the internal access road into the site from Dame Mary Archer Way be submitted and approved prior to the commencement of development

Environmental Health

- 6.3 The following environmental issues have been considered by EH officers:
 - Construction pollution
 - Plant noise
 - Contaminated Land
 - Lighting
 - Air Quality
- 6.4 Officers consider the proposals to be acceptable subject to the following conditions which will seek to ensure that development does not detrimentally affect the amenity of the area;

Standard Conditions

 Submission of preliminary contamination assessment (and proposals for an intrusive investigation)

- Submission of site investigation report and remediation strategy
- Implementation of remediation
- Completion report
- Material Management Plan
- Unexpected contamination
- Emergency or backup Generator
- Submission of Furnace/ Boiler/Industrial Plant
- Implementation of Furnace/ Boiler/Industrial Plant
- Submission of Mitigation Scheme
- Implementation of Mitigation Scheme

Bespoke Conditions

- Demolition and Construction Environmental Management Plan (DCEMP)
- Contaminated Land Gas Risk Condition
- Extraction Equipment Condition
- Plant noise insulation Condition
- Post Installation verification testing
- Lighting Individual Development Plots
- Non-Road Mobile Machinery Plant
- Energy Demand
- Electric Vehicle Charge Points
- Low NOx boilers
- Bespoke Pre-commencement Air Quality Assessment
- 6.5 It is also recommended that a number of Informatives are attached to any planning approval. It should be noted that Environmental Health officers have also recommended that a condition be attached to any approval which requires that the stack heights of flues serving the combustion appliances of the development should be at the maximum height permitted by the Parameter Plans. This is to help disperse air pollutants such as nitrogen dioxide and particulate and protect local air quality.

Head of Streets and Open Spaces (Landscape Team)

6.6 The concept of development for the Abcam development on the southern edge of the Cambridge Biomedical Campus is fully supported by the Landscape Team. The landscape proposals for the development have been the subject of lengthy discussions and much work has been done to advance the proposals to those submitted in the application. Nevertheless,

the Landscape Team still have concerns regarding the inadequate space available along the southern boundary to successfully deliver landscape mitigation. Specifically, amendments were sought to the planting beds to the north of the access road and immediately south of the temporary surface level car park which it is recommended should be widened to 9 metres to accommodate large scale trees and woodland understorey.

- 6.7 In the event that planning permission is granted the Landscape Team has requested the following conditions are attached;
 - Submission & approval of full details of both hard & soft landscaping
 - Submission & approval of full details of proposed earthworks
 - Submission & approval of landscaping above attenuation tank including full engineering details of the attenuation tank
 - Hard & soft landscaping to be implemented in accordance with approved plans
 - Landscape work maintenance requirements
 - Submission and approval of a Landscape Management Plan

Head of Streets and Open Spaces (Nature Conservation Officer)

6.8 An Ecology Statement prepared by Ecosulis dated January 20126 was submitted with the application. The proposals are considered acceptable subject to a condition being attached to any approval which requires the submission and approval of nature conservation enhancements.

Head of Streets and Open Spaces (Sustainable Drainage Officer)

6.9 When the application was originally submitted concerns were raised about the scheme. Further information has now been provided and it is now considered that the proposals are acceptable, subject to a pre-commencement condition being attached to any approval which requires the submission and approval of full details of the surface water drainage scheme for the development.

Senior Sustainability Officer (Design and Construction)

- 6.10 The Senior Sustainability Officer has advised that the proposals integrate a number of proposals related to sustainable design and construction including:
 - Targeting of a BREEAM 'very good' rating, although it has been agreed that the scheme will target more ambitious standards for energy and water use than the mandatory requirements of BREEAM 'very good';
 - Specific treatment of the façade to minimise excessive solar gain and reduce the need for cooling.
 - Prioritisation of natural ventilation in the office block
 - The use of water efficiency measures to secure a proposed 25% education in water consumption, which relates to 2 BREEAM credits.
 - The use of sustainable drainage systems including 3 attenuation ponds, swales and rain gardens
- 6.11 These measures are supported by the Council's Sustainability Officer who has recommended that approval is subject to conditions on the following
 - BREEAM Design Stage Certification The building shall be constructed to meet the approved overall BREEAM 'very good' rating
 - BREEAM Post Construction Certification A certificate shall be issued by a BREEAM assessor indicating that the approved BREEAM rating has been met.

Access Officer

6.12 The Council's Access Officer has not raised any objections to the scheme but has instead raised a number of detail design issues.

Waste Shared Service

6.13 The County Waste Officer has reviewed the waste management strategy submitted with the application and considers that it is acceptable and provides an acceptable strategy for handling of different waste streams. The County Waste Officer has however requested that conditions are attached to any approval which requires the submission of a Construction Environment Management Plan (CEMP) and Detailed Waste Management and Minimisation Plan (DWMMP).

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

- 6.14 The Walking & Cycling Officer considers that the scheme is acceptable but made the following recommendations;
 - With the detailed design of the new accesses into the site keep the radii to a minimum in order to keep speeds low to provide a pedestrian friendly environment.
 - the central cycle lane is re-designed to accord with similar provision elsewhere in the city.
- 6.15 The Walking and Cycling Officer is of the view that the following proposed conditions are welcomed:
 - Provision of land to provide a connection at the north east corner of the site from the local cycle route to the Bell School site
 - Provision of cycle and pedestrian facilities along the northern site boundary on Dame Archer Way – the design of how this facility crosses the site accesses should give priority to cyclists and pedestrians.
 - Pedestrian and cycle crossing facilities at the Papworth Access junction – these should be one-stage crossings.
 - Provision of two cycle links to NCN11 at the south eastern and south western ends of the site
 - Cycle improvements at the Red Cross Lane access
- 6.16 The proposal to improve the crossing facilities for pedestrians and cyclists at the Addenbrooke's Road/ Francis Crick Avenue/ Dame Archer Way roundabout is also welcomed but must also include a 3m link from this crossing into the site, connecting to the facility along the northern site boundary as detailed above. Rather than providing an additional 3m cycle route parallel to the existing NCN 11 path south of the site it would be preferable to widen the existing path and provide links across to it.
- 6.17 As part of the first phase a link across from the pedestrian/cycle link to the south of the ABCAM site to NCN 11 should be provided south of the site.

Head of Streets and Open Spaces (Public Art Officer)

6.18 No comments provided

Cambridgeshire County Council (Archaeology)

6.19 No objections raised to the proposed development, but it is recommended that the site should be subject to a programme of archaeological investigation and recommend that this work should be commissioned and undertaken at the expense of the developer. This programme of work can be secured through the inclusion of a negative condition of the approval.

Environment Agency

On scheme as submitted

6.20 The EA raised objections on flood risk grounds. In the original submission the site was shown to still be in Flood Zone 3. The EA confirmed that until the applicant was able to demonstrate that the site is not within Flood Zone 3 it would not be possible to support the proposals.

On additional information

- 6.21 The Environment Agency (EA) raised objections to the application, as originally submitted, on the basis that the site is within a flood risk zone (Flood Zone 3). However, in a Flood Risk Assessment (FRA) addendum submitted by the applicant dated the 13th April 2016 the EA is now of the view that the application site is now not within Flood Zone 3 and that the risk of flooding is considered low and therefore the scheme is not contrary to the NPPF.
- 6.22 The Environment Agency has requested that four conditions be attached to an approval on;
 - Surface water drainage
 - Foul drainage
 - Potential ground contamination
 - Pollution prevention
- 6.23 The EA also recommends that an informative is added which recommends that the landowner considers a formal floods map challenge to demonstrate the site is not within flood zone 3.

Highways England

6.24 No objections

Health and Safety Executive

- 6.25 The HSE, based on safety grounds, does not advise against the granting of planning permission in this case. An informative will instead be attached to any decision notice recommending that the developer contacts the pipeline operator to;
 - Determine whether they have a legal interest (easement, wayleave, etc.) in the vicinity of the pipeline.
 - Determine if there are any standards to which the pipeline is designed and operated may restrict occupied buildings or major traffic routes within a certain proximity of the pipeline.

National Grid (Pipeline operator)

- 6.26 The Pipeline Operator National Grid, were notified about the proposed development on 11th March 2016 and have clarified that the following apparatus is in the vicinity of the proposed works:
 - High or intermediate pressure (above 2 bar) gas pipelines and associated equipment
 - Low or medium pressure (below 2 bar) gas pipes and associated equipment
- 6.27 National Grid advised that it would provide further comments within 28 days from the date of their comments. At the time of writing this report no further comments have been received.

Anglian Water

6.28 The foul drainage from this development is in the catchment of Cambridge Water recycling Centre that will have available capacity for these flows. Development may lead to an unacceptable risk of flooding downstream. A drainage strategy will therefore need to be prepared in consultation with Anglian Water to determine mitigation measures. AW has requested a condition requiring the drainage strategy covering the issue(s) to be agreed. The proposed method of surface water management does not relate to Anglian Water operated assets.

6.29 An informative should be attached to any planning permission concerning the requirement to obtain AW consent before discharging trade effluents into the public sewer.

Cambridgeshire County Council (Transport)

On scheme as submitted

- 6.30 Having reviewed the submitted Transport Assessment (TA) the Highway Authority considers that further information was required in order to comment in full on the development impacts. A holding objection was lodged. Specific concerns raised included;
 - It is not clear which accesses/ routing through the site cyclists will use to connect to Hills Road and CGB
 - No details had been provided on pedestrian and cycle network improvements
 - Deficiencies were identified in the sustainable travel in the vicinity of the site including

On additional information

6.31 Having reviewed the Transport Assessment and other accompanying information associated with the development the County Council is now in a position to remove the holding objections subject to the various transport improvements being secured through S106 or planning condition. See the main body of the report for more detail.

Cambridgeshire Constabulary (Architectural Liaison Officer)

6.32 The Constabulary's Architectural Liaison Officer was involved in pre application consultations with the developers to discuss their crime prevention and security strategy and after having inspected the application does not wish to raise any objections, recommendations or further observations to make.

Cambridgeshire Fire & Rescue Service

6.33 The Fire Authority has advised that adequate provision for fire hydrants should be secured either through condition or Section 106 agreement.

Network Rail

6.34 No objections or observations to make

Disability Panel

6.35 The Disability Panel meet on 26th January 2016 and did not raise any substantive concerns about the proposals although it did make a series of detailed design recommendations on; car parking, shared surfaces, drop-off spaces, entrance points, wayfinding, etc. A copy of the notes of the Disability Panel Meeting is provided in Appendix 4.

Cambridgeshire Quality Panel (Meeting of 9 Oct. 2015)

- 6.36 The Panel was generally supportive of the scheme but had the following comments;
 - The café space should be opened to everyone to bring the community together.
 - Furnished plans and some sections should be provided so as to understand the elevations.
 - It is suggested that the rain gardens and swales to the front of the building should be extended.
 - It is suggested that the applicant aims for a higher performance building with a fabric approach as part of a higher aspiration in terms of carbon reductions.
 - Recycled water back should be put back into the system.

(Refer Appendix 3 - Cambridge Quality Panel Minutes from the meeting dated 6 Oct. 2015)

7.0 REPRESENTATIONS

- 7.1 The owner/ occupiers of the following addresses have made representations:
 - 10 Cedar Court, Hills Road
 - 15 Greenlands
 - Hedges, 7 Babraham Road
- 7.2 The representations can be summarised as follows:
 - The proposals will lead to the over development of the site

- The Biomedical Campus is very poor for cyclist safety with roads too narrow and cars and cyclist having to share the same path.
- The area cannot cope with additional traffic
- The proposed development will have a 'serious negative impact' on the natural spring and the Local Nature Reserve (LNR) in general.

8.0 ASSESSMENT

- 8.1 From the consultation responses and representations received and from the inspection of the site and the surroundings it is considered that the main issues are:
 - 1. Principle of development
 - 2. Transport
 - 3. Design, Landscape and the Public Realm
 - 4. Drainage and Utilities
 - 5. Ecology
 - 6. Employment
 - 7. Amenity
 - 8. Sustainability
 - 9. Waste Strategy
 - 10. Public Art
 - 11. Archaeology
 - 12. Third party comments
 - 13. Planning Obligation Strategy
 - 14. Other issues

Principle of Development

8.2 Since the granting of outline consent in 2009 for CBC Phase 1 (06/0796/OUT), reserved matters approval has been granted and construction is either completed or is now well advanced on a number of high profile projects, including; the New MRC Laboratory of Molecular Biology LMB (07/0651/FUL), New Papworth Hospital (14/1411/REM), the new Global R&D Centre and the new Corporate Headquarters for AstraZeneca (14/1633/REM).

