DATE: 3RD DECEMBER 2014

Application Number	14/1411/REM	Agenda Item	
Date Received	5th September 2014	Officer	Mr Mark Parsons
Target Date Ward	5th December 2014 Queen Ediths		
Site	Land To The West And S Addenbrookes Campus F		Cambridge
Proposal	Reserved matters application pursuant to outline approval 06/0796/OUT for New Papworth hosp and associated amenity space, planting, vehicle drop off area, cycle parking, energy centre/plantroom and servicing area.		to outline th hospital , vehicle
Applicant	Skanska Construction UK Maple Cross House Mapl	_	answorth

WD3 9SW

SUMMARY

The application is for a New Papworth Hospital allowing relocation from the Hospital's current site in Papworth Everard 13 Miles from Cambridge. The hospital is the largest specialist cardiothoracic hospital in the UK and includes the country's main heart and lung transplant centre.

The development accords with the Development Plan for the following reasons:

The application is a reserved matters application pursuant to an outline permission. The proposed use, and floorspace are consistent with that outline approval. The design of the scheme sit within the design parameters established at that stage.

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 designs coming forward within the Cambridge Biomedical Campus.
	The necessary mitigation measures, such as transport improvements have been secured through the outline consent and will be triggered as development such as this proposal come forward on the wider site.
RECOMMENDATION	APPROVAL

1.0 SITE DESCRIPTION/AREA CONTEXT

- 1.1 Addenbrooke's Campus sits to the South of Cambridge and can be accessed via Long Road to the north, and the Hills Road/Fendon Road/Robinson Way Roundabout roundabout to the east. As part of strategic growth in the south of Cambridge outlined within the Cambridge Local Plan 2006 and subsequent Area Development Framework access to the campus can also be reached from the south west via the Addenbrooke's Road.
- The application site sits to the west of the main Addenbrooke's Campus, between Robinson Way and Francis Crick Avenue, and is part of the Addenbrooke's 2020 land released from the Green Belt in the Cambridge Local Plan 2006, and approved through outline planning permission 06/0796/OUT for the following uses: clinical research and treatment, clinical inpatient treatment and biomedical and biotech research and development.
- 1.3 Immediately to the east of the proposal, on the opposite side of Robinson Way, is the Addenbrooke's Treatment Centre. To the north and west of the site are undeveloped plots of land, but which are subject to current planning application 14/1633/REM to accommodate AstraZeneca's new Research and Development Headquarters.
- 1.4 In between this proposal and AstraZeneca's proposed scheme to the north lies an area of open space known as the 'Circus' which will comprise just under 3ha of open space as well as accommodating an extended route of the Guided Bus. Within

Papworth's plot, but outside of this application an area of land is set aside for a research institute which will link in with the main hospital. The delivery of this facility is dependent on fundraising, and will come forward at a later stage.

- 1.5 To the south of the Papworth proposal is a recently opened Multi-Storey Car Park (known as MSCP2). The plans circulated with this report show the location of the proposed hospital in relation to the wider CBC development.
- 1.6 The site is covered by policy 5/15 (Addenbrooke's) in the Cambridge Local Plan (2006). There are no buildings of listed grade /Building of Local Interest on the site. There are existing trees on boundaries of the site with Robinson Way; none of these are covered by preservation orders. The site falls outside the controlled parking zone.

2.0 THE PROPOSAL

- 2.1 Papworth hospital is currently located in Papworth Everard, approximately 13 miles from Cambridge. The hospital is internationally renowned and has grown with its success over the years. The current site is however constrained and space to support future levels of increasing demand is therefore limited. The benefits of the relocation allow for purpose built, modern accommodation with state of the art facilities that improve patient care and increase integration with partner organisations that do, or will in the future exist on the campus.
- 2.2 The new building has been subject to a Private Finance Initiative (PFI) process which required bidders to work up schemes in detail before a preferred bidder is selected. In December 2013 Papworth announced Skanska as the preferred bidder to lead the project. In May 2014 the business case for the relocation was approved by HM Treasury.
- 2.3 The new building itself comprises 6 above ground floors, along with a basement floor. The ground floor will provide the main reception area/concourse as well as waiting areas, administrative functions, a restaurant, a pharmacy, and a small retail unit. It will also accommodate outpatients, rehabilitation, and imaging or nuclear medicine appointments. The first floor provides space for critical care, theatre catheter labs and administration.

- 2.4 The top four floors provide an 'oval' footprint which varies from the ground and first floor. The first of these four floors (second floor) is an interstitial plant floor, which ensures efficient, effective and easily maintained servicing for the building. Floors 3-5 then comprise the bedspaces for inpatients organised as single bedrooms accessed from a double corridor with a central core of support rooms. There is a basement level below ground which accommodates storage, plant and facilities management. It also provides for staff changing facilities.
- 2.5 There are two main public entrance points into the hospital, one from the south and one from the north. The south entrance fronts onto a drop-off/short-term parking area, and will be the main entrance for visitors who park in the multi-storey car park. The north entrance fronts onto the public realm which will accommodate visitors coming via bus, and the majority of people who have walked and cycled to the site. These two entrances both lead to a central reception area/concourse, as do two further entrance points, one leading to the future research institute, and one leading out towards the pond.
- 2.6 There are further entrance points into the hospital for servicing, adjacent to the service yard on the eastern part of the plot, for staff via the cycle parking area, and from a dedicated ambulance drop off area. Provision is also made for underground linkages with neighbouring buildings.
- 2.7 To the south of the building is a landscape area which incorporates a drop off and short term parking area, and ambulance drop off as well as a good level of planting and open space. A 'reflective' pond, a feature of the current Papworth site used to aid the healing of patients has been provided to the south west of the building.
- 2.8 To the south east of the building is an energy centre which will provide the energy for the hospital. The building is predominantly single storey above ground, although a large basement exists. There is some enclosed plant at first floor level and a flue which extends to 44m above ground level (the maximum allowed through the parameter plans). The flue is thin in profile (2m) when viewed from the east and west, and is 9m wide when viewed from then north and south. A vacuum

- insulated evaporator (VIE) enclosure is also proposed on the south eastern corner of the plot.
- 2.9 Cycle parking is provided for staff adjacent to the north east of the building, with visitor parking provided close to the entrance points. Car parking for staff and visitors is to be provided within MSCP2 consistent with the agreed Addenbrooke's Parking Strategy.
- 2.10 The application was accompanied by the following supporting information:
 - 1. Plans and Drawings
 - 2. Design and Access Statement
 - 3. Planning Statement
 - 4. Consultation Statement
 - 5. Transport Statement
 - 6. Air Quality Statement
 - 7. Noise Statement
 - 8. Drainage Strategy
 - 9. Sustainability Strategy
 - 10. Ecology Strategy
 - 11. Amenity Space Strategy
 - 12. Public Art Strategy
- 2.11 Through consideration of the application an amended noise report, and access and circulation report were submitted along with an amended planting strategy and summary of collaboration with the circus adjacent. Am air quality assessment and a copy of the emerging Cambridge University Hospital's Access to Addenbrooke's Plus Travel Plan was also submitted.
- 2.12 Parallel to this reserved matters application the applicant has submitted a number of discharges of conditions relating to the outline consent these are listed below and will be the subject of separate decisions:

Condition 13: Site levels

Condition 23: Construction method statement Condition 24: Detailed waste management plan

Condition 32: Operational waste Condition 33: Contamination

Condition 38: Tree assessment

Condition 39: Tree protection

Condition 41: Tree excavation trenches

Condition 46: Landscape phasing

Condition 48: Contours

Condition 59: Cycling facilities

2.13 If permission is granted, development of the hospital would hope to commence in the New Year with an aim to open the hospital in late 2017.

3.0 SITE HISTORY

3.1 The table below shows the planning history for the site subject to this application and also the relevant applications from the CBC site.

Reference	Description	Outcome
06/796/OUT	Up to 215,000sqm floor space (excluding plant areas) comprising 60,000sqm of clinical research and treatment (D1 and/or clinical inpatient treatment), 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/or clinical inpatient treatment), and 25,000sqm of either clinical research and treatment (D1 and/or clinical inpatient 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 and all other associated infrastructure.	Approved with conditions
C/05009/12/CW	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	Approved with conditions
11/0780/REM	Reserved matters application (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	Approved with conditions

	Addenbrooke's campus, to serve Addenbrooke's as it expands and the new Papworth Hospital (pursuant to outline approval 06/0796/OUT).	
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 and public realm works known as The Forum Cambridge	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 and Development floorspace, to include: i) R&D Centre and Corporate Headquarters, ii) R&D Enabling Building, iii) Support Building and Energy Centre, iv) Associated car, motorbike and cycle parking, v) Hard and soft landscaping, vi) Internal roads, supporting facilities and ancillary infrastructure.	Pending Consideration

4.0 **PUBLICITY**

4.1	Advertisement:	Yes
	Adjoining Owners:	Yes
	Site Notice Displayed:	Yes
	Public Meeting/Exhibition	Yes
	DC Forum:	No

A public consultation event was organised by Papworth on the 15th and 16th of August at the Frank Lee Centre. The event was attended by around 40 people.

There was a pre-application developer presentation to Planning Committee members on 15th January 2014.

