



South
Cambridgeshire
District Council

Report to: Joint Development Control Committee 16 March 2022

Lead Officer: Joint Director of Planning and Economic Development

21/04336/REM – Land to the West and South West of Addenbrookes Campus, Robinson Way, Addenbrookes Hospital, Cambridge (Queen Edith’s Ward)

Proposal: Reserved Matters application pursuant to 06/0796/OUT (as amended by 21/01584/S73) for a new Cambridge Children’s Hospital (CCH), hard and soft landscaping, internal roads, and ancillary infrastructure. Discharge of Condition 14 (Amenity Space Strategy) pursuant to outline approval 06/0796/OUT.

Applicant: Cambridge University Hospitals NHS Foundation Trust

Key Material Considerations:

- Principle of development
- Context of site, design, and external spaces
- Access and transport
- Environmental considerations
- Impact on residential amenity
- Third party representations

Date of Member site visit: N/A

Is it a Departure Application?: No

Decision due by: 18.03.2022 (Extension of Time)

Application brought to Committee because: This is an application for major development within the JDCC administrative area.

Presenting Officer: Philippa Kelly, Strategic Sites Delivery Manager

Executive Summary

- 1.The proposal is for a new Cambridge Children’s Hospital on land within the Cambridge Biomedical Campus. It follows the granting of outline planning permission in 2009 for Phase 1 of the campus development and is the last reserved matters application to come forward under this permission.
- 2.The proposed Cambridge Children’s Hospital building would meet an identified local and regional health care need on the Addenbrookes campus. It will be a visionary new children’s hospital, which will combine the mental and physical treatment of children, through combined research and healthcare treatment.
- 3.The proposals would deliver new accommodation for children’s health services over six floors (including a basement level, interstitial plant floor and roof level plant), along with biomedical research accommodation for the University of Cambridge
- 4.Sustainable design and construction has played a significant role in determining the design of the scheme. A net zero carbon route map has been proposed in order to demonstrate compliance with the emerging NHS Net Zero Carbon Buildings Standard. The building also aspires for BREEAM ‘outstanding’ rating, which exceeds the requirements of the outline planning approval (requiring a BREEAM ‘very good’ rating).
- 5.This reserved matters application proposal accords with the Parameter Plans approved under the outline planning permission. The proposals would deliver a high quality and well-designed scheme which seeks to be one of the most sustainable hospitals in the United Kingdom.
- 6.The application also seeks to discharge Condition 14 of the outline planning approval 06/0796/OUT, which relates to the informal amenity space strategy. The landscape proposals reflect the CCH core values which contribute to providing a positive environment for patients, visitors and staff.

Recommendation

- 7.The application proposals are **recommended for approval**, subject to the conditions and informatives set out at the end of this report, with authority delegated to officers to undertake appropriate minor amendments of those conditions and informatives prior to issue of the planning permission.
- 8.The information submitted to demonstrate the discharge of Condition 14 of 06/0796/OUT (informal amenity space strategy) has been accepted, and the recommendation is for this **condition to be discharged**.

Relevant Planning History

9. Within the CBC Phase 1 site and Strategic Masterplan area, a number of key developments have been delivered or under construction.

The relevant site history is as follows:

Planning Reference	Description	Outcome
21/04337/FUL	Construction of an underground service corridor to serve the proposed new Cambridge Children's Hospital.	Current planning application
21/02526/S73	Retention and continued use of Regional Surge Centre 40 (RSC 40), ancillary buildings and infrastructure constructed pursuant to planning permission granted under Schedule 2, Part 12 A, Class A of the GPDO (2015) (As Amended) without compliance with conditions A.2. (b) (time period) and condition A.2(c) (use of land) of that planning permission.	Granted 11 October 2021
21/03510/SCRE	Screening request under EIA Regulations 2017: Reserved matters application pursuant to outline consent 06/0796/OUT for the Cambridge Children's Hospital.	Screening request issued 02 September 2021 – no EIA required.
Various S73 applications, most recently 21/01584/S73	AstraZeneca variation of CBC outline re construction hours.	Granted.
06/0796/OUT	Phase 1 Cambridge Biomedical Campus: Up to 215,000 sqm of floorspace (excluding plant areas) comprising 60,000sqm of clinical research and treatment (D1 and/or clinical in-patient 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 in-patient treatment), and 25,000sqm of either clinical research and treatment (D1 and/or clinical in-patient treatment) or higher education or sui generis medical research institute uses, and including related support activities within use classes A1, A3, B1, D1 (creches/nurseries) or sui generis uses, with no individual premises used for support activities to exceed 500sqm; new areas of public realm;	Granted 15 October 2009

	landscaping; parking areas; highway works; drainage works and all other associated infrastructure.	
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Planning Policies