(Refer Appendix 2 which provides a breakdown of the various planning permissions on Phase 1).

8.3 Of the 115,000 square metres of biomedical and biotech research development approved under the outline planning

approval for CBC Phase 1 this is presently either developed, being developed, awaiting planning approval or as claimed by the applicant is committed for development as follows:

- 25,209 square metres built and occupied for the Medical Research Council Laboratory of Molecular Biology (approved under 07/0651/FUL);
- 59,821 square metres for AstraZeneca R&D Centre and Headquarters including of floorspace under development (approved under 14/1633/REM);
- 9,033 square metres committed for the University of Cambridge, known as Plot 8 (awaiting determination under 16/0653/REM).
- Under the AstraZeneca reserved matters application (14/1633/REM) reference was made to the possibility of a further 20,884 square metres of floorspace being delivered at a further phase of development. Although it may be the intention of AstraZeneca to build this further phase of development it has as yet no formal planning status and no planning application has been lodged or determined.
- 8.4 The total amount of biomedical and biotech research development floorspace listed above in paragraph 8.3 would total 114,947square metres with no further floorspace available for further biomedical and biotech research development floorspace, such as the Abcam scheme (Refer Appendix 2).
- 8.5 Policy 9/5 'Southern Fringe' of the Cambridge Local Plan (2006) which includes Clay Farm, Trumpington Meadows, the Biomedical Campus and Bell School states at criteria 'E' that: "Up to 10.28ha of land would be safeguarded until after 2016 for future clinical development and research uses. The respective portions being determined at Plan Review".
- 8.6 The parcel of land was also identified on the Proposals Map which indicates the CBC Phase 2 land in which this Abcam Building application would be contained. Therefore the principle of the development of commercial and clinical buildings in this location has long been established in the 2006 Local Plan.
- 8.7 Adopted Local Plan Policy 5/15 further supports growth in this specific locality for biomedical and biotechnology research and development activities.

- 8.8 Policies 7/1; 7/2 and 7/4 support economic growth in Cambridge in more general terms including: uses which have 'compatibility with adjoining land uses', of which the Abcam Building will be being compatible with uses on both the current campus and the proposed Phase 2 expansion; 'high technology and related industries and services within Use Class B1(b)', of which the Council have confirmed the Abcam Building and uses will meet; and development 'which fosters innovation and helps reinforce the existing high technology and research clusters Cambridge, and which can demonstrate a clear need to be located in the area', including healthcare, biomedical and biotechnology development' indicating that 'provision purpose-designed accommodation will be encouraged to provide for these sectors' including at 'land west of Addenbrooke's Hospital for healthcare biomedical and biotechnology research and development activities'.
- 8.9 The emerging policies 16, 40 and 75 of the draft Local Plan continue to endorse the growth of the Cambridge Biomedical Campus with Paragraph 3.46 of Policy 16 referring specifically to the expansion area which describes the area south of the southern access road (now known as Dame Mary Archer Way) stating "development here will be similar to that approved for the remainder of the site, with approximately a third of the land to be developed for NHS and private clinical development and two-thirds for Biomedical and Biotechnology research and development activities."
- 8.10 The Abcam proposal represents the first building for biomedical and biotechnology research and development on CBC Phase 2 within the site area of the parallel outline application. The proposals accord with policies 5/15, 7/4 and 9/5 of the Local Plan and policies 16, 40 and 75 of the emerging Local Plan.

Relationship with Parameter Plans (PP)

- 8.11 Although it is acknowledged that the outline planning application for CBC Phase 2 (16/0176/OUT) has not yet been approved, it is considered important to ensure that the Abcam scheme is compliant with the development parameters established for CBC Phase 2.
- 8.12 CBC Phase 2 will deliver 75,000 square metres of gross floorspace (GFA) excluding plant areas. Parameter Plan 1

- (PP1) clarifies that 67% of developable land will be for biomedical research and development, ancillary and related uses and 33% will be for clinical, ancillary and related uses.
- 8.13 The Abcam site is contained within the Developable Area set out in PP1 and will deliver 11,495 square metres (GFA) of biotech and biomedical research, development and production floorspace together with associated supporting headquarters and logistics function floorspace, which represents 15.33% of the overall floorspace allowance and 23% of the biomedical research and development allowance.
- 8.14 PP2 fixes a maximum building height of 46.5 metres AOD. The proposed 4/5 storey building will reach a maximum height of 37 metres AOD to the top of the plant screen on the roof of the building and as such is well within the building envelope established in PP2.
- 8.15 It should be noted that PP3 indicates how the site should be accessed and specifically that there should be only two points of vehicular access from Dame Mary Archer Way with a collector road running between the two. The plan indicates that individual parcels within Phase 2 will be accessed from the rear. The proposed new vehicular access which is in the approximate location indicated in PP3 will be delivered by the Abcam development and will provide vehicular access to not only the Abcam development but also the rest of CBC Phase 2 development. It will be conditional that the internal access road will be provide vehicular access to the rest of the CBC Phase 2 (Refer Condition 5)
- 8.16 PP3 also indicates that a connection will be made to the Sustrans cycle route (NCN11) towards the south-west of the application site. The applicant has indicated that the development will deliver a pedestrian / cycle link to the NCN Route 11. The approval prior to the commencement of development on site of the detailed design of the pedestrian / cycle link to the NCN Route 11 from the site will be a condition of approval (Refer Condition 2). PP4 establishes the open space and landscape framework for Phase 2 with four zones for structural landscape across the site. The broadly fit within these parameters (See paragraph 8.64 of this report).

- 8.17 PP5 sets out a number of 'Development Principles' including the requirement that no less than 50% of the southern development line to be edged by landscaped areas which the Abcam Building application will satisfy with the planned landscaping along the southern boundary of the site.
- 8.18 PP5 also requires that landscape areas contain tree planting and allow for visitor cycle parking; recreation, amenity space and drainage. The Abcam proposals reflects this through the use of swales, rain gardens and attenuation areas within this landscape area edged by trees with areas retained for amenity purposes and recreation including seating. Cycle parking is also located on the southern periphery of the service area of the building.

Conclusion

8.19 The submitted proposals is therefore compliant with extant and emerging Local Plan policy and the parameter plans for CBC Phase 2 and is therefore considered 'in principle' to be acceptable.

Transport

Background

- 8.20 Policy 8/2 of the Cambridge Local Plan discourages further traffic growth and allows development where it does not have an unacceptable transport impact. Policy 8/3 requires development that places demand on the transport system to secure suitable mitigation measures. Growth can be supported and accommodated through enhanced sustainable transport use. Policies 8/4 & 8/5 promote walking and cycling and the expansion of the walking and cycling network.
- 8.21 The key road infrastructure to link the application site and the wider CBC Phase 2 to the existing network is already in place with access to be provided off Dame Mary Archer Way, off the roundabout with the Addenbrooke's Road. The site is approximately 500 metres from the centre of the CBC and there are a number of existing cycle and pedestrian routes within the area close to the site. A number of highly frequent bus services which serve the site will be within 550 metres, linking the site with the City Centre, the railway station and key villages and

towns surrounding Cambridge. The site is therefore highly accessible and sustainable and should therefore encourage staff and visitors to travel by modes other than the private car.

Trip generation

- 8.22 In order to determine the level of person trips generated by the proposed development, the Transport Assessment (TA) has referenced the consented person trips for the research and development and general clinical elements of the CBC Phase 1 planning application. The trips for commercial are adjusted to reflect the proposed gross floor area of 58,295 square metres and uplifted to reflect the proposed staff density of 1 employee per 21 square metres.
- 8.23 The mode share from the Addenbrooke's Travel Survey have been used to derive the number of person trips per mode that would occur in the AM and PM peaks over the course of the day. From the survey it has been identified vehicular trips make up a mode share of 26.5%.
- 8.24 The TA anticipates that the proposed Abcam development will generate the following trips:

Table 8.1: Multi-Modal Person Trips for the Proposed Abcam						
Developmen	Development					
Trips (two-	AM Peak	PM peak	Over	% Modal		
way)	(08:00 –	(17:00-	course of	Share		
	09:00)	18:00)	day			
	ŕ	·	(07:00 –			
			19:00)			
All modes	225	182	1360	100%		
Car	59	48	360	26%		
Walk	29	24	177	13%		
Cycle	74	60	449	33%		
Bus	56	45	340	25%		
Other	5	5	34	3%		

8.25 The Highway Authority has accepted the predicted trip generation for the site and the mode shares. In order to provide reassurances that the mode share identified can be achieved the applicant has identified a sustainable transport investment fund which will be drawn upon in the event the single vehicle

trip targets are not met. This can be secured through the S106 as detailed in paragraphs 8.143 of this report.

Vehicular Trip Distribution

8.26 The Highway Authority considers the junction modelling that has been carried for the TA to be acceptable. The two main junctions that improvements works are sought for are crossing facilities for pedestrians and cyclists at the Addenbrooke's Avenue/Dame Road/Francis Crick Mary Archer roundabout and improvements to Shelford Road/Addenbrooke's Road junction. Full details of the measures required and their locations are given in Appendix 5 (and as referred to in paragraphs 8.143 relating to the heads of terms for the Section 106 Agreement). It should be noted that the current County Council policy is not to cater for demand by providing additional highway capacity and therefore it has been considered to be more appropriate to introduce additional capacity to facilitate the use of sustainable modes (pedestrian/cycle/public transport) to the site to mitigate the development impacts.

Sustainable Transport Trip Distribution

- 8.27 In the TA, pedestrian, cycle and public transport trips have been distributed across the CBC entrance and exit points using existing survey data. It is shown that the development will cause additional trips on the network and impacts on the network as a result of these have been identified. A number of improvement/mitigation measures which support the increase in person trips across the development and to mitigate the development impacts are therefore required. These have been agreed with the Highway Authority and the applicant. These are listed in Appendix 5 and will be secured through the S106 Agreement.
- 8.28 The Highway Authority has raised concerns over the bus occupancies levels across services which operate on the Addenbrooke's campus and whether sufficient capacity is available on services in the future to support the mode share target identified. The applicant has committed to undertaking bus capacity surveys in advance of employees occupying the site and liaising with bus operators to ensure adequate capacity is in place. The surveys provide some reassurance that any shortfalls in capacity with be highlighted to the operator in

advance of staff commencing on site and there is the potential for the sustainable transport investment fund to be put towards such measures if they are shown to cause an issue (see Appendix 5).

Travel Plan

8.29 An Interim Travel Plan (TP) has been included with the application and the key aim of the TP is to; influence the travel behaviour of staff and visitors to encourage the uptake of sustainable travel, reducing the reliance on the use of the private car. A further Travel Plan will be required to be submitted prior to the occupation of the development and 6 months following occupation monitoring against the targets to be agreed will be undertaken and annually thereafter for a five year period. The Travel Plans will be secured through the Section 106 and this is included in the package of measures as set out in Appendix 5.

Future Pedestrian and Cyclist Facilities

- 8.30 The proposed cycle/ pedestrian link to Bell School site in the north east corner of the site will be provided as part of the adjacent Bell School development. To ensure that CBC Phase 2 and the Abcam development is connected to the Bell School cycle/ pedestrian route it is recommended that land within the control of the applicant is provided to enable the delivery of a connection to the Bell School cycle/ pedestrian route. The provision of the land should be included within the S106 Agreement. The link should also be completed prior to the first occupation of the Abcam development.
- 8.31 The details of the cycle and pedestrian facilities along the northern site boundary alongside Dame Archer Way to facilitate cyclists and pedestrians circulating the junction are still needed and will be conditioned as part of this application. These details will need to come forward and be implemented prior to occupation of development to ensure these modes are given priority. Condition 4 is recommended to secure these details.
- 8.32 The Cycling and Walking Officer has raised a number of areas that will require upgrading or additional works to ensure that cycling and pedestrian links to and around the site are acceptable. The pedestrian and cycle crossings at the Papworth

Access junction on Dame Mary Archer Way will be upgraded to signalised facilities. Links to the National Cycle Network Route 11 at the south eastern and south western ends of the site will need to be provided and cycle improvements at the Red Cross Lane access. These works will be secured through the Section 106 Agreement (Refer Appendix 5).