A presentation was made to the Southern Fringe Community Forum on 15 September 2014 and boards were available for review at the previous forum.

A presentation was made to the disability panel on 29 July 2014 as part of the pre-application process

A presentation was made to the Cambridgeshire Quality Panel on 15 July 2014

5.0 POLICY

5.1 Relevant Development Plan policies

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

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

Central Government	National Planning Policy Framework March 2012
Guidance	Circular 11/95
	Community Infrastructure Levy Regulations 2010
Supplementary	Sustainable Design and Construction
Planning Documents	Cambridgeshire and Peterborough Waste Partnership (RECAP) : Waste Management Design Guide
	Planning Obligation Strategy
	Public Art
	<u>Citywide</u> :
	Biodiversity Checklist
	Cambridge Landscape and Character Assessment
	Cambridge City Nature Conservation Strategy
	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
	Cambridgeshire Design Guide For Streets and Public Realm
	Air Quality in Cambridge – Developers Guide
	Area Guidelines
	Southern Corridor Area Transport Plan

Cambridge	Southern	Fringe	Area
Development	Framework ((2006)	

5.4 Status of Proposed Submission – Cambridge Local Plan 2014

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

For the application considered in this report, the following policies in the emerging Local Plan are of relevance:

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

Policy 82 – Parking Management and Appendix L: Car and Cycle Parking Standards

6.0 CONSULTATIONS

Urban Design Team

6.1 The overall approach to the external appearance of the building accords with the high level principles established in the Design and Access Statement submitted with the outline application. The overall approach has been to create a distinctive building through a combination of the overall form and use of materials. The associated energy centre located to the south east is proposed that continues the material quality of the ground floor of the main building.

The proposals accord with the parameters approved as part of the outline permission and which fits into the emerging palette of materials on the CBC site. The scheme is therefore supported in urban design terms and satisfies policies 3/4, 3/7 and 3/12 of the Cambridge Local Plan 2006 and emerging policies 55, 56 and 57 of the Cambridge Local Plan 2014 (draft submission).

Head of Streets and Open Spaces (Landscape Team)

6.2 The general landscape concept is welcomed by the landscape team, but much greater detail is required before the landscape team can give full support.

The tree planting strategy for the parkland setting is generally supported, however the tree planting concept in relation to the building is not considered strong enough. We would suggest that a strong line of Plane Trees should echo the curvature of the building, framing entrances humanising the scale of the building, but need to be set back from the building line a minimum of 10m to ensure they have space to mature and will not interfere with the building.

We would expect to see comprehensive hard and soft landscaping details and a long term maintenance and management plan and this should form a condition on any reserved matters approval.

Head of Streets and Open Spaces (Nature Conservation Officer)

6.3 The Nature Conservation Officer is satisfied with the ecology statement which provides a broad overview of the proposed measures to enhance biodiversity on the site and accords with the site wide Nature Conservation Management Plan.

The proposed mix of planting is supported in ecological terms and the proposed pond is supported and should maximise available habitats through a variety of depth profiles. The brown roof proposal is welcomed.

Head of Streets and Open Spaces (Sustainable Drainage Officer)

6.4 The application is supported in drainage terms, however there are some areas where attenuation crates and landscape plans are in conflict. This element should be conditioned.

Senior Sustainability Officer (Design and Construction)

6.5 The approach being taken to integrate the principles of sustainable design and construction into the new Papworth Hospital, and the approach taken to meet and exceed the Council's requirement for 10% renewable energy is supported.

Access Officer

6.6 Agrees with the comments made by the disability panel.

Head of Environment and Refuse

6.7 <u>Comments on amended noise and air quality information</u>

In respect of noise information queries in respect of the noise report have been resolved through the submission of an amended document and further information has been reviewed over the VIE plant. There is no objection subject to conditions relating to noise insulation scheme and a post development report, as well as limitations to the emergency generator.

In respect of air quality, an assessment has been received and subsequently assessed. The modelled increase in levels of nitrogen dioxide is currently of concern. Although air pollution levels would remain below the national objectives of annual average 40 micrograms per cubic metre, the process contribution of up to 3.1 micrograms per cubic metre increase is still quite a high figure. Nitrogen dioxide is harmful to health at levels below the objective, which is important in the sensitive setting of a hospital. There is also a process contribution of nitrogen dioxide of up to 1.2 microgrammes per cubic metre to the surrounding residential areas currently under construction.

Therefore officers would be unable to approve this application because the information that provided to date shows that the levels of emissions from the proposed energy centre will be unacceptable as they currently stand. However the emissions levels can be reduced through abatement equipment to a level that could be considered acceptable.

Conditions are therefore suggested for an updated report when the final plant, fuel source and abatement equipment have been selected which will need to be within specified limits, along with a condition to monitor the outputs on an on-going basis.

6.8 Comments on the initial submission

It is noted that the following issues are the subject of conditions on the outline consent and will be looked at separately:

Construction Method Statement (condition 23)
Detailed Waste Management Plan (condition 24)
Foundation piling (condition 25)
Artificial lighting (condition 28 and 29)
Extraction flues (condition 30)
Contaminated Land (condition 33)

Regarding Plant Noise there are three queries to address in relation to the baseline noise survey, plant noise limits and emergency only plant.

In respect of Air Quality, there is further information required regarding the oil fired boiler plant, further information relating to the biodiesel CHP, and submission of the chimney height calculations.

Subject to the above issues being resolved the application is acceptable in principle subject to a number of conditions and informatives.

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

6.9 The cycle numbers have been confirmed as 378 staff cycle spaces and 30 visitor spaces. There is no detail of the spaces for the proposed racks (this will come through a condition on the outline consent), but the split between Sheffield Stands and Double stacking spaces is acceptable.

Head of Streets and Open Spaces (Public Art Officer)

6.10 The Art Strategy is welcomed and has been developed with thought to enhance the well-being and the quality of the built environment and for those that use it.

A condition is suggested for a public art delivery plan which needs to be clear, more robust about the local authority's role in the process.

Cambridgeshire County Council (Highways Development Management)

6.11 The connection diagram provided within the application should promote an alternative route from the west which uses a diverted public right of way on the Guided Busway bridge.

Cambridgeshire County Council (Transport Assessment)

Comments on amended transport information

6.12 The County Council acknowledge that the transport information is not necessary for a reserved matters application, but feel that the information would have been beneficial to view, especially to feed into the early stages of a travel plan.

Parking numbers (if the floor area of the hospital is taken) has reduced to 462 which is more in keeping with the travel plan target.

Cycle parking provision for staff is in line with the outline condition. Visitor spaces are under the 66 required however the county acknowledge that patient and visitor cycling is likely to be low, but would want to see the situation monitored and ensure that provision is provided in the future if demand requires it.

With regard to the travel plan the County confirm that Papworth will be a part of the new campus wide travel plan, but there will still be a need for Papworth to provide a site specific plan that sits underneath. The County recommend that the applicant provide and agree a Travel Plan prior to the occupation of the development although it is acknowledged that the S106 states 6 months post occupation.

Following the review of the amended information the County's holding objection is removed.

Comments on the initial submission

6.13 There are a number of outline conditions and section 106 triggers in respect of transport that will be triggered by this development. The occupation of Papworth would also trigger the need for MSCP3 in accordance with the approved parking strategy for the site.

Details should be provided to show the development compares to the assumptions made within the transport assessment at the outline stage. Details of how the hospital operates and employee post code information has not been provided despite the end user being known. Staff postcode data would be a good indicator of staff transport patterns.

In terms of car parking provision the application identifies 608 spaces are to be provided in the MSCP2. There will be an additional 30 drop off spaces in front of the building. There are concerns that this level of parking is too great and the numbers exceed the targets what will be required through any subsequent travel plan approved through the Section 106 agreement. There needs to be further justification for the drop off spaces and detail on how they will be managed.

Confirmation is required that the 80% occupation figure is realistic in terms of working out the cycle spaces required. The number of visitor spaces by bicycle appears to be low.

There is a lack of travel plan information and more information should be provided now in terms of the framework travel plan. The County Council therefore object until the above issues are addressed.

Environment Agency

6.14 The Agency has no objection in principle to the proposal. The development must be carried out in accordance with the drainage strategy.

Health and Safety Executive

6.15 The gas pipe in the location of the site has recently been decommissioned and therefore there is no requirement for the HSE to be consulted.

Cambridgeshire Constabulary (Architectural Liaison Officer)

6.16 In conclusion, the layout and design of the hospital is outstanding, and there is every confidence that the project team are providing a safe and accessible environment with controlled access to the facilities within. Bollards close to the entrance and a security barrier for the service area are suggested to further enhance security.

Cambridgeshire Quality Panel (Meeting of 15 July)

6.17 The scheme has been to the Cambridgeshire Quality Panel on two occasions. The first was in 2012 as part of pre-application discussions during the PFI process and a number of queries were raised and recommendations made which were fed back to the applicant. The second meeting on the 15 July 2014 was a presentation to panel members after the contract was awarded and updated them on the evolving design. Appendix 1 provides the full minutes of the July 2014 meeting.