National Guidance

- 10. National Planning Policy Framework (NPPF) 2021
- National Planning Practice Guidance (NPPG)
- National Design Guide (NDG)
- Local Transport Note 1/20 (LTN 1/20) Cycle Infrastructure Design

Cambridge Local Plan (CLP) 2018

- 11. Policy 1: The presumption in favour of sustainable development.
- Policy 5: Strategic transport infrastructure.
- Policy 8: Setting of the city.
- Policy 14: Areas of Major Change and Opportunity Areas – general principles.
- Policy 17: Cambridge Biomedical Campus (including Addenbrooke’s Hospital Area of Major Change).
- Policy 27: Site specific development opportunities.
- Policy 28: Carbon reduction, community energy networks, sustainable design and construction, water use.
- Policy 29: Renewable and low carbon energy generation.
- Policy 31: Integrated water management and the water cycle.
- Policy 32: Flood Risk.
- Policy 33: Contaminated land.
- Policy 34: Light pollution control.
- Policy 35: Protection of human health and quality of life from noise and vibration.
- Policy 36: Air quality, odour and dust.
- Policy 37: Airport safeguarding.
- Policy 42: Connecting new development to digital infrastructure.
- Policy 55: Responding to context.
- Policy 56: Creating successful places.
- Policy 57: Designing new buildings.
- Policy 59: Designing landscape and the public realm.
- Policy 61: Conservation and enhancement of Cambridge’s historic environment.
- Policy 68: Open space and recreation provision through new development.
- Policy 70: Protection of priority species and habitats.
- Policy 71: Trees.
- Policy 80: Supporting sustainable access to development.
- Policy 81: Mitigating the transport impact of development; and
- Policy 82: Parking management.

The application site lies within site M15 of the Cambridge Local Plan 2018 Policies Map (Cambridge Biomedical Campus (including Addenbrooke’s Hospital)).

Supplementary Planning Documents (SPD)

12. Greater Cambridge Shared Planning Sustainable Design and Construction SPD (2020).
Cambridgeshire Flood and Water SPD (2016).
Cambridgeshire and Peterborough Waster Partnership (RECAP): Waste Management Design Guide (February 2012).

Other Material Considerations

13. Cambridge University Hospitals NHS Foundation Trust (CUH) Strategic Masterplan (2010).
Cambridge City Council Public Art SPD 2010.

Publicity

- | | |
|------------------------|-----|
| 14. Advertisement | Yes |
| Adjoining Owners: | Yes |
| Site Notice Displayed: | Yes |

Consultation

15. The response of consultees and third parties have largely been summarised. The full responses are available on Council's public access website.

16. Cambridgeshire County Council (Highways Development Management)

No objection. The proposed works are located at a considerable distance from the nearest adopted public highway, therefore, no significant adverse effect upon the Public Highway should result from this proposal, should it gain benefit of Planning Permission.

17. Cambridgeshire County Council Lead Local Flood Authority (LLFA)

Application as Amended: Remove objection. The documents submitted demonstrate that surface water from the proposed development can be managed on site and discharged to the existing swale previously designed to accommodate drainage at the site and wider area.

Application as Submitted

Objection for reasons relating to the hydraulic calculations; capacity of existing swale; details of adoption/maintenance of the drainage system; approach to assessing water quality of surface water runoff.

18. Cambridgeshire County Council Archaeological Officer

Confirms agreement to approach outlined in the archaeology memo.

19. Cambridgeshire Quality Panel (Pre application meeting 02 August 2021)

No objection. Comments provided relating to the following:

- The relationship of the scheme to the wider site and emerging new Masterplan.

- Connectivity to and within the hospital campus.
- Design of green and public spaces.
- The user experience.