8.33 The applicant has indicated that the development will deliver a pedestrian / cycle link to the NCN Route 11. The approval prior to the commencement of development on site of the detailed design of the pedestrian / cycle link to the NCN Route 11 from the site and will be a condition of approval (Condition 2).

<u>Demolition and Construction Environmental Management Plan</u> (<u>DCEMP</u>)

- 8.34 In order to reduce the impact of construction of the development on the local highway network a construction traffic management plan will be needed. The most significant impact that is likely to occur is the journeys of construction vehicles on the local highway network. Condition 21 is recommended for a Demolition and Construction Environmental Management Plan (DCEMP) which will require details of construction traffic routes. The applicant has confirmed that there will be no construction traffic through the main Addenbrooke's access when travelling to and from the site. The DCEMP should include travel planning of construction works on and off site to prevent them parking in surrounding residential streets.
- 8.35 The County Council has not raised an objection to the updated TA and the package of measures being put forward. The proposed mitigating measures to accommodate the transport growth to sustainable modes to off-set the transport impacts of the scheme are acceptable and the development is therefore considered acceptable in accordance with the policy framework and Cambridge Local Plan Policies 8/2 and 8/3.

Car parking Strategy

8.36 There is a Cambridge University Hospitals NHS Foundation Trust CBC Parking Strategy for the CBC site, which was reviewed in 2015 and is included in the appendices of the TA. This takes account of the changes in parking requirements since the last review in 2014 and as a result of Travel Plan

targets. It identifies how parking needs can be met up to 2025 by use of the residual Phase 1 land (2020 land) for temporary surface car parking and the possible use of MSCP 4, the commercial multi-story car park proposed under the CBC Phase 2 outline application (16/0176/OUT), in order to support the opening of anticipated future developments including ACRC GSK extension, Project Capella, Papworth Hospital, the Forum, Heart and Lung Research Institute and Children's Hospital and the remainder of the permitted CBC Phase 1 clinical development and that proposed under CBC Phase 2 application.

- 8.37 The parking strategy review takes into consideration the reduction in staff parking levels as a result of the Travel Plan impacts on site over the Parking Strategy period. The Travel Plan has been very successful with the current percentage of staff travelling to work by car alone has reduced from 29% to 25% (in 2014) resulting in achieving the single occupancy car use targets of 25% by 2017 set out in the Travel Plan.
- 8.38 The County Council has requested that the car parking provision on site be provided in line with the car driver mode share from the Addenbrooke's Travel Survey and therefore the maximum that can be provided will be 1 space per 80 square metres of GFA. The scheme will deliver 144 car parking spaces, which is in line with this standard.
- 8.39 A total of 9 parking spaces will be designated for use by the mobility impaired and will be located close to the rear entrance. This equates to a greater provision than the Local Plan standards which is 5% of spaces. The proposal accords with local plan policy 8/10.
- 8.40 The parking for the Abcam development will be met in two ways. The first is that parking will be provided within the atgrade car park located to the south west of the development. The second will be provided within a Multi-Storey Car Park (MSCP) which is to be built on the site of the surface car park.
- 8.41 It should be noted that the detailed design of the MSCP will require planning permission and it is not clear at this time whether it will be designed, consented and constructed before the Abcam building is occupied. It is therefore recommended that a condition is attached which clarifies that the maximum

number of car parking spaces for use by Abcam is 144 spaces, and that 9 bays are designed for people with disabilities (Refer Condition 6).

8.42 The County Council have considered the impact that those travelling to the development may park on-street in surrounding residential areas. In order to mitigate this potential impact the applicant will undertake surveys of on-street parking within a 25 minute walking distance of the development to assess the impacts of of ABCAM and CBC Phase 2 employees. In the event that the surveys demonstrate there to be an issue, a consultation funded by the developer will be undertaken of residents in the affected streets to establish whether there is support amongst residents for a managed parking scheme. In the event that additional measures are shown to be required these will be funded by the developer. The survey work and funded can be secured through the Section 106 agreement as set in Appendix 5. It is noted that the nearby new developments of Clay Farm, Glebe Farm and Bell School have interim on-street parking controls and will be subject to traffic regulation orders preventing on-street parking once the roads are adopted by the Highway Authority.

Cycle parking

- 8.43 Cambridge Local Plan cycle parking standards do not define provision for research and development or clinical uses. Cycle parking numbers have been calculated using the same methodology used in CBC Phase1. The condition on the outline states:
- 8.44 Condition 58 (of outline 06/0796/OUT)

 Unless otherwise agreed in writing by the Local Planning Authority, the submission of any reserved matters application for approval of any building shall include a quantum of cycle parking provision that is equivalent to:
 - a) For staff provision, a level which will provide a total number of spaces which cater for at least 10% more than the existing modal share percentage of staff cycling to work as shown by the latest Addenbrooke's Annual Travel Survey. The final level of provision to be calculated shall assume that only 80% of staff will be on-site at any one time.

b) For patients and visitors, a level which will provide a total number of spaces which cater for at least 10% more than the existing modal share percentage of patients and visitors cycling to work as shown by the latest Addenbrooke's Annual Travel Survey. The final level of provision to be calculated shall assume that cycle parking spaces are used 3 times daily.

Reason: To ensure that the proposed level of cycling provision is appropriate to the nature of the proposed building and its use (Cambridge Local Plan 2006 policy 8/6).

8.45 A total of 200 bicycle parking spaces will be provided with the development, including spaces for visitors. On site cycle parking provision is considered adequate to cater for expected demand with visitor parking provision also considered acceptable.

Travel Plan

- 8.46 A Parking Control Strategy will be provided as part of the Travel Plan for the development which will detail how parking will be allocated to staff.
- 8.47 The Highway Authority expects an updated Travel Plan to detail existing home locations and travel patterns of ABCAM staff along with a commitment to undertake pre-occupation Travel Planning with staff in advance of relocating to the CBC campus. This is to ensure that Abcam staff are fully aware of the sustainable transport options available to them in advance of moving to the site and to encourage changes in travel behaviour from the outset.
- 8.48 In order to provide added reassurances that the mode share identified can be achieved the applicant has identified a sustainable transport investment fund which will be drawn upon in the event the single vehicle trip targets are not met. The fund will be used by the developer to promote sustainable transport to the site beyond the Travel Plan initiatives already identified in the event the car driver modes share target has not been achieved.
- 8.49 The Highway Authority has raised concerns over the bus occupancies levels across services which operate on the Addenbrooke's campus and whether sufficient capacity is

available on services in the future to support the mode share target identified. The applicant has committed to undertaking bus capacity surveys in advance of employees occupying the site and liaising with bus operators to ensure adequate capacity is in place. The surveys provide some reassurance to the County Council that any shortfalls in capacity will be highlighted to the operator in advance of staff commencing on site and there is the potential for the sustainable transport investment fund to be put towards such measures if they are shown to cause an issue.

Proposed Mitigation Measures

8.50 To address transport concerns and to ensure that there is a modal shift the various mitigation measures will be sought from the developer which will be secured through S106 agreement (Ref Appendix 5).

Conclusions

8.51 Having reviewed the Transport Assessment and other accompanying information associated with the development the County Council is now in a position to support the proposals. The development proposals will therefore meet the requirements of Local Plan policies 8/2, 8/3, 8/4 & 8/5.

Design, Landscape and the Public Realm

Background

- 8.52 The relevant policies of the Local Plan are 3/2, 3/4, 3/6, 3/7, 3/11, 3/12, 3/13, 4/2. 4/3, 9/3, and 9/5. The policies provide a framework to assess the application in terms of its location on the southern edge of Cambridge and its potential impact on the setting and special character of Cambridge, including the retained Green Belt, the Green Corridor and open countryside.
- 8.53 The proposed new Abcam building will be located to the south of Dame Mary Archer Way with vehicle access provided to the east of the site via a new access road. This road will also provide access to the service area, new surface level car parking and future multi-storey car park (MSCP) along with future phases of CBC Phase 2. The new building will be divided into two buildings linked by a central glass atrium. The

western building is the smaller of the two and is almost square in form. The eastern building is rectangular with the shorter elevation facing the Green Belt land to the south. Both buildings have a regular and rhythmic fenestration producing a strong horizontal as well as vertical regularity.

8.54 Abcam will play an important role in defining the western end of the CBC Phase 2 land and is reflected in the proposed layout, scale, massing of the building and materiality to create a pavilion type laboratory building backed by the office function to the east. The following sections consider the detailed design of the proposed new building.

Elevations and Materials

- 8.55 The elevations to the proposed new building are organised into a well-defined grid on each part of the building. The laboratory section alternates solid to void within the metallic grid whereas the office section is organised on a more conventional grid. The glazed atrium links the two building sections and creates a lightweight centrally placed circulation core.
- 8.56 The cladding of the laboratory building is proposed to be gold in colour with similar accents within the reveals on the office building. The use of the gold colour is considered acceptable in principle; however the colour and finish of materials will need to be a condition of approval. A condition will be attached which requires prior to the commencement of development the erection of a sample panel on the site of sufficient size to allow the colour to be assessed from nearby vantage points (Refer Condition 7).
- 8.57 The brick/masonry panels have the potential to create subtle variation on the elevation due to the way light will fall on individual bricks. It will also reveal a more textural quality closer up to the building. It is understood that a dark brown is being proposed rather than black. This approach should therefore be applied to the submitted proposals. The final colouration and cladding system will be covered by condition should the application be approved.
- 8.58 The frames of the Atrium building need to be lightweight and not the indicated black. The design of the grid created by the

framing is not refined enough to warrant expression and would be better 'lost' as part of the lightweight atrium structure.

Public Realm

- 8.59 The Urban Design Team has commented that that there is the need for a clearer indication of what the character and quality of the internal access route will be. Specifically, it is advised that the design speed should be below 20 mph and that a table or similar feature be provided at the junction with Dame Mary Archer Way which would allow the linear public realm/park to continue at grade and clearly demarcate a change in driver expectation from the conventional highway design of Dame Mary Archer Way. A table across the street would also tie in with the proposed pedestrian/ cycle link which will run just to the south and parallel with Dame Mary Archer Way. This recommended design measure would also address concerns raised by the Walking and Cycling Officer and by the Disability Review Panel.
- 8.60 To address concerns raised it will be conditional that prior to commencement full details of the design of the internal access road into the site from Dame Mary Archer Way is submitted and approved prior to the commencement of development. A table or similar feature will need to be provided at the junction with Dame Mary Archer Way (Refer Condition 3).

Visual impact and landscaping

- 8.61 The site is highly visible from public vantage points from the south and west. The character of the landscape to the south is well-managed farmland with large, open arable fields and scattered deciduous woodland on gently rolling countryside. The area has elevated views from the south which reveals almost the full extent of the city, including its historic core, with the Addenbrooke's site and CBC dominating the foreground. Views of the CBC Phase 2 site from the south include the backdrop of CBC Phase 1 development and Addenbrooke's Hospital. 150m to the south of CBC Phase 2 is a mature hedgerow containing recently planted supplementary planting delivered through the S.106 agreement for CBC Phase 1.
- 8.62 In response to the Green Belt edge the parameter plans for wider CBC Phase 2 will ensure that there will be breaks in the

built form with expanses of open space extending north into the developable area to appear as 'green finger' extending in from the Green Belt. PP5 also establishes that along the southern edge no less than 50% of the length of the southern development line shall be edged by landscape and that the landscape areas should extend to a minimum depth of 40 metres which will ensure that the development will provide sufficient landscape to break up the edge to the Green belt and allow views in through (and out) of the development to the wider CBC site.