Disability Consultative Panel (Meeting of 29 July)

at the meeting, and offered the following comments:
Addenbrooke's has a shortage of disabled parking spaces which should be taken into consideration.
Colour contrast between walls, floor and glass will be important
as there is a lot of glass proposed.
Texture and colour should be considered in tactile paving.
Signage needs the appropriate lighting and be at eye level.
Blue badge drop off should extend beyond 20 minutes.
The Guided bus stops at 1945 which is inadequate for staff.
The internal plan addressed the problem with long corridors.

6.18 The Panel welcomed the proposal that was presented to them

Cambridgeshire Fire & Rescue Service

6.19 The fire authority asks that adequate provision for fire hydrants be secured through condition or Section 106 agreement.

South Cambridgeshire DC

6.20 SCDC at a strategic level has recognised the decision to relocate Papworth's facilities since 2005, and within policy E/5 of the submitted local plan (para 8.18) are relevant in explaining the consequences and policy for the present site.

SCDC commented at the outline stage on various issues including the need for adequate landscaping as required in the Southern Fringe Area Development Framework. Providing that these matters are addressed then SCDC has no further comment to make.

The above responses are a summary of the comments that have been received. Full details of the consultation responses can be inspected on the application file.

7.0	REPRESENTATIONS
7.1	One representation has been received from the following property:
	□ 12 Topcliffe Way
7.2	The objection can be summarised as:
	 The proposal envisages using car parking capacity in a MSCP even through the parking capacity in the Forum is not yet built. This contravenes the parking strategy previously approved. The agreed parking strategy recognises the need over time to eliminate hospital related parking on adjacent streets/residential areas, and for the Councils to work with Cambridge University Hospital's Trust to ensure alignment of any necessary on-street controls. The agreed strategy proposes to provide adequate on-site

parking and the New Papworth Hospital must be dependent on this strategy being carried out beforehand.

8.0 ASSESSMENT

- 8.1 From the consultation responses and representations received and from my inspection of the site and the surroundings, I consider that the main issues are:
 - 1. Principle of development
 - 2. Design, Landscape and the Public Realm
 - 3. Drainage and Utilities
 - 4. Ecology
 - 5. Transport
 - 6. Amenity
 - 7. Sustainability
 - 8. Waste Strategy
 - 9. Construction
 - 10. Public Art
 - 11. Archaeology
 - 12. Planning Obligation Strategy

Principle of Development

- 8.2 In 2009 outline planning permission was granted for the expansion of the hospital site at Addenbrooke's (called the 2020 vision). The permission relating to the land to the west and south of the existing built up area, approved a further 215,000 square metres of floorspace for a range of uses including clinical research and treatment, in-patient treatment, biotech and biomedical research and development, and higher education use. The campus is referred to now as the Cambridge Biomedical Campus (CBC site)
- 8.3 As part of the outline approval a number of parameter plans were agreed which allocates certain uses within certain parts of the site and establishes a number of limitations with regard to design such as maximum heights.

Floorspace and proposed use

8.4 The proposed use is a hospital which falls under 'clinical research and treatment' (clinical in-patient treatment) as set out within the description of the outline permission. The floorspace (excluding plant and covered atrium) proposed is 33,300 sq metres, which falls within the ceiling set out, when combined

cumulatively with other consents (both approved and pending). See table in Appendix 2

Relationship with parameter plans

- 8.5 The proposal is sited between Robinson Way and Francis Crick Avenue and falls within two areas of Parameter Plan 1 (land use); the area set aside for clinical research and treatment, and a flexible area set aside for that same use OR biomedical and biotech research OR higher education/sui generis medical research institute uses. The proposed use is compatible with in both areas and is therefore compliant with parameter plan 1.
- 8.6 The site is limited to a height no greater than 36m above ground level by parameter plan 2. This same plan requires building facades facing north onto the 'circus' to exceed 60% of the plot width. The height of the main building is 32.68m above ground level and the main façade covers 61% of the overall frontage to the 'circus'. It is considered therefore that the proposal complies with the parameter plan.
- 8.7 Parameter Plan 3 limits the height of the building but also the height of any flues proposed. The building as specified above is less than 36m in height and the proposed flue (attached to the energy centre) is 44m in height. These heights sit within the approved development envelope. The proposal also complies with Parameter Plan 4 and 5 with respect to minimum heights and envelopes.

Outline permission conditions

- 8.8 There are a number of conditions attached to the outline consent that are required to be discharged prior to commencement of any development for each individual application coming forward at the reserved matters stage. These discharge of condition applications have come forward separately, but in parallel with, this reserved matters application. Where these are relevant to this application they have been referenced in the report.
- 8.9 It is considered that the principle of the development is therefore acceptable. It complies with the terms of the outline consent and it is in accordance with policies 5/15 and 7/4 of the Cambridge Local Plan. Policy 16 of the proposed submission

Cambridge Local Plan has also been used in formulating this recommendation.

Design, Landscape and the Public Realm

8.10 The site for the proposed New Papworth Hospital is located in the heart of the CBC extension and has frontages to both Robinson Way, the proposed 'Circus' and AstraZeneca's proposed scheme. The proposed scheme was presented to Cambridgeshire's Quality Panel on the 15 July 2014 and their comments have been addressed below and/or in paragraph 8.33 at the end of this section.

Height and Massing

- 8.11 The proposed building sits within the approved parameter plans, six storeys above ground in height. The building is not uniform on all six storeys the building varies in both footprint and material to help break up the massing and produce a more human scale.
- 8.12 The base or 'podium' of the building (ground and first floor) is faced in reconstituted stone which extends up through the building adjacent to the north and south entrances and provides an 'anchor' for the more lightweight glazed oval form. The glazed oval form (second to fifth floor inclusive) also provides for cut outs in the built form to create further visual interest and also allow daylighting of the linking corridors. The overall effect is to create a striking silhouette and a clear identity for the New Papworth Hospital, yet sit well within its existing and emerging context.
- 8.13 The energy centre sits adjacent to the building to the east and is largely single storey in height (above ground level). The flue associated with the energy centre extends up to 44m in height above ground level and presents a narrow profile to the east and west (2m) and is 9m wide when viewed from the north and south. The flue is well designed and although tall, is within the agreed parameters and will sit comfortably within the CBC, where many new and existing buildings carry the requirement to accommodate heavy plant loads.

Layout and Design

- 8.14 The layout of the new hospital has evolved from the need to provide for 'clinical adjacencies' providing an interdisciplinary environment for clinicians, specialist consultants and researchers to work together, and for movement of patients into, and around the building is optimised in terms of speed.
- 8.15 The differing departments, and how they all interrelate are explained in detail within the submitted deign and access statement, which show how the 'building blocks' of the proposal have been put together.
- 8.16 The layout has responded to the constraints and sensitivities of a new hospital building providing for main entrance points from both the north side and south side responding to people travelling by car (south) and softer modes of travel (north). The building has been organised to enable an intuitive wayfinding strategy with a clear view from both entrance points to the main reception. At this point visitors will have three options: Outpatient will be directed through the main door to the east, Inpatients will be directed to the upper floors, and Catering/waiting which will be located to the west of the atrium. These areas will be assessable so that there is no requirement to use the reception area upon second visit.
- 8.17 The upper floors arranged in an elliptical form enable a variation in footprint to reduce the mass of the building but also has a positive effect in reducing the need for long corridors. Each of the top three floors is based around inpatient rooms facing either outward to the wider campus or inward to the central 'void'. The windows to the external façade will be full height glazed windows. Due to the acuity of the patients clinical oversight is key to the safe provision of clinical services. Nursing base points located central to the layout, along with internal room design and glazed ward walls achieves 100% oversight of patients.

Active frontages and interface

8.18 The design of the building allows it to connect into the surrounding key proposed public realm spaces with entrances positioned on the north and south elevations and a further connection to the west. A staff entrance is also proposed from

Robinson Way responding to the proposed cycle storage. It is considered that ground floor organisation of the building achieves a good balance between patient privacy and the desire to create surveillance and activity onto surrounding spaces. The location of the restaurant on the western elevation creates activity and surveillance of the key landscape and public realm area located to the west of the building.

- 8.19 Non-sensitive functions will be located on the northern elevation to provide some surveillance over the proposed 'circus' area. The main cycle park links to the northern side and this along with the proximity of the proposed Guided Bus stop provides an acceptable level of the activity and surveillance along this section of the building whilst maintaining patient privacy. Privacy of patients arriving and leaving by ambulance is an equally important consideration and the ambulance 'drop-off area' is located to the east of the southern patient and visitor entrance and will be well screened through the proposed landscape treatment.
- 8.20 Following on from the Cambridgeshire Quality Panel review and discussions with officers the patient and visitor entrances and corridors were realigned and adjusted in width to improve the legibility of the centrally positioned reception area.

Materials

8.21 Detail of the materials is subject to a condition (Condition 12) on the existing outline consent. Notwithstanding this, the proposal includes details of the materials 'concept' which is an integral part of the design. The 'podium' (ground and first floor) is dressed in reconstituted stone and gives a visually strong 'base' to the building. The upper floors is dressed in glass curtain walling allowing the building (along with the oval form) to be softer and blend into the landscape around.

Signage

8.22 The main signage for the hospital is proposed along the entrance canopies. Although a concept is shown on the plans the final wording, design and size is yet to be decided upon. A condition (Condition 1) is therefore suggested to ensure that the signage is in keeping with the elevational detailing and materials proposed.