20. Greater Cambridge Shared Planning Service Urban Design Team

Application as Amended:

Comments. Overall the updated drawings and accompanying information are supported.

Application as Submitted:

No objection. Detailed comments provided. The proposals are considered acceptable in urban design terms. A number of minor clarifications and amendments are needed to the public realm, but these could be resolved through the discharge of conditions process. Recommends conditions relating to materials, sample panel, cycle parking, wayfinding and signage, internal landscape, courtyard and breakout spaces.

21. Greater Cambridge Shared Planning Service Landscape Officer

Application as Amended:

No objection. Comments. No objection. Comments. Recommends conditions relating to hard and soft landscape works; topsoil and subsoil specification; irrigation methods; green and blue roof; soft landscape works and gas store.

Application as Submitted:

No objection. Comments. Requests further information.

22. Greater Cambridge Shared Planning Service Sustainable Design and Construction Officer:

No objection. Detailed comments provided. The overall approach being taken is welcomed, and the proposed scheme is supported in sustainable construction terms.

23. Greater Cambridge Shared Planning Service Conservation Section:

No objection. No material conservation issues.

24. Greater Cambridge Shared Planning Service Access Officer

The application proposals were presented to a meeting of the Disability Consultative Panel on 27 July 2021. Panel praised the presenters for their thoughtful approach to a much-needed facility. Detailed comments provided.

25. Cambridge City Ecologist:

Application as Amended

Content with the information submitted.

Application as Submitted

No objection. Comments. Requests completed DEFRA BNG Metric which clarifies assumptions made on existing and new habitat condition and demonstrates how the proposed BNG will be provided.

26. Cambridge City Sustainable Drainage Engineer:

The development proposed is acceptable subject to the imposition of conditions relating to details of the surface water scheme, details of the construction, flood

resilience measures, flood resilience works timing, surface water drainage scheme verification and foul drainage.

27. Cambridge City Health and Environmental Services:

No objection. The development is acceptable subject to conditions/informatives relating to the following: Noise Insulation Scheme; Servicing Collections and Deliveries Times; Standby Emergency/Back Generator Operation.

28. Cambridgeshire Fire and Rescue:

No objection. Comments. Requests adequate provision be made for fire hydrants should the scheme be approved.

29. Environment Agency:

No objection. Recommends informatives relating to environmental permitting and contaminated land.

30. Anglian Water:

Comments. Requests foul water drainage strategy to show proposed discharge rate from the pumping station, which demonstrates that there will be no increased risk of flooding in the downstream network. Requests to be consulted on any forthcoming application to discharge Condition 21 of the outline planning application 06/0796/OUT (detailed foul drainage information).

Advises that surface water management comments will subsequently be provided in respect of the submitted surface water drainage information.

31. Shared Waste Commercial Waste Manager:

No comments received.

32. Cambridgeshire Constabulary Designing Out Crime Officer:

No comments to make.

33. Cambridge Airport:

No comments received.

Representations

34. One representation was received from the occupant of 28 Vawser Way, Cambridge, objecting to the application on the following grounds:

- Impact of noise associated with the development on local residential amenity.
- Impact of increased car parking on adjacent residential streets.

The Site and Surroundings

35. The Cambridge Biomedical Campus (CBC) comprises biomedical research, patient care and education on a single site. It is located south of Cambridge City centre, accessed via the Cambridgeshire Guided Busway and via Long Road to the north, the

Hills Road/Fendon Road/Robinson Way Roundabout to the east, and from the south-west via Addenbrooke's Road.