- 8.63 The proposed Abcam building will set back from the southern boundary by a depth of just over 40 metres with landscaped areas in the space between which accords with the PP. These spaces will be planted with a mix of grassland, shrubs and mature woodland towards the southern boundary which together with the woodland strip along the entire southern site boundary will help mitigate the visual impact of the Abcam development.
- 8.64 It is noted that the Landscape Team has expressed concerns regarding the inadequate space available along the southern boundary of the site to help mitigate the visual impact of development. However, the submission and approval of a detailed landscaping scheme for the site including a planting schedule will be a condition of approval (Refer Condition 8). While preparing a detailed landscaping scheme for the site it will be possible for the applicant to investigate opportunities for strengthening landscaping along the southern boundary. should however be acknowledged that it will not be possible to screen development completely as the proposed new Abcam building will be over 30 metres in height above ground level and the MSCP possibly taller. It should be noted, however, that the design for the MSCP has not vet been submitted and it is not known whether the footprint of the new MSCP will cover the area reserved in this application for at grade car parking and for the new MSCP. There may therefore be scope to increase the space for planting along the southern boundary.
- 8.65 The landscaped set back from the southern boundary and planting along the boundary will help to mitigate the visual impact of development and ensure that the scheme helps to 'conserve or enhance' the setting of Cambridge (Policy 3/2).

- 8.66 The proposed concept landscape strategy for the development seeks to create a green and attractive frontage to the site along Dame Mary Archer Way together with a series of connected spaces around the new Abcam building comprising; plazas, gardens, links, nature areas, green buffers which carefully integrate the sustainable drainage strategy.
- 8.67 The Council's Landscape Team supports the concept landscape strategy in principle but has requested further detailed design information is provided on the following;
 - the three attenuation 'ponds' to the south and west of the proposed new building
 - the existing attenuation tank
 - the proposed rain gardens & swales
- 8.68 To ensure that the further detailed design information is provided permission will be conditional of the following;
 - i. Submission & approval of full details of both hard & soft landscaping
 - ii. Submission & approval of full details of proposed earthworks
 - iii. Submission & approval of landscaping above attenuation tank including full engineering details of the attenuation tank
 - iv. Hard & soft landscaping to be implemented in accordance with approved plans
 - v. Landscape work maintenance requirements
 - vi. Submission and approval of a Landscape Management Plan

(Refer Condition Nos. 8, 9, 10, 11, 12 & 13).

Designing out crime

8.69 On Tuesday 8 December 2015 the design team met with the Cambridgeshire Police Architectural Liaison Officer to discuss the proposals. The Architectural Liaison Officer (ALO) is of the view that designing out crime has been considered within the design evolution of this scheme and as such the ALO supports the proposals. The

Inclusive Access

- 8.70 Policy 3/7 of the Local Plan requires that developments have considered the needs of those with disabilities to ensure places are easily and safely accessible.
- 8.71 The Abcam Building application was presented to the Cambridge Disability Consultative Panel on Tuesday 26 January 2016 and a number of detailed design matters were raised by the panel (Refer Appendix 4). The Council's Access Officer has also reviewed the plans and raised a number of detail design issues. These issues will, however, be addressed in a Disability Access Statement which will be a condition of planning approval (Refer Condition 18).
- 8.72 Subject to the applicant successfully addressing the detailed design issues raised by both the Panel and the Council's Access Officer in a Disability Access Statement the scheme will satisfy Policy 3/7.

Quality Panel

- 8.73 The Quality Panel was generally supportive of the design approach adopted and made the following comments;
 - To open the café space to everyone to bring the community together.
 - Provide furnished plans and some sections so as to understand the elevation. This needs to be provided to the city council before the planning application is submitted.
 - Extend the rain gardens and swales to the front of the building.
 - Aim for a higher performance building with a fabric approach as part of a higher aspiration in terms of carbon reductions.
 - Put the recycled water back into the system.
- 8.74 The recommendations made by the Panel have been taken on board and where possible they have incorporated into the emerging scheme of development. It has not, however, been possible to meet all the recommendation. For example, the café will be available for staff and guests but not to the wider public access due to the need to provide security.

Conclusion

8.75 The proposals will create a high quality, functional and distinctive buildings that accords with the planning parameters for CBC Phase 2 set out in 16/0176/OUT. Furthermore, the proposals have been well considered in terms of the site and the wider Cambridge context and have the support of both the Cambridgeshire Quality Panel, the Disability Consultative Panel and the Council's Urban Design & Landscape Teams. The scheme is therefore supported in design terms and satisfies Policies 3/4, 3/7 and 3/12 of the Cambridge Local Plan (2006).

Drainage and Utilities

- 8.76 National Planning Policy Framework (NPPF) requires local planning authorities to consider flood risk and use opportunities offered by new development to reduce the causes and impacts of flooding. More efficient use and management of water, such as with the use of more efficient water related appliances within buildings and with incorporation of SUDS, should be sought. Policy 8/18 of the Local Plan clarifies that planning permission will not be granted for development where there is an inadequate water supply, sewerage or land drainage system to meet the demands of development.
- 8.77 The application is supported by a Flood Risk Assessment (FRA) and Surface Water Drainage Strategy. The proposed development area is shown to be within Flood Zone 3 on the Environment Agency flood risk map, however additional modelling carried out as part of the Phase 1 development the surrounding residential developments has shown that the site is within Flood Zone 1 and this has been agreed by the Environment Agency. The FRA considers the nature of residual flood risk at the site and advises that surface water runoff management strategy will ensure that there is no detrimental increase in downstream flood risk arising from the proposed development site for the design storm return periods to which the new drainage networks will be designed. The FRA concludes that matters can be adequately mitigated/minimised through the application of 'best practice' design principles at the detailed design stage.
- 8.78 The proposals include a Sustainable Urban Drainage System (SuDS) as the development would result in additional surface

water runoff. Existing ground conditions and high local water table restrict the potential for infiltration of surface water from the site and therefore surface water will be directed into an existing ditch to the south of the site. Surface water run-off from the site will be stored within a combination of geocelluar attenuation features and above ground flood storage areas located within individual plots. Discharge from these on-plot attenuation features into the receiving system will be via pumped outfall. The attenuation features will be designed to accommodate the surface water run-off from all rainfall events up to and including the 1 in 100 year plus climate change. The surface water run-off will be discharged at the agreed run-off rates to the existing ditch course (the ditch which runs east-west to the south of the site) via a new primary swale and surface water pumping station arrangement.

Surface water drainage

- 8.79 The Environment Agency (EA) initially raised objections to the application, as originally submitted, on the basis that the site is within a flood risk zone (Flood Zone 3). However, in a Flood Risk Assessment (FRA) addendum submitted by the applicant dated the 13th April 2016 the EA is now of the view that the application site is now not within Flood Zone 3 and that the risk of flooding is low, and therefore the scheme is not contrary to the NPPF.
- 8.80 The topography of the site is relatively flat with little ground level difference across it. The existing groundwater level is estimated as being 500mm below existing ground levels in the western section of the site increasing to approximately 1000mm in the east. The ditch along the southern boundary of the which flows from east to west along the southern boundary of the wider CBC Phase 2 (CBC2) site will provide the outfall for the new development drainage networks.
- 8.81 The full sustainable urban drainage design for the site includes rain gardens, an underground attenuation tank and retention ponds. Due to the shallow depth of the primary swale, pumping of the surface water from the Abcam Building is necessary. To safe guard against flooding as a result of pump failure, the attenuation tank and pond have been designed to accommodate 24 hours of emergency surface water storage.

- 8.82 The surface water drainage strategy as detailed in the application submission is considered acceptable in principle. The submission and approval of full details of the surface water drainage scheme is however still required, the submission of which will be a condition of approval (Refer Condition 14).
- 8.83 The drainage strategy will need to be prepared in consultation with Anglian Water to determine appropriate mitigation measures.

Foul drainage

- 8.84 The proposed foul water strategy is via a gravity system which will include a domestic foul system for toilets and showers etc. and a lab foul system serving the lab areas. The lab foul system will pass through a sampling chamber manhole prior to joining the domestic foul system. The foul drainage from the Abcam Building will be discharged into the existing 5 metre deep manhole towards the northern boundary of the site via the connection stub.
- 8.85 Based on the load calculations, the existing foul connection has sufficient capacity for total discharge foul and lab volumes from the site. Spillages and surface water from the bin refuge area will be collected via road gully and discharge into the foul water network to prevent contamination of the surface water system.
- 8.86 The foul drainage from this development is within the catchment of Cambridge Water recycling Centre which has available capacity for these flows and the proposed development may lead to an unacceptable risk of flooding downstream. To address this concerns a drainage strategy will need to be prepared and submitted, in consultation with Anglian Water, to determine appropriate mitigation measures (Refer Condition 22).

Conclusion

8.87 The proposed concept surface water and foul drainage strategies are considered acceptable and satisfies Policy 8/18 of the Local Plan. However, prior to development commencing on site the applicant will be required to submit for approval detailed surface water and foul drainage strategies (Refer Conditions 14 & 22).

Ecology

- 8.88 Policy 4/3 of the Local Plan states that development proposals should seek to enhance features of the landscape, which are of importance for amenity or nature conservation and that development resulting in adverse effects or loss of those features will not be permitted. Policy 4/6 seeks to safeguard sites of local conservation importance from adverse impacts, including Local Nature Reserves (LNR's). The policies allow for mitigation measures to minimise adverse effects, reinstatement or equivalent replacement of the feature affected and proposals for long-term management.
- 8.89 An Ecology Statement prepared by Ecosulis dated January 20126 was submitted together with the application. The ecology strategy has been designed in accordance with the CBC site wide NCMP to ensure that it connects with wider management and mitigation measures. The Ecology Statement concludes that an ecological management plan would be required for the long-term management of the site and be based on the following practical measures;
 - New Planting
 - Creation of a grassland
 - Protection of new planting and remedial works. Protective fencing will be erected around all new planting areas
 - To ensure the protection of any badgers on site any deep trenches dug during construction will be either covered or provide a means of escape for badger
 - Each new building will support a minimum of four integral nesting bird features, including boxes and designed-in cavities.
 - Quarterly checks of protective measures around retained
 - Annual monitoring of species populations (or the habitats that support them)
- 8.90 The application has been developed to retain but also enhance opportunities for wildlife on the site, therefore providing a net gain in accordance with the National Planning Policy Framework (NPPF).
- 8.91 The Nature Conservation Officer considers the approach to be acceptable subject to a condition being attached to any

- approval which requires the submission and approval of nature conservation enhancements (Refer Condition 19).
- 8.92 From a nature conservation perspective the proposals are considered acceptable and in line with the aims of Policy 4/7 of the Local Plan.

Employment

- 8.93 The Local Plan through Policies 7/2 and 7/4 promotes employment development proposals which fosters innovation and helps reinforce the existing high technology and research clusters of Cambridge, particularly in healthcare biomedical and biotechnology research and development related activities..
- 8.94 The proposed development will employee approximately 533 staff when fully occupied, up from the 436 staff currently employed at their site at the Cambridge Science Park. This anticipated 20% growth in staff numbers by 2018 represents a significant boost to the local economy and will contribute towards the continuing success of the City as a centre for biomedical and biotechnology research and development activities.
- 8.95 The proposals therefore satisfy the policy aims of 7/2 and 7/4 of the Local Plan.

Amenity

8.96 The relevant policies of the Local Plan are 4/13 and 4/14. Policy 4/13 seeks to only allow development that does not lead to significant adverse effects on health, the environment and amenity and allows for the use of appropriate mitigation through remediation, secured through conditions on planning permissions.

Construction pollution

8.97 Pollution from the construction phases has the potential to affect the amenity of surrounding properties if not controlled. In the interests of amenity, In accordance with recommendations from Environmental Health (EH) Officers standard construction/delivery noise/hours and dust conditions will be attached to any approvals (Refer Condition 21).

Plant noise

- 8.98 Sound levels from plant and equipment associated with the application requires assessment to ensure local amenity is protected. It is required that 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.
- 8.99 A Technical Note titled "Baseline Survey and Operational Noise Limits" by AECOM dated 11/11/2015 ref. 60323976M001.004 has been submitted in support of the application (dated January 2016). This was also submitted in support of the CBC Phase 2 application and is considered by EH officers to be satisfactory in terms of the principals and conclusions drawn.
- 8.100It is noted that there will be a significant number of operational plant noise sources. These include air handling units, air conditioners, mechanical ventilation for kitchen and laboratories located mainly at roof level 3 and 4 (a combination of internal and external plant rooms / plant and areas), potential emergency backup generator and a nitrogen oxide tank at ground level amongst other plant on site. Experience on other sites has identified that deliveries to nitrogen oxide tanks have the potential to give rise to significant noise levels. Any noise report must consider all potential noise sources on site and propose adequate mitigation measures where required.
- 8.101In accordance with recommendations from Environmental Health Officers standard plant noise insulation and emergency/backup generator conditions (Refer Conditions Nos. 36 & 29) together with associated informative will be attached to any approvals.