Landscape

- 8.23 The proposed development will be situated with significant open space to the north and south of the building. The southern space forms part of this application and comprises open space, planting, and an amenity pond. This space will also accommodate the patient drop off and short stay parking area.
- 8.24 Condition 45 of the outline consent requires a landscaping scheme to come forward as part of a reserved matters application. The landscaping proposals submitted with this application provide for a mixture of planting which respond to the different character areas within the proposed scheme.
- 8.25 These areas can generally be divided into three areas: building approach and public realm, parkland planting and car park planting. The parkland planting proposes a native mix of Field Maple, Crab Apple, Pear and Cherry trees as well as specimen trees such as Blue Cedar and Tulip Tree. Common Alder and River Birch will be set around the edge of the pond. Pine Oak will be used around the drop off area to the front of the building. Italian Alder will be positioned between the building and the energy centre and cycle parking. There is no objection to these trees, however the information submitted falls short of the requirements of the planning condition set at the outline stage, and further detail is needed with regard to planting specification, tree pits and coordination with attenuation crates.
- 8.26 The planting around the building approach (London Plane) is welcomed although the planting of these trees in the public realm between the proposal and the future research Institute building is questionable in terms proximity to the building and design in respect of the building. Overall there has been enough detail provided to enable the concept to be supported, however in doing so a condition has been suggested (Condition 2) to require further detailed information.
- 8.27 The eastern side of the building fronts onto Robinson Way and benefits from a number of existing trees which screen the proposal from Robinson Way. Conditions 38,39 and 41 of the outline approval require details of these trees including confirmation of any trees to be removed. As a result of this proposal there is the need to remove some trees. None of these

trees are high quality individually, however it is considered that their collective role along Robinson Way has benefit to the streetscene. It is considered therefore as part of the condition above some replacement planting should be provided for which will re-enforce this tree belt along Robinson Way and will help part screen the energy centre and other plant from that street.

Public Realm

- 8.28 The drop off area creates a shared space to allow for vehicle movements within a high quality public realm. This approach is supported in design terms and achieves a clear and well-connected route from the south (MSCP) into the hospital that works in harmony with the architectural emphasis of the entrance. A 'blue light' route is proposed to a dedicated ambulance drop-off area which will also be the delivery access to the pharmacy. These two functions need a higher degree of privacy for both security reasons and patient dignity. Accordingly a landscaped area is proposed to the east of the entrance path that will provide the necessary level of screening to these two functions.
- 8.29 Following the Quality Panel review officers integrated the way the shared space worked within the landscape. The proposal was revised following officer and Panel comments and the final approach taken to this southern space has in officer's view achieved a good balance between accommodating the functional needs of users arriving on foot, by bicycle, car and ambulance and the need to create a high quality public realm to provide an appropriate setting for the new Papworth Hospital.
- 8.30 The 'Circus' located to the north and north-west of the new hospital is being progressed separately by the strategic land developer. Pre-application discussions involving all parties involved in this part of the CBC campus have taken place and accordingly there is a high degree of co-ordination between the emerging schemes.

Designing out crime

8.31 Consultation has taken place with Cambridge Constabulary's Architectural Liaison Officer (ALO) who is complementary on the design and layout of the hospital. The ALO considers that the project team are providing a safe and accessible

environment with controlled access to all the key facilities within.

Inclusive Access

8.32 The building is been designed taking all users into account. A lot of consideration has been put into wayfinding, taking in user feedback and lessons learnt from other hospital designs. The proposed development was presented to the Council's Disability Panel who were on the whole supportive of the approach.

Cambridgeshire Quality Panel

- 8.33 The Cambridgeshire Quality Panel reviewed the emerging proposal on 29 July 2014. The Quality Panel raised the following issues at the meeting which were (where necessary) acted on. The full minutes are attached as Appendix 1.
 - (i) Panel raised the importance of good views for staff and visitors.

As set out in paragraph 8.17 each patient room has an external outlook with full height glazed windows. The working environment for the staff has been further improved through the integration of full height windows at the corridor ends allowing for daylight and views out for clinical staff. The generous atrium and restaurant area will ensure a positive experience for visitors.

(ii) Could the roof at third floor level be used for amenity/healing space?

The space above the first floor was explored for additional space to aid healing. The applicants were not supportive of this as the roof top space would stand adjacent to the interstitial plant floor and would require a significant amount of health and safety equipment attached to the roof, ultimately it would not be good for healing space. The roof is being utilised as a brown roof which does bring drainage, ecological and sustainability benefits so the space is being used effectively for different means.

(iii) The Panel questioned if there will be any electronic display in the waiting area in order for patients to feel more in control.

These details do not form part of the planning application as they are do not require planning consent. The applicant will work through this detail but will take on board the suggestion from panel.

(iv) Wayfinding must be considered at this stage.

Wayfinding has been considered, and forms part of the integral design of the building. Section 10 of the Design and Access Statement goes into significant detail about how the strategy has been informed by the need to accommodate all users.

(v) Using 'smart' technology to help change the way people travel.

These details do not form part of the planning application as they are do not require planning consent. The applicant will work through this detail but will take on board the suggestion from panel.

(vi) Review the south entrance as there is current conflict between deliveries, ambulance, pedestrians and drop off.

The design of the space to the front of the building was reviewed post meeting and took into account further work on visitor numbers and anticipated appointment 'peak' times. Para 8.29 above concludes that this space now works well for all users.

(vii) The Panel recognised that this is a strong scheme, highlighting that Papworth Hospital is a world leading hospital and praised the linked work with the evolving 'circus' scheme.

Officers agree that this is a strong proposal and are keen to ensure that the proposal integrates with the neighbouring scheme. A statement of collaboration has been received to support this. (viii) The eastern frontage should relate better to Robinson Way and that planning of the services and energy should be reviewed.

The eastern side of the proposal accommodates the service yard, energy centre and the cycle provision. While this is the 'functional' end of the building the elevational treatment of the energy centre, and the wall enclosing the cycle storage is still an important detail to get right. Para 8.27 above explains that the tree belt along Robinson Way will be retained and enhanced which will provide a soft buffer for the proposal.

(ix) Panel recommended that quality external space is focused to the west around the pond and servicing and ambulance movement to the east.

Various options we explored post meeting with the applicants (these are identified in the D&A Statement). Officers are content see para 8.28 above that the final proposal is, on balance, the optimal solution when considering all the necessary constraints.

(x) Panel noted the sustainability targets for the proposed development and noted that building regulations were set to change in the future and this will need to be taken into account.

Officers are pleased with the overall sustainability targets for the proposed developments. The application will have to deal with any relevant changes in future legislation if it relates to their development.

Quality Panel Conclusion

8.34 The panel were concerned about traffic conflict points and expressed the need for careful management of these areas. The Panel made specific recommendations which align with the issues raised above.

Overall Conclusion

8.35 The proposals for the new Papworth Hospital will create a distinctive and clearly identifiable building that accords with the

parameters approved as part of Outline Permission 06/0796/OUT and which fits into the emerging palette of materials on the CBC site. 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

Surface water drainage

- 8.36 Condition 17 of the outline approval requires a strategic site wide surface water strategy to be approved by the local authority. This strategy was approved on 22 November 2011. Condition 18 of the outline permission requires each individual reserved matters application to provide a detailed drainage strategy to feed into, and be consistent with the strategic document.
- 8.37 The detailed strategy confirms that the proposed site is not at risk of flooding, and ensures that the development does not increase run-off from the site beyond that which exists at present (greenfield runoff rate). The strategy concludes that the outfall off the site of the proposed development is 2 litres per second, per hectare (2l/s/ha) which conforms with the rate set within the strategic document.
- 8.38 The design has, where possible, included Sustainable Drainage Systems (SuDS) which enables the water quality to be improved as well as attenuating the flow. Within the landscape there will be lined gravel trenches and swales as well as depressions in the ground to within the grassed area to deal with some extreme events. The pond will also be designed to attenuate runoff and provide storage in 1:100 (+30% climate change) storm event.
- 8.39 In addition to the above, the scheme proposes permeable paving for car and ambulance parking spaces and a brown roof on the podium roof. Attenuation crates are proposed to store the remaining volumes of water in storm events. On the plans provided there is some conflicts between the attenuation crates and proposed landscape above ground. This would result in the proposed landscaping features failing. Officers are confident that the crates can be reconfigured to ensure that there is no

- conflict, therefore requirement for this to be shown within Condition 2 is suggested.
- 8.40 The City Council's Sustainable Drainage officer has raised no objection to the proposed strategy subject to the condition suggested above. It is therefore considered that the proposal complies with the outline strategy and both local and national policy in this respect.

Water usage

8.41 The proposal includes sustainable measures to reduce water consumption, including use of gels and liquids for hygiene/hand washing, installation of water flow regulators/restrictors, use of water efficient equipment and installation of rainwater harvesting for irrigation and maintenance areas.

Foul drainage

8.42 The proposed buildings will be drained via a new foul water gravity network which will connect into existing discharge points on the western boundary of the site. Foul drainage from the basement will be lifted by a pump and associated rising main to adjoin the hospital gravity drainage.

Utilities

8.43 The hospital has been comprehensively designed to ensure that plant and utilities are used in an efficient and effective manner. The interstitial floor will accommodate plant and utilities allowing good access to plant and efficient connection to the two floors below and three floors above. This minimises the need for plant on the roof, and some plant is provided for in the basement also.