36. The application site occupies a central location at the heart of the CBC, which was consented in 2009 through the outline planning permission for Phase 1 (06/0796/OUT). It is located to the south of Robinson Way and the existing Rosie Maternity Hospital to the north. It is bounded by Robinson Way to the north. The southern and eastern boundaries are formed by Dame Mary Archer Way.
37. The southern site boundary is edged with swales, gabion walls and hedges which form part of the water retention infrastructure of Dame Mary Archer Way. There is a row of pine trees on the northern boundary. Young trees have also been planted along Dame Mary Archer Way to the east and south of the site, alongside the swales. In total, the site contains 26 individual trees, one area of trees, and two hedges.
38. Immediately to the west of the application site is the temporary 40 bed Regional Surge centre (RCS) which forms part of the CUH Covid-19 response. Further to the west is a vacant plot of land which forms the residual CBC Phase 1 Land.
39. To the south of Dame Mary Archer Way is 'CBC Phase 2' which is partially built out with the ABCAM development and the Addenbrooke's helipad, beyond which is 'CBC Phase 3', which is identified as a Site Allocation E/2 in the South Cambridgeshire Local Plan (2018).
40. The nearest residential properties to the application site are situated approximately 50m to the south-east, on Vawser Way.
41. CCH forms part of the wider Addenbrooke's Masterplan which was prepared for the site in 2010 by Allies and Morrison and is currently in the process of being updated on behalf of the Cambridge University Hospitals NHS Foundation Trust.
42. CCH is a partnership between Cambridge University Hospitals, NHS Foundation Trust (CUH), Cambridgeshire and Peterborough NHS Foundation Trust (CPDT) and the University of Cambridge.

The Proposal

43. This is a RMA for access, appearance, landscaping, layout and scale, pursuant to 06/0796/OUT (as amended) for a Cambridge Children's Hospital (CCH) of approximately 46,300 square metres. The scheme also proposes hard and soft landscaping, and internal roads and ancillary infrastructure.
44. The proposed accommodation will be provided over six floors, including a basement level, interstitial plant floor and roof level plant. Critical care, operating theatres, day surgery accommodation and in-patient mental and physical health wards are provided for children and young people from birth until they are nineteen. Space is also

provided for imaging and radiology, staff and dedicated family areas, biomedical research, and public reception and café space.

45. At the heart of the building is a central integration hub. This will contain all of the primary circulation spaces for the scheme and provides links between clinical accommodation and shared space for non-clinical activities.
46. The proposals have been designed to a framework which seeks to provide adaptability over time. Three types of spaces are proposed: high tech, medium tech and plant space. High tech accommodation is located in the lower two-storey plinth and is served by the interstitial plant floor above. This space provides for the operating theatres, critical care, laboratories and other heavily serviced spaces.
47. Medium tech accommodation is housed in the upper floors. This generally provides ward accommodation, where patients spend the longest periods of time, and where there are opportunities to maximise access to natural daylight. This also provides opportunities for long distance views out of the hospital and over the Cambridgeshire landscape.
48. The main entrance to the hospital will be on Robinson Way opposite the main entrance to the Rosie Maternity Hospital, the principal route connecting the site to the remainder of Addenbrooke's Hospital. A secondary entrance will be provided to the east, off Dame Mary Archer Way. This secure entrance provides a less public entrance as well as ambulance pick up and drop off, and deliveries.
49. The design of the new landscape surrounding CCH reflects several core values which respond to the programme requirements, as well as addressing placemaking and identify. The four core values for landscape are green, playful, legible and integrated. Together they contribute to the aim of providing a healthy and restorative place which illustrates the positive effects that access to nature has on patients, visitors and staff.
50. Access to the outdoors is a key consideration of the design response, with access within the building provided to many outdoor spaces such as ward gardens and terraces. In addition, external amenity space is provided, including the north forecourt along Robinson Way, gardens, courtyards, green links and a south perimeter meadow.
51. The submission ensures that the existing structural landscape buffer along the Dame Mary Archer way frontage (as identified in the approved outline Parameter Plan 1) is retained. This is extended to include a band of landscaped planting along the south and east of the site, including park trees of mixed species.
52. The landscape approach includes a green perimeter of landscaping around the building. This creates a soft edge and naturalistic buffer between the building and surroundings. It also seeks to introduce new and replacement tree planting, and a green link along the western edge of the plot, aligning to wider CBC connectivity ambitions, by offering pedestrian and cycle routes across the wider campus.

53. Cycle parking is to be provided for visitors and staff. Staff cycle parking is covered and secure. Visitor spaces will be located mainly along the north forecourt and situated close to the main entrance. Standard Sheffield visitor parking is also to be located along the southern edge of Robinson Way, and cargo cycle spaces with wider spacing located underneath the building overhang, close to the main entrance. Cycle parking is also to be provided adjacent the bus stops on Dame Mary Archer Way.
54. Limited car parking is provided in the north-east corner of the site, for blue badge holders, ambulance parking and carpool spaces which are required to be placed on site. Four blue badge drop-off parking spaces north of the main entrance along Robinson Way provide access for blue badge drivers.