Substation

8.102A new substation is proposed within the site. Electrical substations can produce very low frequency tonal humming which has the potential to cause noise disturbance to neighbouring properties.

- 8.103It is recommended that the noise from the substation 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. This is to guard against any creeping background noise in the area and prevent potential noise disturbance to residential premises.
- 8.104A bespoke noise insulation condition as recommended above should be attached to any permission granted (Refer Condition 36). Any assessment should include noise frequency spectra, predicted noise levels at the site boundary, regard of noise sensitive premises and attenuation details of any building or enclosure. Careful consideration of the low frequency element of the substation noise is strongly recommended.
- 8.105In accordance with recommendations from Environmental Health Officers the applicant will be required to carry out post installation testing of the components in order to satisfy the local planning authority that the emissions fall within required standards (Refer Condition 37).

Contaminated Land

- 8.106A review of historic records identified that the CBC Phase 2 site has generally been undeveloped with the exception of a pumping station in the corner of the Abcam site and a helicopter pad located towards the east of the site. Based on the above information a Summary of Geo-Environmental Risks report has been prepared and recommendations for further intrusive investigation proposed. The key objectives of the further investigation are considered by EH officers to be acceptable in principle. In accordance with recommendations from EH Officers as hydrocarbons have been identified locally it is recommended that groundwater as well as soil analysis is undertaken (Refer Conditions 23, 24 & 25).
- 8.07 The report is silent on the findings of other site investigations in close proximity to the site where elevated levels of ground gas, primarily attributed to the geology of the area, have been identified. Furthermore, when the monitoring of ground gas is undertaken particular care and attention is required in the design, location and installation of the monitoring wells due to the flooding potential already identified for the site.

- 8.108In accordance with recommendations from EH Officers a materials management plan will be required (Refer Condition 27). In addition, no material unsuitable for its proposed use shall be imported or reused or recycled.
- 8.109It is also recommended that a Phase II site investigation is undertaken prior to any archaeological excavations to identify any contamination on site and that contaminated land conditions and informatives are attached to any approval (Refer Condition 23).

Lighting

- 8.110The relevant policy of the Local Plan is 4/15. The policy seeks to ensure that lighting measures provide for public safety and crime prevention whilst also minimising light spillage to avoid impacts on residential amenity, wildlife, the landscape and setting of the City. The most sensitive receptors to light pollution will be from the Green Corridor and residential properties to the east and west and from the Gog Magog Hills and public viewpoints from the south.
- 8.111A Building Lighting Document CBC Phase 2 External Lighting Assessment by Hoare Lea dated January 2016 (Ref. 60323976/DS/00) has been submitted with the application. It is a strategy document not a detailed design solution and states that the lighting scheme aim is to meet Environmental Zone category E3 suburban and to comply with the relevant British Standards and ILP guidance.
- 8.112However, EH Officers do not agree with this classification. The Astra Zeneca site, which is in a similar location, was considered to fall within the Environmental Zone E2 Rural (Village or relatively dark outer suburban locations) in the External Lighting Report submitted with the planning application and this this is considered a more appropriate classification for this location at the edge of the green belt.
- 8.113Within Environmental Zone E2 —Rural lighting on new developments should be designed and orientated so as to avoid unacceptable levels of light pollution. Lighting should therefore be designed to minimise the impacts of artificial light using the ILP Guidance notes for the reduction of obtrusive light GN01:2011. Subject to the appropriate control over lighting

impacts associated with the development of the site through the imposition of condition 38, the proposed development accords with Local Plan policy 4/15.

Air Quality

- 8.114The relevant policies of the Local Plan are 4/13 and 4/14. Policy 4/14 seeks to protect air quality within Air Quality Management Areas (AQMA). The supporting text to 4/14 allows the local planning authority to assess proposals that are not within or adjacent to an AQMA if they could generate significant pollution which may have a detrimental effect on it. The emerging local plan Policy 36 requires that proposals demonstrate that they would not lead to significant adverse effects on health, the environment or amenity from polluting or malodorous emissions, or dust or smoke emissions to air; or where a development is a sensitive end-use that there will not be any significant adverse effects on health, the environment or amenity arising from existing poor air quality, sources of odour or other emissions to air.
- 8.115The development site is not within an Air Quality Management Area but there is an AQMA to the north of the site.
- 8.116Insufficient information about the air quality impact of the proposed development has been provided by the applicant. The applicant has stated that the "air quality impact of the Abcam development has been assessed as part of the air quality assessment carried out for the CBC Phase 2 masterplan". However, this is a standalone application and a decision must be made on the information provided and not upon the information submitted in support of another planning application.
- 8.117EH Officers are therefore of the view that an Air Quality Assessment (AQA) will need to be provided; which should consider the increase in traffic flows on the local road network and emissions from all boilers serving the proposed building, including temporary back-up generators as these can be particularly polluting with past evidence suggesting that they can have a measureable impact on hourly and annual mean levels of air pollution. The AQA can be provided through a precommencement condition (Refer Condition 43).

- 8.118No air quality mitigation, other than the Travel Plan is proposed. Mitigation could include; a further increase in the number of cycling space provision, provision of electric vehicle charge points, contributions to improvements in the bus services, or any other measures that the developer might wish to propose.
- 8.119A condition will be imposed to secure the provision of EV charging points (Refer Condition 41). Further, it is suggested that infrastructure for the future installation of additional charge points should be established at the point of construction so that future retrofit will have a lower cost and thus lower barrier to implementation.
- 8.120No information about the energy requirements or how they will be fulfilled has been provided in support of this application. The air quality impact of any boilers has therefore not been assessed. This information must be supplied as part of the bespoke air quality pre-commencement condition so that appropriate building design and mitigation can be secured (Refer Condition 42).
- 8.121 Environmental Health officers recommended that a condition be attached to any approval which requires that the stack heights of flues serving the combustion appliances of the development should be at the maximum height permitted by the Parameter Plans. This is to help disperse air pollutants such as nitrogen dioxide and particulate and protect local air quality. It is, however, not possible to impose such a condition as the design of the stack would require careful consideration in terms of; design, visual impact, etc.

Conclusions

8.122In terms of construction pollution, plant noise (including the proposed sub-station), contaminated land, artificial lighting, EH officers are content that with the proposed conditions appropriate safeguards are in place to protect the amenities of nearby properties. There are concerns however about the lack of information provided about the air quality impact of the proposed development. To address these concerns a precommencement condition will require the submission of an Air Quality Assessment which establish air quality mitigation measures. With these safeguards in place the proposals are

therefore considered to be compliant with the aims of Local Plan Policy 4/13.

Sustainability

- 8.123Policy 3/1 permits development if it meets the principles of sustainability. Policy 8/16 of the Local Plan states that major developments are required to provide at least 10% of predicted energy requirements on-site, from renewable energy sources. The policy triggers a process for developers of examining a series of renewable energy options that can be practically and efficiently used in the development. The more efficient the development, the less amount of energy is required to meet the 10% requirement. The SPD requires the submission of an Energy Statement that addresses these issues.
- 8.124The proposals integrate a number of proposals related to sustainable design and construction including:
 - Targeting of a BREEAM 'very good' rating, although it has been agreed that the scheme will target more ambitious standards for energy and water use than the mandatory requirements of BREEAM 'very good';
 - Specific treatment of the façade to minimise excessive solar gain and reduce the need for cooling. This strategy has involved a series of Brise Soleil configurations that have been designed to respond to the each specific elevation as different shading treatments are required dependent on elevation. As such the following configurations are proposed:
 - West/east elevations mid depth side and top Brise Soleil
 South elevation deep depth top Brise Soleil
 Lab block all elevations vertical with horizontal Brise Soleil as required.
 - Prioritisation of natural ventilation in the office block, although it is noted that due to the nature of the work undertaken in the laboratory block, mechanical ventilation will be required to maintain a controlled clinical environment;
 - The use of water efficiency measures to secure a proposed 25% reduction in water consumption, which relates to 2 BREEAM credits. As this forms part of the justification for moving away from the current adopted policy requirement related to renewable energy (see Energy Strategy below), it

- is recommended that this be secured through a planning condition, and appropriate wording is suggested above;
- The use of sustainable drainage systems including 3 attenuation ponds, swales and rain gardens, although I will leave detailed comments to the council's sustainable drainage engineer.
- 8.125These measures are supported by the Council's Sustainability Officer who has not raised any concerns but has requested that approval is conditioned with the following
 - BREEAM Design Stage Certification The building shall be constructed to meet the approved overall BREEAM 'very good' rating (Condition 15)
 - BREEAM Post Construction Certification A certificate shall be issued by a BREEAM assessor indicating that the approved BREEAM rating has been met (Condition 16).

Conclusion

8.126The approach being taken to sustainable design and construction and reducing carbon emissions is supported and satisfies policy 3/1 of the Local Plan.

Waste Strategy

- 8.127The relevant policies of the Local Plan are 3/12 and 4/13. The policies seek to ensure the incorporation of facilities for waste recycling, the use of sustainable construction processes and materials and the minimisation of pollution arising out of waste management
- 8.128A Site Waste Management Plan (SWMP) has been submitted with the application. This document builds upon the overarching waste framework strategy submitted with the outline planning application for Cambridge Biomedical Campus Phase (CBC) Phase 2.
- 8.129In line with regulations and for the purposes of health and safety and hygiene best practice, wastes will be handled separately from others. The segregated waste streams at Abcam fall into technical and non-technical categories including:

- Clinical waste;
- Chemical waste:
- Gas cylinder waste; and
- Commercial Research & Development (R&D) wastes.
- 8.130Clinical waste is likely to require autoclaving prior to being taken of site by a waste contractor. The decision of whether the waste requires autoclaving will be made by Abcam using appropriate information, regulation and guidelines. Chemical wastes will be stored based on hazardous classification and chemical compatibility. The waste chemicals will be held in this store for collection by a specialist waste contractor or the supplier of the chemicals themselves. Non-hazardous chemical waste and appropriately treated chemical waste can be disposed of as drain effluent in compliance with the site's trade effluent licence.
- 8.131The waste management strategy presented is acceptable and provides an acceptable strategy for handling of different waste streams which will be generated within the development and satisfies Policy 4/13 of the Local Plan. The County Waste Officer has requested that conditions are attached to any approval requiring the submission of a Demolition and Construction Environment Management Plan (DCEMP) and Detailed Waste Management and Minimisation Plan (DWMMP); Conditions nos. 21 & 20 respectively.

Public Art

- 8.132A Public Art Strategy has been submitted with the outline application for Phase 2 CBC (16/0176/OUT). As with CBC Phase 1, the Phase 2 public art strategy proposes to showcase contemporary arts and culture of the same intellectual and international standard as the scientific research, education and healthcare offers on the Campus. The CBC Public Art Steering group established in 2011 through the Phase 1 Public Art Strategy will have responsibility for overseeing the implementation of the Public Art Strategy.
- 8.133The Public Art Strategy for CBC Phase 2 proposes a 2-strand cultural commission programme to embed contemporary arts

practice into schemes conceptual development and physical infrastructure:

- Art & public realm Quads, Plazas & Promenade
- Art & Architecture the Multi Storey Car Park (MSCP west)
- 8.134The application submission has not made any reference to Public Art, although it is acknowledged that as part of the outline planning submission for Phase 2 a Public Art Strategy has been provided. To ensure that the scheme satisfies the Local Plan policy requirements (3/7) for the delivery of public art a planning agreement will require the submission and approval of a Public Art Strategy.

Archaeology

- 8.135The relevant policy of the Local Plan is 4/9. The policies seek to ensure that potential archaeological remains on sites put forward for development are fully examined, appropriately preserved, recorded and archived.
- 8.136The site is located in a landscape of high archaeological potential. Archaeological investigations undertaken in advance of development to the immediate north have revealed extensive evidence for Bronze Age and Roman settlement and agriculture. The proposed development site has been subject to an archaeological evaluation, the results of which demonstrate that elements of the Roman landscape extend into the site (HER ECB4404). Significant archaeological remains survive in the area which would be severely damaged or destroyed by the proposed development.
- 8.137There are no objections to the proposed development, but it is recommended that the site be subject to a programme of archaeological investigation and that this work should be commissioned and undertaken at the expense of the developer. This programme of work will be secured through the inclusion of condition 17.
- 8.142Subject the applicant undertaking an approved programme of archaeological investigation the proposals satisfies Policy 4/9 of the Local Plan.