Ecology

8.44 A Site Wide Nature Conservation Management Plan was approved via condition 15 attached to the outline approval. Any reserved matters application is required to provide a detailed Nature Conservation Plan to show how it accords with the site wide strategy with specific ecological measures.

- 8.45 The management plan proposed with this proposal has been designed to encourage wildlife and improve biodiversity by the creation of a parkland, reminiscent of the existing Papworth site. The planting type and species proposed will create a number of habitats and diversity.
- 8.46 This will, in turn, be supplemented with the ecological benefits of the proposed pond providing breeding habitat for amphibians. The bank vegetation, along with the marginal and aquatic planting, will have a positive impact on foraging and shelter for a range of species. The reed bed within the pond will further enhance biodiversity for invertebrates and birds.
- 8.47 The proposed brown roof will be installed to create wildlife habitat, and provide potential nesting. The roof will include design aspects aimed to attract Black Redstart (a species with restricted distribution). The plan includes a table identifying the timing of the delivery for these measures and the plan has the support of the council's nature conservation officer. It is considered therefore that the proposal complies with the outline strategy as well as local and national policy in this respect.

Transport

Transport Impact

- 8.48 The outline application for the CBC site was accompanied with a full Environmental Statement which assessed the full impact of the development including the transport impact and secured through either the section 106, or planning condition, mitigation measures to ensure that the transport impact of the development is acceptable.
- 8.49 This transport assessment used trip generation figures derived from the annual Addenbrooke's Travel survey and provided a good level of information over trip generation (looking at the AM peak, PM peak, and 12 hour numbers) as well as the predicted model share (those that arrive by bus, cycle, foot, car driver, car passenger etc.). The proposed re-location of Papworth was included in these figures, and the assessment assumed delivery of both the Addenbrooke's Access Road (AAR) and the Cambridge Guided Bus (CGB). The County Council accepted the assessment for the site.

- 8.50 As identified above, a number of measures were secured as mitigation for the proposed transport impact of the CBC development. Contributions were secured for the AAR and CGB which enhanced the strategic vehicular access to the site, as well as strategic public transport links. Payments were also secured through the Section 106 for the Southern Corridor Area Transport Plan and improvements to the nearby M11 junction. Through route traffic control was also controlled through the Section 106 as are travel plans and off site car parking (both discussed in more detail below). Furthermore condition 63 of the outline consent requires work to be carried out at the following locations:
 - 1) Hills Road/Fendon Road/Robinson Way Roundabout.
 - Long Road/Trumpington High Street/Trumpington Road intersection
 - 3) Queen Ediths Way/Mowbray Road/Fendon Road.
- 8.51 While the County Council had requested that an assessment be made at this reserved matters to compare against the outline assumptions this cannot be insisted upon, and as Papworth's relocation was assumed (and included within) the outline assessment failure to provide a comparative assessment at this stage could not reasonably be given as a reason to withhold permission. It is considered therefore that the impact of transport was sufficiently assessed and mitigated for at the outline stage.

Travel Plan Approach

- 8.52 A key aspect of the transport strategy on the CBC site is the approach to travel planning. Addenbrooke's has run a successful travel plan for a number of years and this is now evolving into a fully revised travel plan that recognises the importance of a partnership approach in delivering sustainable transport choices to the wider campus. Cambridge University Hospitals NHS Foundation Trust are the lead partner in this document however it has 'buy in' from all the main partners on the campus including Papworth Hospital.
- 8.53 The new travel plan, titled Caring for our Campus Commuters: Access to Addenbrooke's Plus will look to progress transport initiatives, with greater economies of scale across the wider

- campus. Actions within the plan span across all modes of transport from walking, cycling and bus transport to looking at the use of the private car and reducing the need to travel.
- 8.54 The County Council had requested that a framework travel plan, identifying key travel plan themes and targets be submitted at this stage to provide comfort that targets can realistically be met, and that the document is available from first occupation. The applicants have not provided this, but are committed to the wider travel plan identified above which will provide for sustainable travel targets consistent with the existing campus. The applicant is obligated (through schedule 12 of the S106 agreement) to provide a travel plan, carry out a survey, and appoint a travel plan coordinator within 6 months of occupation. While officers would encourage the applicant to progress this travel plan as soon as is reasonably possible they cannot insist on the detail at this stage (given the terms of the existing agreement). The County Council acknowledge this in their revised comments.

Access Points

- 8.55 The proposed development has been designed to welcome staff and visitors from the south, using the MSCP and drop off area, as well as from the north which will likely be in point of entry for pedestrians and people arriving by bicycle. Visitors coming by bike will use the racks adjacent to the entrance points, staff will use the dedicated secure parking.
- 8.56 Blue light arrivals will have a dedicated area which will also be used for secure delivery to the pharmacy. Facilities management and servicing drop off will be within the servicing area to the east of the development.

Car Parking

8.57 The CBC site benefits from a parking management plan (secured through condition 6 of the MSCP permission 11/0780/REM) which details how parking spaces will be provided for as the masterplan evolves and how some of the lost spaces, through developments such as the Forum, will be compensated for. On the back of this management plan a parking strategy is updated every time there is a 'major

- development change' (change in demand/ new provision provided of more than 100 spaces).
- 8.58 The most recent Parking Strategy (November 2013, but updated in April 2014) identifies how parking needs will be phased with spaces being created and being lost through particular developments. In respect of Papworth the strategy is relevant in the following ways:
 - Papworth has been allocated 608 spaces (556 staff and 52 visitors) spaces within the recently opened MSCP2.
 MSCP2 currently compensates for parking displaced on the
 - Forum site and previous spaces lost from car parks elsewhere (P and K1) and relocation of car park K2.
 - □ Papworth Hospital opening will trigger the need for and opening of MSCP3 (opposite the Rosie Hospital to the south of Robinson Way).
- 8.59 This parking strategy (and the subsequent updates of the document) is key to managing the on-going parking changes/demands on the CBC site. The 608 spaces proposed for Papworth within MSCP2 has been earmarked in the strategy and this is consistent with the submitted proposal.
- 8.60 The 608 figure has been based on the outline planning condition stipulation (outline conditions 53 and 54) of 1 space per 72 square metres for staff and 1 space per 773 square metres for patients and visitors. 6% of spaces (37) blue badge spaces are set aside in accordance with policy and outline condition 55. This overall number (608) is however based on the overall floorspace (excluding plant and atrium space) assumed for the entire Papworth plot (which includes the research institute building which has not come forward as part of this application- see para 1.4). It is considered that parking spaces should relate to useable floorspace (consistent with that applied on application the LMB building 07/0651/FUL), but cannot at this stage include the research institute building.
- 8.61 It is therefore considered that 462 staff spaces should be allocated to the hospital, and that the further 94 spaces (resulting in the 556 staff space figure) should be allocated to the research institute building if/when one is approved, and final floorspace known. Of the overall 52 visitor spaces, 44 should be allocated to the hospital and 8 held back for the research

- building. This is consistent with the strategic parking strategy as the research institute building is not listed within that document and therefore sits under the same 'banner' as Papworth within that document.
- 8.62 Although the number of spaces has been provided for in accordance with the condition requirements there is also an obligation for the applicants to achieve sustainable travel patterns through the proposed travel plan. If model targets are to be achieved consistent with the rest of Addenbrooke's (using the 2013 survey and the expected number of employees) then this would require approximately 442 spaces, twenty spaces fewer than using the outline application ratio.
- 8.63 Overall it is considered that there is sufficient parking earmarked for the development although the binding factor will be the travel plan limitations imposed through the Section 106. As the exact numbers of employees and travel plan targets will evolve as more information is known the number of spaces allocated could change (and reduce) over time. It is therefore considered that the 462 figure represents the absolute maximum number of spaces and that the final number of spaces shall align with the travel plan targets once known.
- 8.64 One third party representation has been received in relation to car parking citing concerns that the CBC is not being carried out in accordance with the approved strategy (referenced in para 8.58 above). Having reviewed the updated strategy the strategy is currently being carried out correctly, the opening of Papworth is dependent on another MSCP coming forward, something which will be taken forward with the strategic developer (an informative will be placed on the permission to this effect).
- 8.65 The concern from the resident extends to the fact that on-street parking resulting from staff/visitor overflow should be eliminated over time. This requires a realistic number of spaces provided on site, which officers consider the proposal does, but while still creating a sustainable development which reduces the need for the car in the first instance. Provisions still exist in the section 106 for monies to be available for controlled parking in the surrounding streets should that necessity arise.

- 8.66 Overall the number of spaces proposed through this application are consistent with the number set aside in the approved parking strategy, provided that parking associated with the research institute is included within that overall number. The travel plan agreed through the S106 will further evolve the numbers of staff who should be travelling to the site by car. The proposal therefore complies with the approved outline approval, strategic documents and policy 8/10 of the Cambridge Local Plan.
- 8.67 In addition to the long-term parking spaces within the MSCP the proposal includes 24 drop off spaces and 6 disabled spaces which are limited to a 20 minute maximum stay. These spaces are not intended to be additional parking spaces beyond those identified above, their role is to allow for patient drop off to avoid the need for patients to have to walk from the MSCP. The driver will, following drop off, either park in the MSCP or carry on their wider journey. This area will also accommodate taxi drop off and patient transfer mini-buses.