Pre-application Engagement

55. Throughout the design process, the project team have engaged extensively with the clinical user groups and various stakeholders to develop the brief for the building. A series of workshops to engage with patients and gather feedback to inform the vision for the future hospital have also been held.
56. The development proposals have been the subject of detailed pre-application dialogue with officers since April 2021, as well as technical sessions relating to Design, Drainage and Environmental Health Issues. In July and August 2021, the pre-application scheme was reviewed by the Disability Consultative Panel, the Cambridgeshire Quality Panel and presented to the Joint Development Control Committee.

Application Documents

57. In addition to the application forms, covering letter and architectural drawings, the application is accompanied by the following supporting information:

- Planning and Consultation Statement (September 2021)
- EIA Statement of Conformity
- Design and Access Statement Rev P01 (September 2021)
- Amenity Space Strategy
- Ecological Impact Assessment and Biodiversity Design Opportunities Statement
- Drainage Strategy and SUDS Report
- Cycle Parking Strategy Note (13 September 2021)
- Air Quality Statement of Conformity
- Noise Statement
- Contaminated Land Technical Note (10 September 2021)
- Energy Strategy
- Gas Enclosure Technical Note
- Extraction Equipment Report
- Arboricultural Survey, Method Statement and Tree Protection Plans
- Archaeology Memo
- Fire Statement

Amended Plans and Additional Information

58. Following the statutory consultation period and initial officer assessment of the application, additional information was submitted to the Local Planning Authority for review. These revisions relate to the following formal submission:

Covering letter dated 17 December 2021 and accompanying information:

- **Ecology:** Ecology Addendum and Biodiversity Net Gain Addendum

This information was submitted in response to initial consultation comments made by the City Council Nature Conservation Officer, requesting the clarification of the ecological proposals and provide the Metric (calculation and methodology) to the Biodiversity Net Gain.

- **Landscape:** Landscape Response Document and updated landscape drawings.

Submitted in response to initial consultation comments made by the GCSPS Landscape Officer. The Response Document identifies on an item-by-item basis the matters raised and describes the associated updated landscape drawings. The updates involve refinements to the landscape scheme and did not necessitate any significant changes.

- **Drainage:** Drainage Technical Memo, Updated Drainage Strategy, Updated Drainage Drawings, Updated Drainage Calculations.

Submitted to address comments made by Anglian Water and the Local Lead Flood Authority. The Technical Memo provides clarification and explains the changes to the drainage drawings. The updates involve refinements to the drainage scheme and have not necessitated any significant changes.

- **Architectural:** Updated Building Drawings (Windows), Design and Access Statement Addendum.

The ongoing detailed scheme design led to some minor realignments to the building windows to better serve the intended function and arrangement. The character and general appearance of the external elevations remain as per the original submission. The Addendum document presents and explains this change.

In addition, queries were addressed through the submission relating to noise and construction phasing.

Discharge of Condition

59. In addition to the RMA, the submission also seeks the discharge of Condition 14 of the outline planning permission (Amenity Space Strategy) as it relates to the Cambridge Children's Hospital proposal.

Planning Assessment

60. From the consultation responses and representations received and from an inspection of the site and the surroundings, the key issues are:

- Principle of development
- Context of site, design, and external spaces
- Access and transport
- Environmental considerations
- Impact on residential amenity
- Third party representations

Principle of Development

61. The principle of biomedical research and development on the development plot was established under the outline planning permission and Policy 17 of the Cambridge Local Plan 2018 relating to the Cambridge Biomedical Campus Area of Major Change.

62. Policy 17 of the Cambridge Local Plan 2018 relating to the Cambridge Biomedical Campus Area of Major Change supports development where it can be demonstrated that development is required to meet a local, regional or national health care need or for biomedical and biotechnological research and development activities within class B1(b), related higher education and sui generis medical research institutes.

63. Phase 1 related to 215,000 sqm of floorspace comprising 60,000sqm of clinical research and treatment (D1 and/or clinical in-patient 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 in-patient treatment), and 25,000sqm of either clinical research and treatment (D1 and/or clinical in-patient treatment) or higher education or sui generis medical research institute uses, and including related support activities within use classes A1, A3, B1, D1 (creches/nurseries) or sui generis uses.