Third party comments

Issue	Response / Paragraph where addressed
over development of the site	8.2 – 8.16
poor for cyclist safety	The proposals will deliver significant improvement to the walking a cycling network
area cannot cope with additional traffic	There are no objections raised by the Highway Authority and appropriate mitigation measures are in place which will ensure that the area can cop[e with additional traffic
'serious negative impact' on the natural spring and the Local Nature Reserve (LNR)	The proposals will not impact on the nearby spring and LNR

Planning Obligations

- 8.143The Community Infrastructure Levy Regulations 2010 have introduced the requirement for all local authorities to make an assessment of any planning obligation in relation to three tests. If the planning obligation does not pass the tests then it is unlawful. The tests are that the planning obligation must be:
 - (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.
- 8.144In 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.
- 8.145The development will bring about a number of impacts as set out in the report that needs to be mitigated against. These are considered necessary and directly related to the development.

- 8.146The planning obligations listed under paragraph 8.148 are required to mitigate the impacts of developments across CBC Phase 2, including the Abcam development. Preliminary discussions have taken place with the applicant and the mitigation measures for the whole of CBC Phase 2 have been agreed. The precise amount apportioned to this scheme and triggers have, however, yet to be agreed by all the parties involved. The triggers in this \$106 in relation to this scheme will need to ensure that the relevant mitigation measures are bought forward in a timely fashion to mitigate in turn this development and other developments within CBC Phase 2. In bringing forward the recommendation in relation to the Planning Obligation for this development officers have considered the above requirements.
- 8.147A full schedule of the Section 106 requirements is attached in Appendix 5.

Transport

- 8.148 Financial contributions are secured towards the following:
 - A Sustainable Transport Investment Fund, if the agreed Travel Plan car driver mode share target has not been achieved
 - To cover cost of RTPI at a bus stop on Dame Mary Archer Way in the event that bus services are routed along it.
 - A fund for recalibrating the Trumpington Road/ Long Road junction traffic signals M11 junction improvements
 - A fund monitoring of parking activity on a weekday within an agreed zone around the development site, prior to opening and every year thereafter Cambridge Guided Bus revenue
 - The cost of extending parking controls in the local area and the associated public consultation
 - Hills Rd City Deal Cycle Scheme
 - Western Orbital Bus Route Scheme
 - Queen Edith's Way/ Fendon Rd Cycle scheme
 - NCN 11 improvement scheme
 - Red Cross Lane access to campus
 - Park & Ride Expansion

Other S106 requirements

 Carry out improvement works to the crossing facilities for pedestrians and cyclists at the Addenbrooke's Road / Francis Crick Avenue / Dame Mary Archer Way three-arm roundabout

- Deliver an updated Travel Plan
- Carry out improvements to the A1301 Shelford Road /Addenbrooke's Road junction.
- Provide land within applicant control necessary to delivery connection at north east corner of site from local cycle route into Bell School site.
- Upgrade with signalised facilities the pedestrian and cyclist crossing facilities at the Dame Mary Archer Way / Papworth Access signalised 'T' junction.
- Provide a shelter at a bus stop on, on Dame Mary Archer Way in the event that bus services are routed along it.

Public Art

A S106 relating to the Public Art strategy will require;

• The submission and approval of a Public Art Delivery Plan

Other Issues

There are no other concerns raised by the proposals.

9.0 CONCLUSION

- 9.1 The proposal has been developed in line with approved parameter plans and site wide strategies, and has evolved further through detailed discussions with technical officers at the local authority. Through assessment of the application it is considered that the proposal complies with the approved development plan.
- 9.2 The points made in the representations received have been carefully considered, none of the points raised offer sufficient reasoning or justification to part with the development plan in this instance.

10.0 RECOMMENDATION

APPROVE subject to completion of a S106 Agreement by 26th October 2016 and the imposition of 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. No occupation of a building shall take place until a programme of works for the land west of the proposed car park and north of the existing drainage ditch shown partially edged in blue on plan PL-A(1)101 have been submitted to and approved in writing by the Local Planning Authority. The programme of works shall include any temporary or permanent provision and phasing of the following:
 - a) a cycle connection to the National Cycle Network route number 11 to the west to be implemented prior to occupation of any building;
 - b) drainage features in accordance with the approved Surface Water Drainage Strategy;
 - c) landscaping works.

The development shall be carried out in accordance with the approved details and phasing.

Reason: To ensure that the transport improvements are delivered to mitigate the impact of development and accords with the requirements of Policies 8/2, 8/3 and 8/4 of the Cambridge Local Plan 2006

3. Notwithstanding the submitted plans 60323976-SHT-10-C-0001(PO2), 0100(PO1), 0510(PO2), 1300(PO2), 4000(PO1), 4001(PO1) and 4002(PO1), prior to commencement of any development the detailed design of the access road into the site should be submitted and approved by the Local Planning Authority. The detailed design should indicate a feature at the junction with Dame Mary Archer Way which will allow the linear public realm/park and proposed pedestrian/ cycle link to continue at grade. The internal access road shall be constructed in accordance with the approved plans.

Reason: To ensure that the development provides an attractive high quality environments and that transport improvements are delivered in accordance with the requirements of Policies 3/6, 3/7 and 8/1 of the Cambridge Local Plan 2006.

4. Prior to commencement of any development the detailed design of the cycle and pedestrian facilities along the northern site boundary alongside Dame Archer Way should be submitted and approved by the Local Planning Authority, and the approved plans shall be implemented in accordance with the approved plans.

Reason: To ensure that the transport improvements are delivered as required by policies 8/4 and 8/5 of the Cambridge Local Plan 2006

5. The internal access road which will be delivered as part of this application shall provide vehicular access to the remainder of the CBC Phase 2.

Reason: To ensure that the development is coordinated with the wider CBC Phase 2 development as required by policy 3/6 of the Cambridge Local Plan 2006.

6. The maximum number of car parking spaces for use by the Abcam development will be 144 spaces of which 9 car parking spaces will be designed for people with disabilities.

Reason: To mitigate the impact of development and accords with the requirements of Policies 8/2 and 8/3 of the Cambridge Local Plan 2006

7. No development of a building/s shall take place until a sample panel of the materials to be used in the construction of the external surfaces has been prepared on site for inspection and approved in writing by the Local Planning Authority. The sample panel shall be at least 1m x 1m and show the proposed material, bond, pointing technique and palette of materials (including roofing, cladding and render) to be used in the development. The development shall be constructed in accordance with the approved sample, which shall not be removed from site until the completion of the development.

Reason: To ensure that the appearance of the external surfaces on the development is appropriate and accords with the requirements of policies 3/4, 3/7, 3/12 and 3/14 of the Cambridge Local Plan 2006.

8. No development shall take place until full details of both hard and soft landscape works have been submitted to and approved in writing by the local planning authority and these works shall be carried out as approved. All details shall be fully dimensioned and fully co-ordinated with the Engineer's They shall include proposed finished levels or information. contours; means of enclosure; car park layouts, other vehicle and pedestrian access and circulation areas; hard surfacing materials; minor artefacts and structures (e.g. furniture, cycle parking, refuse or other storage units, signs, lighting); accurate proposed and existing functional services above and below ground (e.g. drainage including rain gardens and swales, power, communications cables, pipelines indicating lines, manholes, supports. Soft Landscape works shall include planting plans; written specifications (including cultivation and operations associated with plant other and establishment); schedules of plants, noting species, plant sizes and proposed numbers/densities 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 and accords with the requirements of policies 3/4, 3/11 and 3/12 of the Cambridge Local Plan 2006.

9. No development shall take place until details of earthworks have been submitted to and approved in writing by the local planning authority. These details shall include the proposed grading and mounding of land areas including the levels and contours to be formed, showing the relationship of proposed mounding to existing vegetation and surrounding landform. Development shall be carried out in accordance with the approved details.

Reason: To ensure that the details of the earthworks are acceptable and accords with the requirements of policies 3/4, 3/11 and 3/12 of the Cambridge Local Plan 2006.

10. All hard and soft landscape works shall be carried out in accordance with the approved details, and to a reasonable standard in accordance with the relevant recommendation of the appropriate British Standard or other recognised code of good practice. The works shall be carried out prior to the occupation of any part of the development or in accordance with the programme agreed by the local planning authority in writing. The maintenance shall be carried out in accordance with the approved schedule. Any trees or plants that, within a period of five years after planting, are removed, die or become in the opinion of the local planning authority, seriously damaged or defective, shall be replaced as soon as is reasonably practicable with others of species, size and number as originally approved, unless the local planning authority gives its written consent to any variation.

Reason: To ensure provision, establishment and maintenance of a reasonable standard of landscaping in accordance with the approved design and accords with the requirements of policies 3/4, 3/11 and 3/12 of the Cambridge Local Plan 2006

11. No development shall take place until full engineering details of the attenuation tank including invert and top of tank level, requirements (depth) for stone fill around the tank, finished ground level, depth of soil(s) above the tank and specification for the soil around the tank has been submitted to and approved in writing by the local planning authority and these works shall be carried out as approved.

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

12. Prior to the occupation of development a schedule of landscape maintenance for a minimum period of five years should be submitted to and approved in writing by the local planning authority. The schedule shall include details of the arrangements for its implementation.

Reason: To ensure that the landscaped areas are maintained in a healthy condition in the interests of visual amenity and accords with the requirements of policies 3/4, 3/11 and 3/12 of the Cambridge Local Plan 2006 13. A landscape management plan, including long term design objectives, management responsibilities and maintenance schedules for all landscape areas, shall be submitted to and approved by the local planning authority in writing prior to occupation of the development or any phase of the development whichever is the sooner, for its permitted use. The landscape plan shall be carried out as approved.

Reason: To ensure that the landscaped areas are maintained in a healthy condition in the interests of visual amenity and accords with the requirements of policies 3/4, 3/11 and 3/12 of the Cambridge Local Plan 2006

- 14. Prior to commencement of development full details of the surface water drainage scheme, including any strategic elements required to serve this development, shall be submitted to and approved in writing by the local planning authority. The details should include:
 - i. Comprehensive levels, including invert and cover levels of all drainage features.
 - ii. Construction details of the ponds, swales, rain-gardens, permeable surfaces and pump stations.

Reason: To prevent environmental and amenity problems arising from flooding and to comply with National Planning Policy Framework (NPPF) and Policy 8/18 of the Cambridge Local Plan 2006.

15. The building shall be constructed to meet the approved overall BREEAM 'very good' rating as a minimum, with at least 4 credits for ENE01 (reduction of energy use and carbon emissions) and 2 credits for WAT01 (water consumption). Prior to commencement of development above slab level, a BRE issued Design Stage Certificate demonstrating that the development has achieved a BREEAM rating of 'very good' with a minimum of 4 credits for ENE01 and 2 credits for WAT01 shall be submitted to, and approved in writing by, the Local Planning Authority. Where the interim certificate shows a shortfall in credits for ENE01 and WAT01, a statement shall be submitted identifying how the shortfall will be addressed.

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

16. Within 6 months of occupation, a certificate following a post-construction review shall be issued by an approved BREEAM Assessor to the Local Planning Authority, indicating that the approved 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 and accords with the requirements of policy 8/16 of the Cambridge Local Plan 2006 and Supplementary Planning Document 'Sustainable Design & Construction' 2007

17. No development shall take place within the site until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the local planning authority.

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

18. Before the development hereby permitted is commenced a Disability Access Statement indicating the provision to be made for disabled people to gain access to new building shall have been submitted to and approved by the local planning authority. The agreed scheme shall be implemented before the development hereby permitted is brought into use.

Reason: The Disability Access Statement is required to assist the Local Planning Authority with the assessment of the issues relating to disabled people and to satisfy Policy 3/7 of the Local Plan

- 19. Prior to commencement of development full details of the nature conservation enhancements shall be submitted to and approved in writing by the local planning authority. The details should include:
 - i. Construction details and planting plans for the ponds, swales, rain-gardens and ground preparation, species and provenance for the wildflower meadows.
 - ii. A plan showing the number, specification and location of proposed bird boxes within the scheme.