Cycle Parking

- 8.68 Conditions 56 and 57 of the outline planning consent require any reserved matters application to provide a summary of the Addenbrooke's Annual Travel Survey showing the current modal share for staff, patients and visitors cycling to Addenbrooke's along with the numbers of staff, patients and visitors visiting the building in any one typical day.
- 8.69 Condition 58 then requires applicants to calculate the number of staff (assuming 80% staff are on site at any one time) by the modal share for cycling (currently 31%) and add a further 10 percentage points to cater for cycling uplift through travel planning. A similar exercise is then carried out for visitors and patients (using anticipated numbers and the current modal shift). Each visitor space is assumed to be used three times daily.
- 8.70 These calculations result in the following demand: 378 spaces for staff, 18 spaces for patients and 48 spaces for visitors. The spaces for patients and visitors are based on 14% of modal share (10% over the 4% current model share). The proposed development proposes 378 cycle spaces, and 30 visitor spaces. The 378 is consistent with the amount required through the

- condition. The 30 visitor spaces is fewer than the required amount (66).
- 8.71 The cycle parking provision for staff, visitors and patients on the CBC site has been calculated using real life model share, with uplift to cater for an increase in cycling but in officer's views should still should use a common sense approach to numbers provided. Although fewer visitor spaces are proposed than required through the condition given the type of patients and visitors to this hospital the model shift will be low (similar if, not less than the 4% current), and certainly won't increase 10 percentage points to 14%. It is considered therefore that the 30 spaces proposed exceeds the current model shift (4% would require 22 spaces) and is therefore acceptable. There is adequate space on site for additional spaces should demand exceed the proposed amount- this would be monitored through travel planning.
- 8.72 The detail of the cycle parking itself is covered by condition 59 of the outline consent. These details have been submitted which shows the location of the cycle facilities and confirms that they are secure and spaced adequately in accordance with standards. The 378 spaces are made up of predominantly Sheffield stands (approximately 65%) with around 35% of spaces being provided as double stacked provision. For a development such as this, this ratio is considered acceptable and has the support of the cycling officer. The proposal is therefore in accordance with policy 8/6 of the Cambridge Local Plan and the conditions set out in the outline permission.

Public Transport

8.73 The Papworth proposal in itself will be well served by the CGB through the provision of a new bus stop within the circus to the north. Strategically the CBC site is well served by public transport with a number of bus routes running through the site, and Babraham Park and Ride in close vicinity.

Amenity

Noise and Odour

8.74 The proposed development does not sit adjacent any residential development, however to protect any new development on

adjacent land, the Addenbrooke's treatment centre on the opposite side of Robinson Way, and the hospital rooms proposed here, noise levels resulting from proposed plant needs to be considered acceptable for the development to be supported.

- 8.75 At this stage, the final design and type of plant is not fully known, therefore the noise assessment provided establishes noise levels at the agreed boundaries for the final plant to work within. Fixed mechanical plant for the hospital is to be situated in the interstitial floor (level 2) for air handling plant, in the basement for pumps, tanks and medical gas compressors, and in the energy centre for boilers and combined heat and power (CHP) equipment. The limit for the final plant to work within is to ensure that the noise at the boundary of the premises is less than or equal to the existing background level. A condition (Condition 6) is therefore suggested. Conditions (conditions 8 and 10) are also suggested to ensure that emergency plant, and kitchen odour extract, adheres to acceptable criteria also.
- 8.76 Subject to these conditions being implemented and adhered to it is considered that the proposal complies to Local Plan Policy 4/13.

Air Quality

- 8.77 The application has provided an air quality assessment to look at the impact of the proposal on air quality levels. The modelled increase in levels of nitrogen dioxide within the report is of concern to environmental health officers. Although air pollution levels would remain below the national objectives of annual average 40 micrograms per cubic metre, the process contribution of up to 3.1 micrograms per cubic metre increase is still quite a high figure. Nitrogen dioxide can be harmful to health at levels below the objective, which is important given the sensitive setting of a hospital. More energy supply units are in the pipeline for the Addenbrookes site, with the EIC already having an extant planning permission, so this energy centre cannot be considered in isolation, but in the context of the cumulative impact.
- 8.78 Technical officers suggest that as an increase in flue height is not possible (due to parameter plan constraints) then there will be a requirement for emissions abatement, and subsequent

monitoring of that equipment. In conclusion, while the levels of emissions from the proposed energy centre in the assessment appear unacceptable as they currently stand the levels can be reduced through abatement equipment to a level that could be considered acceptable. Conditions are therefore suggested for an updated report when the final plant, fuel source and abatement equipment have been selected which will need to be within specified limits within the condition (condition 3), along with a condition to monitor the outputs on an on-going basis (condition 4). With the successful imposition and adherence of these conditions it is considered that the proposal complies with policy 4/13 and 4/14 of the Cambridge Local Plan.

Lighting

8.79 A condition on the outline application requires details of the lighting proposals to be submitted and approved by the local authority. This assessment will be made independently of this application, but work on any lighting scheme associated with the development will not be able to commence until the outline condition has been discharged.

Contamination

8.80 Parallel with this application the applicants are looking to discharge the existing outline condition with regard to contamination. This assessment and decision will be made independently of this application, but work on this proposal will not be able to commence until the outline condition has been discharged.

Sustainability

- 8.81 Both the Sustainability Statement and the Design and Access Statement submitted with the application set out the approaches that have been taken to integrate the principles of sustainable design and construction into the design of the new Papworth Hospital. The Sustainability Statement sets out that the general approach to sustainability has been to integrate sustainable principles from the start of the design process.
- 8.82 Orientation of the building ensures that patient rooms and other areas benefit from natural light. This has been balanced by the need to minimise excessive summertime solar gain, which is to

be achieved through the use of solar control glazing and the use of interstitial blinds set within the triple glazed units on the south and south-east through to south-west elevations.

- 8.83 The proposal integrates measures to help the scheme adapt to future changing climate, which, in addition to the measures referenced above to regulate temperatures, includes a large area of open landscaping and water feature to provide urban cooling and the use of rainwater harvesting to supply maintenance areas and irrigation of the grounds. As identified in paras 8.38 above SuDS have been integrated into the scheme and measures to reduce water consumption.
- 8.84 A number of commitments in relation to construction materials have been made including sourcing materials from local businesses, the specification of a minimum of 20% recycled content of building materials by material volume (26% currently being achieved), measures to minimise the volume of construction waste, and the target to recycle at least 95% of waste by mass of demolition and construction waste.

BREEAM

8.85 Condition 37 on the outline consent requires buildings to be constructed to BREEAM level 'very good'. The building as proposed aspires to achieve 'excellent', which is welcomed. The Design and Access Statement makes reference to a current BREEAM score of 75.3%, which equates to an 'excellent' rating. In accordance with the outline condition, a detailed BREEAM pre-assessment needs to be submitted prior to development of the building. The outline approval requires a 'very good' level, however the applicants have, in justifying a separate energy centre (See below), stated that one of the main reasons is to achieve BREEAM 'excellent'. A condition (condition 5) is therefore suggested to ensure this is achieved if the separate energy centre is built.

Renewable Energy

8.86 The scheme has a requirement to meet a minimum of 10% of its energy requirements from the use of on-site renewable energy (Condition 35 of the outline consent), measured in terms of reduction in carbon emissions.

- 8.87 The Sustainability Statement includes an energy report setting out the hierarchical approach to reducing carbon emissions in order to exceed current Building Regulations requirements, an approach that is fully supported. In addition to the Council's renewable energy requirement, the applicant has been set a number of ambitious targets related to energy use by the Papworth Trust. Of the energy requirement of the hospital, 40% of this energy is to be generated through the use of renewable energy, namely the use of ground source heat pumps and biodiesel Combined Heat and Power (CHP). Sustainable sourcing of the biodiesel is a particular issue, and the applicant has confirmed that the biodiesel to be used is likely based on used cooking oil (although still to be confirmed through condition), an approach which is supported.
- 8.88 In respect of the level of carbon reduction being achieved by the proposal, it is predicted that the combined use of the ground source heat pumps and the CHP will reduce carbon emissions by 1,346,727 Kg/CO₂/annum, which when set against the baseline emissions equates to a 21% reduction. This approach, which exceeds the Council's minimum 10% requirement, is fully supported.