Reason: To ensure that the development of the site conserves and enhances ecology and meets the requirements of policies 4/3, 4/6 and 4/8 of the Cambridge Local Plan 2006

- 20. Prior to the commencement of development an updated Detailed Waste Management and Minimisation Plan (DWMMP) shall be submitted to and approved in writing by the local planning authority. The DWMMP shall include details of:
 - a) Construction waste infrastructure including a construction material recycling facility to be in place during all phases of construction
 - b) anticipated nature and volumes of waste and measures to ensure the maximisation of the reuse of waste.
 - c) measures and protocols to ensure effective segregation of waste at source including waste sorting, storage, recovery and recycling facilities to ensure the maximisation of waste materials both for use within and outside the site.
 - d) any other steps to ensure the minimisation of waste during construction
 - e) the location and timing of provision of facilities pursuant to criteria a/b/c/d.
 - f) proposed monitoring and timing of submission of monitoring reports.
 - g) the proposed timing of submission of a Waste Management Closure Report to demonstrate the effective implementation, management and monitoring of construction waste during the construction lifetime of the development.

h) proposals for the management of municipal waste generated during the occupation phase of the development, to include the design and provision of permanent facilities e.g. internal and external segregation and storage of recyclables, non-recyclables and compostable material; access to storage and collection points by users and waste collection vehicles. The Detailed Waste Management and Minimisation Plan shall be implemented in accordance with the agreed details, unless otherwise agreed in writing by the Local Planning Authority.

Reason: In the interests of maximising waste re-use and recycling opportunities; and to comply with policy CS28 of the Cambridgeshire and Peterborough Minerals and Waste Core Strategy (2011); and to comply with the National Planning Policy for Waste October 2014; and Guidance for Local Planning Authorities on Implementing Planning Requirements of the European Union Waste Framework Directive (2008/98/EC), Department for Communities and Local Government, December 2012.

- 21. Prior to the commencement of development, a site wide Demolition and Construction Environmental Management Plan (DCEMP) shall be submitted to and approved in writing by the local planning authority. The DCEMP shall include the consideration of the following aspects of demolition and construction:
 - a) Demolition, construction and phasing programme.
 - b) Contractors' access and parking arrangements for vehicles, plant and personnel including the location of construction traffic routes to, from and within the site, details of their signing, monitoring and enforcement measures.
 - c) Construction/Demolition hours which shall be carried out between 0800 hours to 1800 hours Monday to Friday, and 0800 hours to 1300 hours on Saturday and at no time on Sundays, Bank or Public Holidays, unless in accordance with agreed emergency procedures for deviation. Prior notice and agreement procedures for works outside agreed limits and hours.
 - d) Delivery times for construction/demolition purposes shall be carried out between 0800 to 1800 hours Monday to Friday, 0800 to 1300 hours on Saturdays and at no time on Sundays, bank or public holidays, unless otherwise agreed in writing by the local planning authority in advance.
 - e) Soil Management Strategy.

- f) Noise method, monitoring and recording statements in accordance with the provisions of BS 5228-1: 2009.
- g) Maximum noise mitigation levels for construction equipment, plant and vehicles.
- h) Vibration method, monitoring and recording statements in accordance with the provisions of BS 5228-2: 2009.
- Maximum vibration levels.
- j) Dust management and wheel washing measures in accordance with the provisions of Control of dust and emissions during construction and demolition supplementary planning guidance 2014
- k) Prohibition of the burning of waste on site during demolition/construction.
- I) Site lighting.
- m) Drainage control measures including the use of settling tanks, oil interceptors and bunds.
- n) Screening and hoarding details.
- o) Access and protection arrangements around the site for pedestrians, cyclists and other road users.
- p) Procedures for interference with public highways, including permanent and temporary realignment, diversions and road closures.
- q) External safety and information signing and notices.
- r) Consideration of sensitive receptors.
- s) Prior notice and agreement procedures for works outside agreed limits.
- t) Complaints procedures, including complaints response procedures.
- u) Membership of the Considerate Contractors Scheme.

Reason: To protect the amenity of the adjoining properties and accords with the requirements policy 4/13 & 4/14 of the Cambridge Local Plan 2006

22. No development shall commence until a foul water strategy has been submitted to and approved in writing by the Local Planning Authority. The building shall not be occupied until the works have been carried out in accordance with the foul water strategy as approved unless otherwise approved in writing by the Local Planning Authority. Reason: To protect the amenity of the adjoining properties and accords with the requirements of the National Planning Policy Framework (NPPF) and policy 8/18 of the Cambridge Local Plan 2006

- 23. Prior to the commencement of the development 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 and accords with the requirements of Policy 4/13 of the Cambridge Local Plan 2006.

- 24. Prior to the commencement of the development with the exception of works agreed under condition 23 and in accordance with the approved investigation strategy agreed under clause (b) of condition 23, 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 and accords with the requirements of Policy 4/13 of the Cambridge Local Plan.

25. Prior to the first occupation of the development the remediation strategy approved under clause (b) to condition 24 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 and accords with the requirements of Policy 4/13 of the Cambridge Local Plan.

- 26. Prior to the first occupation of the development 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 24 and implemented under condition 25 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 and accords with the requirements of Policy 4/13 of the Cambridge Local Plan.

- 27. Prior to importation or reuse of material for the development 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 and accords with the requirements of Policy 4/13 of the Cambridge Local Plan.

28. 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 24 above. The approved remediation shall then be fully implemented under condition 25

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

- 29. Before the development/use hereby permitted is occupied, a scheme for the insulation of the emergency generator in order to minimise the level of noise emanating from the said generator shall be submitted to and approved in writing by the local planning authority. The scheme as approved shall be fully implemented before the use hereby permitted is commenced and shall thereafter be retained as such. The scheme shall include the following:
 - (i) Generator Use

The generator shall only be used in the event of mains power failure or in accordance with (ii) below. It shall not be used as an alternative supply in the event of disconnection from the mains supply following for example non-payment.

(ii) Generator - Hours of Running for Maintenance

Running of the generator as part of routine maintenance and repair shall only take place for the length of time specified by the manufacturer between the hours of 8am - 6pm Monday to Friday, 9am -1pm Saturday and no time Sunday or Public Holidays.

Reason: To protect the amenity of nearby properties and accords with the requirements of policies 4/13 & 4/14 of the Cambridge Local Plan 2006.

- 30. Prior to the first occupation of the development hereby permitted, details of the (furnace/ fixed boiler/industrial plant) to be installed shall be submitted to, and approved in writing by the Local Planning Authority. Any gas-fired CHP must meet an emissions standard of:
 - Spark ignition engine: less than 150 mgNOx/Nm3
 - Compression ignition engine: less than 40 mgNOx/Nm3
 - Gas turbine: less than 50 mgNOx/Nm3

Reason: To protect human health and accords with the requirements of policies 4/13 & 4/14 of the Cambridge Local Plan 2006.

31. The [furnace/fixed boiler/industrial plant] approved under condition number 30 shall be installed in accordance with the approved details before the first occupation of the development and shall thereafter be retained as such.

Reason: To protect human health and accords with the requirements of policies 4/13 & 4/14 of the Cambridge Local Plan 2006.

32. Prior to the commencement of development full details of a mitigation scheme to address the impacts on air quality arising from the development shall be submitted to, and approved in writing by the Local Planning Authority.

Reason: To protect human health and accords with the requirements of policies 4/13 & 4/14 of the Cambridge Local Plan 2006.

33. The Air Quality mitigation scheme approved under condition number 30 shall be implemented in accordance with the approved details before the first occupation of the development and shall thereafter be retained as such.

Reason: To protect human health and accords with the requirements of policies 4/13 & 4/14 of the Cambridge Local Plan 2006.

34. Should the contaminated land assessment and associated remedial strategy identify the presences of material with the potential to generate an identifiable ground gas risk for a building, prior to the commencement of development of that building, a specification for gas protection to be incorporated into the building design to prevent build-up of potentially asphyxiating gases shall be submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details.

Reason: In order to safeguard the health and safety of future occupants of the building and accords with the requirements of policy 4/13 of the Cambridge Local Plan 2006.

35. Prior to the occupation/use of a building, details of equipment for the purpose of extraction and filtration of fumes, odours and/or hazardous material such as airborne bacterial and viral organisms shall be submitted to and approved in writing by the local planning authority. The approved extraction/filtration scheme shall be installed before the use hereby permitted is commenced and shall thereafter be retained as such.

Reason: To protect the amenity of nearby properties and accords with the requirements of policy 4/13 of the Cambridge Local Plan 2006.

36. Within 6 months of occupation, a scheme for the insulation of the plant in order to minimise the level of noise 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 and retained thereafter.

Reason: To protect the amenity of nearby properties and accords with the requirements of policy 4/14 of the Cambridge Local Plan 2006.

37. Prior occupation to post а construction/installation/verification/completion report for the development incorporating details of the plant installed and demonstrating compliance with the approved noise insulation scheme under condition 36 shall be submitted to and approved in writing by the Local Planning Authority. The noise insulation/attenuation scheme as approved shall thereafter be maintained in accordance with the approved details and shall not be altered without the prior written approval of the Local Planning Authority.

Reason: To protect the amenity of nearby properties and accords with the requirements of policy 4/14 of the Cambridge Local Plan 2006.

38. Prior to the installation of any operational 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 the nearest light sensitive receptor 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) for Environmental Zone E2. The approved lighting scheme shall be installed, retained and operated in accordance with the approved details / measures unless the Local Planning Authority gives its written consent to any variation.

Reason: In the interests of visual amenity and to ensure that the development will not result in unacceptable light pollution and accords with the requirements of policies 3/11, 4/13 and 4/15 of the Cambridge Local Plan 2006

- 39. All Non-Road Mobile Machinery (NRMM) of net power between 37kW and 560 kW used during demolition or construction works or similar, shall meet the emissions standards in Stage IIIA of EU Directive 97/68/ EC (as amended) for both Nitrogen Oxides (NOx) and Particulate matter (PM). If Stage IIIA equipment is not available the requirement may be met using the following techniques:
 - Reorganisation of NRMM fleet
 - Replacing equipment
 - Retrofit abatement technologies
 - Re-engineering

All eligible NRMM shall meet the requirement above unless it can be demonstrated that the machinery is not available or that a comprehensive retrofit for both PM and NOx is not feasible. In this situation every effort should be made to use the least polluting equipment available including retrofitting technologies to reduce particulate emissions. Developers will be required to provide a written statement of their commitment and ability to meet the requirement within their Construction and Demolition Management plans. An inventory of all NRMM must be kept on site and all machinery should be regularly serviced and service logs kept on site for inspection. Records should be kept on site which details proof of emission limits for all equipment. This documentation should be made available to local authority officers as required.

Reason: To protect local air quality and human health by ensuring that the production of air pollutants such as nitrogen dioxide and particulate matter are kept to a minimum during the lifetime of the development, to contribute toward National Air quality Objectives and accords with the requirements of National Planning Policy Framework (NPPF) and policies 4/13 & 4/14 of the Cambridge Local Plan (2006)

40. The total energy demand to be supplied by locally polluting combustion sources (such as but not limited to natural gas, biogas, biodiesel, diesel and biomass) shall not exceed 350 W/m2 (energy demand includes heating, ventilation, air conditioning, process energy requirements, including the normal regular operation of back up plant.

Reason: To protect local air quality and human health by ensuring that the production of air pollutants such as nitrogen dioxide and particulate matter are kept to a minimum during the lifetime of the development, to contribute toward National Air quality Objectives and accords with the requirements of the National Planning Policy Framework (NPPF) and policies 4/13 & 4/14 of the Cambridge Local Plan 2006.

41. A minimum of 3% of car park spaces shall have electric vehicle charge points installed at the point of construction and a minimum of 15% of car parking spaces shall have infrastructure for the future provision of electric vehicle charge points.

Reason: To protect local air quality and human health by ensuring that the production of air pollutants such as nitrogen dioxide and particulate matter are kept to a minimum during the lifetime of the development, to contribute toward National Air quality Objectives and accords with the requirements of the National Planning Policy Framework (NPPF) and policies 4/13 & 4/14 of the Cambridge Local Plan 2006

42. The development hereby approved shall utilise low NOx boilers, i.e., appliances that meet a dry NOx emission rating of 40mg/kWh, to minimise emissions from the development that may impact on air quality. Details of these shall be submitted to the City Council prior to commencement of development and installed in accordance with the details thus approved prior to first occupation of the building and retained thereafter.

Reason: To protect local air quality and human health by ensuring that the production of air pollutants such as nitrogen dioxide and particulate matter are kept to a minimum during the lifetime of the development, to contribute toward National Air quality Objectives and accords with the requirements of the National Planning Policy Framework (NPPF) and policies 4/13 & 4/14 of the Cambridge Local Plan 2006

43. Prior to commencement of any development, a detailed Air Quality Assessment using dispersion modelling shall be submitted to and approved by the City Council as local planning authority. The Assessment shall consider both baseline traffic sources and those attributable to the increase in traffic flows on the local road network and emissions from all combustion plant serving the proposed building, including the normal regular operation of back up plant. The assessment shall be based on details of all of combustion appliance / plant and shall include details of the selected plant (including size / rating, abatement equipment, technologies, location/ height of exhaust stack / flue discharge velocity, NOx emissions standards, appropriate), their emissions and maintenance schedule. The details of the combustion plant shall demonstrate compliance with the agreed emissions limits and stack heights. scheme as approved shall be fully carried out in accordance with the approved details before first occupation and shall be thereafter retained.

Reason: To protect local air quality and human health by ensuring that the production of air pollutants such as nitrogen dioxide and particulate matter are kept to a minimum during the lifetime of the development, to contribute toward National Air quality Objectives and accords with the requirements of the National Planning Policy Framework (NPPF) and policies 4/13 & 4/14 of the Cambridge Local Plan 2006

44. Prior to occupation a scheme for the provision of fire hydrants shall be submitted to and approved in writing by the local planning authority. Development shall be carried out in accordance with the approved details and the approved scheme shall be fully operational prior to the first occupation of that development parcel.

Reason: To ensure the provision of adequate water supply infrastructure to protect the safe living and working environment for all users and visitors and accords with the requirements of policies 3/7, 3/12 and 8/18 of the Cambridge Local Plan 2006

45. Prior to erection of any signage on the building exterior hereby approved, details of the signage identifying the proposed location, size, wording, materials and any illumination of the signage shall be submitted to and approved by the local planning authority. The signage shall then be carried out in accordance with the approved details.

Reason: To ensure that the signage complements the design approach to the building and accords with the requirements of policy 3/4 of the Cambridge Local Plan 2006

46. The development shall be carried out in accordance with the following approved drawings and technical documents.

Site Location Plan - PL-A(1)101 -PL 10

Site Location Plan - PL-A(1)108 -P2

Illustrative Site Plan -PL-A (1)100 -PL14

Site Layout Plan -PL-A (1)102 -PL14

Site Elevations -PL-A (1)200 -PL14

Site Sections -PL-A (1)300 -PL10

Floor Plan Level 0 - PL-A (2)100 -PL10

Floor Plan Level 1- PL-A (2)101- PL7

Floor Plan Level 2-PL-A (2)102 - PL7

Floor Plan Level 3 - PL-A (2)103 - PL8

Floor Plan Level 4 - PL-A (2)104 - PL8

Floor Plan Level 5 - PL-A (2)105 - PL8

Elevations North & East - PL-A (2)200 - PL9

Elevations South & West - PL-A (2)201 - PL10

Service Area - PL-A (2)202 - PL8

Sections Atrium/Transversal - PL-A (2)300 - PL10

Sections Lab/Office - PL-A (2)301 - PL9

Typical Bay Building A - PL-A (29)300 - PL5

Typical Bay Building B - PL-A (29)301 - PL5

Car Park Drainage Layout - PL-D(77)-1-01-002 - P03

Car Park Flood Flow Plan - PL-D(77)-1-01-003 - 102

Abcam Building Flood Flow Plan - PL-D(77)-1-01-004 - I02

Drainage Details Sheet 1 - PL-D(77)-1-01-002 - P01

Drainage Details Sheet 2 - PL-D(77)-1-01-002 - P01

Drainage Details Sheet 3 - PL-D(77)-1-01-002 - P01

Drainage Details Sheet 4 - PL-D(77)-1-01-002 - P01

Detail Section - Southern Edge - OX5177-1-201 - D00

Landscape Masterplan - OX5177-100 - D01

Landscape General Arrangement Plan - OX5177-1-101 - D03

Planting Plan - OX5177-102 - D03

Tree Survey - 5063 - 27/11/2015 Tree Survey drawing - 5063-D - A Existing Site Plan - OX5177-1-099 - D02

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.

INFORMATIVE: This planning permission should be read in conjunction with the associated deed of planning obligation prepared under s.106 of the Town and Country Planning Act 1990 (as amended). The applicant is reminded that under the terms of the s106 Agreement you are required to notify the City Council of the date of commencement of development.

INFORMATIVE: The HSE advises that as the proposed development is within the Consultation Distance of a major hazard pipeline the applicant is advised to contact the pipeline operator for the following reason;

- The operator may have a legal interest (easement, wayleave, etc.) in the vicinity of the pipeline. This may restrict certain developments within a certain proximity of the pipeline.
- The standards to which the pipeline is designed and operated may restrict occupied buildings or major traffic routes within a certain proximity of the pipeline. Consequently there may be a need for the operator to modify the pipeline, or its operation, if the development proceeding

INFORMATIVE: An application to discharge trade effluent must be made to Anglian Water and must have been obtained before any discharge of trade effluent can be made to the public sewer. Anglian Water recommends that petrol / oil interceptors be fitted in all car parking/washing/repair facilities. Failure to enforce the effective use of such facilities could result in pollution of the local watercourse and may constitute an offence. Anglian Water also recommends the installation of a properly maintained fat traps on all catering establishments. Failure to do so may result in this and other properties suffering blocked drains, sewage flooding and consequential environmental and amenity impact and may also constitute an offence under section 111 of the Water Industry Act 1991.

INFORMATIVE: Before the development/use hereby permitted is occupied, a scheme for the insulation of the emergency generator in order to minimise the level of noise emanating from the said generator shall be submitted to and approved in writing by the local planning authority. The scheme as approved shall be fully implemented before the use hereby permitted is commenced and shall thereafter be retained as such. The scheme shall include the following:

(i) Generator - Use

The generator shall only be used in the event of mains power failure or in accordance with (ii) below. It shall not be used as an alternative supply in the event of disconnection from the mains supply following for example non-payment.

(ii) Generator - Hours of Running for Maintenance

Running of the generator as part of routine maintenance and repair shall only take place for the length of time specified by the manufacturer between the hours of 8am - 6pm Monday to Friday, 9am -1pm Saturday and no time Sunday or Public Holidays. To protect the amenity of nearby properties (Cambridge Local Plan 2006 policy 4/13)

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.

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%20E missions%20SPG%208%20July%202014_0.pdf

INFORMATIVE: To satisfy the backup generator condition the noise level from the generator associated with this application should not raise the existing background level (L90) by more than 5 dB(A) at the boundary of the premises subject to this application and having regard to noise sensitive premises.

Note: Only in exceptional circumstances where the applicant has shown that the above cannot be achieved and the need is for real emergencies (e.g. hospital operating theatre or emergency services) the following standard may be used. To satisfy the emergency generator condition the noise level from the emergency generator associated with this application should not raise the existing background level (L90) by more than 10 dB(A) at the boundary of the premises subject to this application and having regard to noise sensitive premises.

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).

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 The document, how to deal with contaminated land. 'Contaminated Land in Cambridge- Developers Guide' can be downloaded from the City Council website https://www.cambridge.gov.uk/land-pollution. Hard copies can also be provided upon request.

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 20 m3 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: 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: A premises licence may be required for this development in addition to any planning permission. A premises licence under the Licensing Act 2003 may be required to authorise:

- o The supply of alcohol
- o Regulated entertainment e.g.
- o Music (Including bands, DJ's and juke boxes)
- o Dancing
- o The performing of plays
- o Boxing or wrestling
- o The showing of films
- o Late Night Refreshment (The supply of hot food or drink between 23:00-05:00)

A separate licence may be required for activities involving gambling including poker and gaming machines.

The applicant is advised to contact The Licensing Team of Environmental Health at Cambridge City Council on telephone number (01223) 457899 or email Licensing@cambridge.gov.uk for further information.

INFORMATIVE: Demolition/Construction noise/vibration report. The noise and vibration report should include:

- a) An assessment of the significance of the noise impact due to the demolition/construction works and suitable methods for this are to be found in BS 5228:2009 Part 1 Annex E Significance of noise effects. It is recommended that the ABC method detailed in E.3.2 be used unless works are likely to continue longer than a month then the 2-5 dB (A) change method should be used.
- b) An assessment of the significance of the vibration impact due to the demolition/construction works and suitable methods for this are to be found in BS 5228:2009 Part 2 Annex B Significance of vibration effects. If piling is to be undertaken then full details of the proposed method to be used is required and this should be included in the noise and vibration reports detailed above.

Following the production of the above reports a monitoring protocol should be proposed for agreement with the Local Planning Authority. It will be expected that as a minimum spot checks to be undertaken on a regular basis at site boundaries nearest noise sensitive premises and longer term monitoring to be undertaken when:-

- · Agreed target levels are likely to exceeded
- Upon the receipt of substantiated complaints
- At the request of the Local Planning Authority / Environmental Health following any justified complaints. Guidance on noise monitoring is given in BS 5228:2009 Part 1Section 8.4 - Noise Control Targets and in Annex G - noise monitoring.

A procedure for seeking approval from the Local Planning Authority (LPA) in circumstances when demolition/construction works need to be carried out at time outside the permitted hours. This should incorporate a minimum notice period of 10 working days to the Local Planning Authority and 5 working days to neighbours to allow the Local Planning Authority to consider the application as necessary. For emergencies the Local Planning Authority should be notified but where this is not possible the Council's Out of Hours Noise service should be notified on 0300 303 3839. Contact details for monitoring personnel, site manager including out of hours emergency telephone number should be provided.

INFORMATIVE: It is a requirement of the Clean Air Act 1993 that no furnace shall be installed in a building or in any fixed boiler or industrial plant unless notice of the proposal to install it has been given to the local authority. Details of any plant to be installed should be provided using the Chimney Height Calculation form (available here: https://www.cambridge.gov.uk/chimney-height-approval

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 https://www.cambridge.gov.uk/land-pollution Hard copies can also be provided upon request.

INFORMATIVE: The applicants are advised that the Environmental Statement for the CBC 2020 site identified that, due to the underlying geology of the site, buildings should be subject to gas protection measures to ensure any risk from the build- up of dangerous gases is adequately mitigated. As similar geology has been identified around the 2040 site this recommendation applies therefore to the CBC 2040 site as well.

INFORMATIVE: Ventilation associated with fume and microbiological cupboards / cabinets shall be installed (including consideration of flue / exhaust termination discharge heights that are required for adequate dispersion) in accordance with national and industry standards, codes of practice and technical guidance, such as:

- Building Regulations
- o BS EN 14175 Fume Cupboards Parts 1 to 7
- o BS 7989:2001 Specification for recirculatory filtration fume cupboards
- o BS EN 12469:2000- Biotechnology. Performance criteria for microbiological safety cabinets
- o BS 5726 various Microbiological safety cabinets.

INFORMATIVE: Where chimney height calculations are required to be submitted, the relevant form is available on-line at: https://www.cambridge.gov.uk/chimney-height-approval.

INFORMATIVE: The Medium Combustion Plant Directive (MCPD) is part of The EU Clean Air Package published in December 2013. lt will introduce system registration/permitting for 1-50MW plant, emission limits for nitrogen oxides, sulphur dioxide and particulate matter and monitoring of emissions by operators. Medium combustion plant include boilers, engines, turbines and backup generators and can run on natural gas, solid and liquid fuels, including biomass and biogas. New plant will need to be registered and meet emission limits in late 2018 and existing plants by 2025 and 2030 depending on size. The proposed planning application involves the installation of plant that is likely to require regulation. The applicant is advised to ensure that the design and installation of any relevant plant takes into account the requirements of this Directive. Further advice can be obtained from the Environmental Quality and Growth team.

INFORMATIVE: As the premises is intended to be run as a food business the applicant is reminded that under the Food Safety Act 1990 (as amended) the premises will need to registered with Cambridge City Council. In order to avoid additional costs it is recommended that the applicant ensure that the kitchen, food preparation and foods storage areas comply with food hygiene legislation, before construction starts. Contact the Commercial Team at Cambridge City Council on telephone number (01223) 457890 for further information.