Separate energy centre

- 8.89 The proposed development proposes a separate energy centre within this plot, additional to the Energy Innovation Centre already approved on the wider site. The applicant has set ambitious tight energy and carbon targets alongside a BREEAM 'excellent' target for the New Papworth Hospital (this goes beyond the requirement in the outline permission for 'very good'). In order to meet these targets, the newly proposed standalone energy centre utilises biodiesel CHP and Ground Source Heat pumps which combine to give a low energy and low carbon primary energy mix. The proposed on-site plant mix can therefore successfully deliver a low carbon and energy solution allowing the applicant to exceed their set energy and carbon targets. The onsite plant mix proposed will also allow the proposal to obtain a minimum of 6 BREEAM credits ensuring that the scheme meets its BREEAM 'excellent' target.
- 8.90 Furthermore, the separate energy centre will also provide a security of power supply to the hospital allowing it a very high level of resilience to undertake its clinical activities. Given the

- nature of the clinical activities which will take place in this hospital (heart and lung transplants), it is imperative that the operation of the hospital can rely on this security of supply.
- 8.91 In conclusion the combined ability for the hospital to successfully meet and exceed carbon, energy and BREEAM targets, alongside the critical need to provide a security of power supply suitable for the nature of the Hospitals clinical activities makes this standalone energy centre on balance the most appropriate solution for providing power to the New Papworth Hospital and provides sufficient justification for the separate energy centre. In accepting this separate energy centre it is considered that a condition for the hospital to secure BREEAM excellent is justified. The proposal is compliant with Local Plan policy 8/16 and 8/17.
- 8.92 Notwithstanding the above if the Energy Innovation Centre were to be delivered in a similar timeframe to the hospital itself, and energy plant mix was compatible, there would still be the potential for the hospital to connect into the EIC. The same condition suggested above provides a way of formalising this to ensure that any implications are controlled, and that BREEAM 'very good', the level stipulated at outline stage, would be accepted.

Waste Strategy

- 8.93 Condition 32 of the outline consent requires the details of waste storage for both trade waste and storage to be submitted and approved prior to any development of a building.
- 8.94 Waste will be stored and collected via the service yard at the eastern end of the building ensuring secure and efficient collection of waste. Waste will be stored within the 'facilities management' area proposed within the basement.
- 8.95 A full waste management policy for the hospital has been submitted to enable discharge of this condition 32. In line with EU waste management regulations and technical guidance from NHS Estates management of differing types of waste are dealt with in different ways. The strategy submitted identifies how waste such as clinical, domestic and recycling and confidential waste will be dealt with, along with sensitive aspects such as

- hazardous waste and radiological/radioactive waste will be removed.
- 8.96 This assessment and decision will be made independently of this application, but work on this proposal will not be able to commence until the outline condition has been discharged.

Construction

- 8.97 As a reserved matters application pursuant to the outline consent the construction of this proposal will have to follow the agreement procedures within the Construction Environmental Management Plan (CEMP), approved at the outline stage through condition 22. In addition to this, condition 23 of the outline consent requires a site specific Construction Method Statement to be submitted prior to commencement of development. This will help control the construction process in terms of local impacts and residential amenity. This assessment and decision will be made independently of this application, but work on this proposal will not be able to commence until the outline condition has been discharged.
- 8.98 Hours for construction work are limited to 0700hrs to 1800hrs Monday to Friday, 0800 to 1300 Saturday and at no times on Sunday or public holidays. The same hours apply to deliveries for the purpose of construction. (Conditions 26 and 27 on the outline consent).
- 8.99 The Detailed Waste Management Plan for construction has been submitted for condition discharge (outline condition 24). This assessment and decision will be made independently of this application, but work on this proposal will not be able to commence until the outline condition has been discharged.

Public Art

8.100As part of the strategic approval a public art strategy has been approved for the wider site which focuses on two main 'strands'. The CBC Artist In Residence (AIR) programme and the Circus Public Realm Commission. This proposal is deemed to have 'paid into' these strands which formed the strategic approval and therefore there is no requirement for individual reserved matters applications to input beyond this. The evolving design

- for the Circus is currently taking place which will include the main public art for the campus.
- 8.101 Notwithstanding this, the public art strategy does however encourage further art commissions and interventions funded by stakeholders, and in this context the applicants have come forward with public art proposals of their own. An arts strategy has been submitted which identifies the theme of the 'living building' and the importance of engaging the five senses for positive health and wellbeing. This theme will run through the AIR, as well as embedded arts (examining opportunities for art on the building façade and entrance area), as well as curated programmes such as a print collection and temporary events and exhibitions. The proposal therefore complies with the public art strategy approved at the outline stage. A condition is suggested (condition 12), which will require a public art delivery plan to agree the final works. This should include the process for agreement of the art and clearly set out the role the project steering group/local authority/Council's Public Art panel have in the process.

Archaeology

8.102An archaeological investigation was secured as part of the outline approval and has been undertaken for this site in advance of the planning application. The main phase of excavation has now been completed. Post excavation assessment is the next step which will involve specialist assessments to be undertaken.

Planning Obligations

- 8.103The 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.

In bringing forward the recommendation in relation to the Planning Obligation for this development officers have considered the above requirements

8.104This application is a reserved matters application pursuant to an outline consent that was approved with a section 106 agreement. Below is a summary of the mitigation measures were necessary as a result of the proposed development.

Transport

Monies secured towards the Addenbrooke's Access Road (phase 1 and 2)
Monies secured towards the Southern Corridor Area Transport Plan.
Monies for M11 junction improvements Monies towards the Cambridge Guided Bus Monies towards the Cambridge Guided Bus revenue Monies towards local transport initiatives Requirement for travel plan
Public Art
Monies secured to carry out the public art strategy
S106 monitoring
Monies towards performance monitoring
Landscape/ Ecological improvements
Monies towards ecological mitigation measures at Nine Wells Off-site landscaping
Proposed occupiers
Requirement for future occupiers to agree they fall under the terms of the local plan policy prior to application submission.

Planning Obligations Conclusion

8.105The outline permission secures adequate mitigation for all the entire build out of the CBC site. Some of the provisions above will be triggered when certain milestones in floorspace are passed. Ultimately there is no requirement for any additional S106 measures on the back of this application as it falls entirely within the parameters of the outline approval.

9.0 CONCLUSION

9.1 The proposal sits within the outline consent and has been developed in line with approved parameter plans and site wide strategic strategies, and has evolved further through detailed discussions with officers at the local authority. The design of scheme is well considered and will be a high quality building befitting of Papworth's reputation as a leading hospital. The proposal follows on an exemplar approach to sustainability that goes beyond the measure set in the outline approval. The proposal complies with the approved development plan and is therefore recommended for approval.

10.0 RECOMMENDATION

APPROVE subject to the following conditions:

1. Prior to the erection of any signage on the buildings hereby approved, details of the signage identifying the proposed location(s) size, wording and materials 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 (Local Plan Policy 3/4)

- 2. Prior to the commencement of development except underground enabling works a landscaping scheme shall be submitted which shall include:
 - a. Planting plans and written specifications for hard and soft landscaping,
 - b. Cultivation proposals for maintenance and management associated with grass establishment,

- c. Details of the mix, size, distribution, density and levels of all trees/hedges shrubs to be planted and proposed time of planting.
 - d. Tree pits showing size and type of pit including coordination with any below ground utilities.
 - e. Coordination of the landscape with above and below ground drainage features such as attenuation crates.
 - f. A strategy for the replacement planting for any trees removed on Robinson Way.

The approved landscaping scheme shall then be carried out in accordance with the approved details within the phasing agreed through outline condition 46.

Reason: In order to ensure that the landscaping proposals are complementary to the design of the building and can succeed within their setting (Local Plan Policy 3/11)

3. Prior to commencement of the development, details of the fuel source and plant associated with the energy centre, including any abatement mechanism or plant shall be submitted to and approved in writing by the Local Planning Authority.

An air quality assessment using dispersion modelling shall be carried out and submitted to the local authority to demonstrate that the stack height and abatement scheme are sufficient to prevent emissions having a significant negative impact on ambient levels of nitrogen dioxide (NO2) and particulate matter (PM10).

The proposed scheme to be submitted shall ensure that resulting emissions do not result in an increase in the annual average level of more than 1 microgramme per cubic metre of nitrogen dioxide and 1 microgramme per cubic metre of particulate matter.

The scheme as approved shall be fully carried out in accordance with the approved details before first occupation and shall be thereafter retained.

Reason: To minimise the impact of the development on air quality. Local Plan Policy 4/14

4. Prior to the instalment of any plant within the energy centre a methodology for monitoring the above emissions shall be submitted to and agreed with the local planning authority. The development shall then be maintained and monitored in accordance with the approved details.

The plant equipment shall be monitored post-installation for a proving period of every 3 months for 2 years to demonstrate compliance with the emissions limits, using UKAS accredited methods. Monitoring shall take place every 12 months thereafter and annual reports shall be submitted to the local authority for the lifetime of the plant, or until the local authority confirms in writing that the report is no longer necessary.

If monitoring results show levels beyond those expressed in the condition 3 above, a method statement to bring the levels back to the limits expressed shall be submitted to and approved by the local planning authority. Works shall then be carried out as approved and monitored.

The plant and the abatement equipment shall be associated with a written schedule of maintenance, which shall be submitted prior to installation. Annual maintenance reports shall be submitted to the Local Authority Environmental Health Department.

Reason: To ensure that emissions do not adversely impact on air quality. Local Plan Policy 4/14

- 5. Prior to any development in respect of the energy centre building approved herein, a statement confirming whether the development will either;
 - a) provide a separate energy centre approved as part of this permission, or
 - b) use the adjacent Energy Innovation Centre.

This Statement shall be submitted to the local planning authority and;

In the event of (a) above, the development shall be delivered to a minimum of BREEAM 'excellent' and upon receipt of the final certificate for the building a copy shall be submitted to the local planning authority for their records. In the event of (b) above prior to any development of the energy centre changes to the energy centre building design and/or plant shall be submitted to and approved by the local planning authority for approval, and the development shall be delivered to a minimum of BREEAM 'very good' and upon receipt of the final certificate for the building a copy shall be submitted to the local planning authority for their records.

In the event of (b) above prior to occupation of the hospital evidence shall be submitted to the local planning authority to demonstrate that a physical connection to the Cambridge Biomedical Campus Energy Innovation Centre and its associated energy network has been installed. This should include a plan showing the pipe route and connection point to the wider network, high level technical specification and date of implementation and connection.

The development shall then be carried out in accordance with the approved plans and levels of BREEAM as identified above.

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. The uplift of BREEAM from very good to excellent is required as justification for the separate energy centre proposed. (Local Plan Policy 8/16)

6. Prior to occupation, a scheme to minimise the level of noise emanating from plant including the VIE associated with the development shall be submitted to and approved in writing by the Local Planning Authority. This scheme shall ensure that the rating level of the noise at the boundary of the premises hereby approved (having regard to noise sensitive premises) is less than or equal to the plant noise limits for positions 1, when relative to the Addenbrooke's Treatment Centre building and position 2 for all other boundaries as shown in Table 1: Lowest measured background noise levels and plant noise limits on page 10 of the Noise Statement by SRL dated 23 October reference: C/12938A/T048b. The scheme as approved shall be fully implemented before first occupation.

Reason: To protect the amenity of nearby properties. Local Plan Policy 4/13

7. Prior to occupation a post construction / installation verification / completion report for the development to incorporating details of the plant installed, including the emergency generators, and demonstrating compliance with the approved noise insulation scheme 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. Local Plan Policy 4/13

- 8. Before the development hereby permitted is occupied, a scheme for the insulation of the building(s) and/or emergency generator plant in order to minimise the level of noise emanating from the said building(s) and/or emergency generator 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. 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. Local Plan Policy 4/13

9. There shall be no deliveries to, or refilling of, the vacuum insulated evaporator (VIE) plant other than between the hours of 0700hrs and 1900hrs.

Reason: To protect the amenity of nearby properties. Local Plan Policy 4/13

10. Before the development hereby permitted is commenced, except for underground enabling works details of equipment for the purpose of extraction and/or filtration of fumes and or odours 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.

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

11. 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 (Policies 3/7, 3/12 and 8/18 of the Cambridge Local Plan).

12. Prior to occupation details of the final public art proposals in the form of a public art delivery plan shall be submitted to and approved in writing by the local planning authority. The public art proposals shall be carried out in accordance with the approved details and within the timescales specified in the agreed document.

Reason: To ensure the adequate provision of public art on the site (Policies 3/7 of the Cambridge Local Plan).

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

NPH-HOK-0-AP-LL-PP-00-1001 REDLINE NPH-HOK-0-AP-LL-PP-00-1002 **LOCATION PLAN** NPH-HOK-0-AP-LL-PP-00-1003 SITE ACCESS PLAN NPH-HOK-0-AP-LL-PP-00-1004 SITE ACCESSIBILITY PLAN NPH-HOK-0-AP-LL-PP-00-1005 SITE KEY DIMENSIONS **PLAN** NPH-HOK-0-AP-LL-PP-00-1006 **EXISTING SITE LEVELS** NPH-HOK-0-AP-LL-PP-00-1010 LANDSCAPING KEY PLAN NPH-HOK-0-AP-LL-PP-00-1011 ENLARGED PLAN. LANDSCAPE GA - WEST NPH-HOK-0-AP-LL-PP-00-1012 ENLARGED PLAN, LANDSCAPE GA - EAST DEPARTMENT STACKING NPH-HOK-2-AP-ZZ-PP-00-1021 DIAGRAM FLOOR PLAN - BASEMENT NPH-HOK-2-AP-B1-PP-00-2001 NPH-HOK-2-AP-0-PP-00-2002 FLOOR PLAN - GROUND NPH-HOK-2-AP-1-PP-00-2003 FLOOR PLAN - FIRST FLOOR PLAN - SECOND NPH-HOK-2-AP-2-PP-00-2004 NPH-HOK-2-AP-3-PP-00-2005 FLOOR PLAN - THIRD NPH-HOK-2-AP-4-PP-00-2006 FLOOR PLAN - FOURTH NPH-HOK-2-AP-5-PP-00-2007 FLOOR PLAN - FIFTH NPH-HOK-2-AP-RA-PP-00-2008 FLOOR PLAN -ROOF **ACCESS** NPH-HOK-2-AP-RF-PP-00-2009 FLOOR PLAN - ROOF **ENTRANCES** NPH-HOK-2-AP-0-PP-00-4001 ACCESSIBILITY 1/2

NPH-HOK-2-AP-0-PP-00-4002 ENTRANCES

ACCESSIBILITY 2/2

NPH-HOK-2-AP-XX-PP-00-5001 EXTERIOR ELEVATIONS

NORTH-SOUTH

NPH-HOK-2-AP-XX-PP-00-5002 EXTERIOR ELEVATIONS

EAST-WEST

NPH-HOK-3-AP-ZZ-PP-00-5003 ENERGY CENTRE

NPH-HOK-3-AP-ZZ-PP-00-5004 GAS GOVERNOR

ENCLOSURE

NPH-HOK-2-AP-XX-PP-00-7001 SECTION AA & BB

NPH-HOK-2-AP-XX-PP-00-7002 SECTION CC & DD

NPH-HOK-2-AP-ZZ-PP-00-8001P02 EXTERIOR DETAIL -

PAVEMENT LIGHT

NPH-HOK-0-AP-XX-PP-00-X001 SITE MASSING VIEWS 1

NPH-HOK-0-AP-XX-PP-00-X002 SITE MASSING VIEWS 2

Drainage Strategy NPH-STL-01-RP-XX-CD-92-0061

Ecology Statement 3 September 2014

Noise Statement C/12938A/T048b

Reason: To facilitate any future application to the Local Planning Authority under Section 73 of the Town and Country Planning Act 1990.

INFORMATIVE: Underground Enabling Works

Underground enabling works for the purpose of the above conditions is defined as earth movement, site preparation, digging out of basement area and piling (instalment of pile caps and ground beams).

This is because enabling works and piling in the instance of this approval, will not prejudice the discharge of conditions worded as 'prior to the commencement, except for underground enabling works'.

INFORMATIVE: Plant noise insulation

To satisfy condition 6 (Noise Insulation), the rating level (in accordance with BS4142:1997) from all plant and equipment including the VIE, 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 5 dB(A) correction. This is to guard against any creeping background noise in the area and 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 5 minute period),

It is recommended that the agent/applicant submits a noise prediction survey/report in accordance with the principles of BS4142: 1997 "Method for rating industrial noise affecting mixed residential and industrial areas" 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.

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

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

INFORMATIVE: Emergency or Backup Generator

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.

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) an increase of not more than 10 dB(A) at the boundary of the premises subject to this application and having regard to noise sensitive premises may be applied.

INFORMATIVE: Kitchen Odour/Fume Filtration/Extraction

To satisfy standard condition C60 (Odour/Fume Filtration/Extraction), details should be provided in accordance with Annex B of the, "Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems," prepared by Netcen on behalf of Department for Environment, Food and Rural Affairs (DEFRA) dated January 2005 available at:

http://webarchive.nationalarchives.gov.uk/20130123162956/http://www.defra.gov.uk/environment/quality/noise/research/kitchene xhaust/documents/kitchenreport.pdf

INFORMATIVE: Health and Safety

As parts of the development are intended to be run as businesses, the applicant is reminded of their duty under the Construction (Design and Management) Regulations 2007 to ensure that the that all significant risks related to the design and operation of the premises are minimised. Contact the Health and Safety Executive for further information on 03000 031747.

INFORMATIVE: Food Safety

The applicant is reminded that under the Food Safety Act 1990 (as amended) the supermarket and any other premises run as a food business will need to register with Cambridge City Council. In order to avoid additional costs it is recommended that the applicant ensure that food areas including food preparation and food storage areas comply with food hygiene legislation, before construction starts. Contact the Commercial Team of the Refuse and Environmental Service at Cambridge City Council on telephone number (01223) 457890 for further information.

INFORMATIVE: Approved CBC Parking Strategy

Attention is drawn to the current Updated Parking Strategy which requires the opening of MSCP3 to allow the opening of Papworth Hospital. This will be drawn to the attention of the strategic land developer by the local authority.

Appendix 1- Cambridge Biomedical Campus Approved Floorspace

Floorspace Type	Biomedical and Biotech R&D (B1(b))	Clinical research and treatment (D1 and/or clinical in-patient	Clinical research and treatment (D1 and/or clinical in-patient treatment) OR Higher Education OR	Biomedical and Biotech R&D (B1(b)) OR Clinical research and treatment (D1 and/or clinical in-patient	Total
Approved by outline permission Square metres	115,000	60,000	25,000	15,000	215,000
LMB Building (07/0651/FUL)	25,209	-	-	-	25,209
New Papworth Hospital (14/1411/REM	-	33,300	-	-	33,300
AstraZeneca (14/1633/REM)	59,821	-	-	-	59,821
Total Approved	25,209	0	0	0	25,209
Total Pending	59,821	33,300	0	0	93,121
Total remaining	29,970	26,700	25,000	15,000	96,670

Key	
Approved	
Pending	