64. The proposed CCH Building would meet an identified local and regional health care need on the Addenbrookes campus, and thus is acceptable in principle.

Compliance with the Outline Planning Permission and Parameter Plans

65. Outline consent for the expansion of the CUH and CBC was granted planning permission in October 2009. The outline planning permission was supported by a number of Parameter Plans (PP) relating to land use, building heights and building envelopes, which together establish the principles of the subsequent development of the site:

66. Condition 6 of the outline planning permission requires '*development to be substantially in accordance with the parameters*'. The parts of Condition 6 relevant to the assessment of this application are a, b, c, d and f as follows:

- (a) Maximum building heights above ground (including roof level plant but excluding flues) shall not exceed those specified on approved plan PP2.

- (b) Maximum building envelopes shall not exceed those specified on approved plan PP2.
- (c) Building lengths and widths shall accord with the maximum and minimum parameters as specified in the text to approved plan PP3.
- (d) Building heights above ground level shall be no lower than those specified on approved plan PP4.
- (f) Building façades facing south onto the southern spine road shall occupy no more than 60% of their plot width, as measured from and along the southern spine road, within 12m of the boundary with the southern spine road.

- Land Uses

67. Land Uses are identified in PP1 and the scheme is wholly compliant with the uses as identified. In addition, the development is considered to deliver a meaningful landscape buffer as identified on this Parameter Plan.

- Scale, Massing, Building Heights and Building Lines

68. PPs 2 – 5 cover scale and massing (including the maximum and minimum allowable heights of buildings and the maximum and minimum lengths of buildings). PP2 and PP4 also establish the allowed building lines for development and percentages of south facing façades that occupy the building line.

69. PP2 allows an overall maximum height of 36m (excluding flues) to the northern part of the development site and a requirement to step down to 26m to the south. The CCH will be a maximum of 30.4m in the northern (36m maximum) section and 26m in the southern (26m maximum) section. Accordingly, the overall building heights of the proposed building are consistent with this PP.

70. PP2 also establishes the building lines to which any proposals can build to. The proposed northern, eastern and western edges of the building accord with this PP. A blue dashed line also identifies a maximum building extent towards Dame Mary Archer Way to the south.

71. As part of early pre-application engagement on the building form, required footprint and internal organisation, the Applicant established a need for the building line to the south to be 6.5m beyond that identified on PP2 and PP4. As part of these discussions, the ability to deliver meaningful planting in the landscape buffer to the south of the plot to include forest scale trees and safeguard views from the south were taken into careful consideration. It should be noted that Phase 2 of the CBC development allows buildings of up to 46.5m (AOD), approximately 31.3m in height.

72. The proposed scheme allows for the delivery of the required landscape and a step down (as required through PP2) is still being proposed. The maximum building height of 30.4m is also below the maximum allowed through PP2. As such (and given the wording of Condition 6), the amended building line to the southern section of the site is

supported. Officers are of the view that this does not create additional harm to the setting, or the views that supported the outline application.

- Continuous Frontage

73. PP2 and PP4 seek to control the maximum continuous frontage that can occupy the southern boundary. Wording in Condition 6(f) of the outline permission requires that buildings occupy no more than 60% of their plot width to Dame Mary Archer Way and for the remaining façades to be set back at least 12m from this line.

74. PP2 and PP4 identify a blue dashed line set 26m back from Dame Mary Archer Way. Whilst building plots are not identified on these PP's, buildings can occupy up to 60% of the total plot. The balance of the southern façade is to be set back by at least 12m from the blue dashed line.

75. Officers note that the proposed building is set 6.5m further south than the PP2 and PP4 line. This approach has been accepted given that it is considered to be 'substantially in accordance with' the building lines, as required by associated planning Condition 6(f). The plot width, which includes the green corridor to the west and the landscaped space to the east, along the alignment of the blue dashed line is approximately 127m.

76. The proposed hospital has a total frontage of approximately 69m, located 6.5m forward of the blue dashed line. A recessed section on the southern façade is approximately 15m long and set back 12m from the southern façade. It is the view of officers that, once the development is completed, the hospital will be consistent with the requirements of PP2 and PP4 in terms of the required setback sections and maximum 60% continuity of the south facing façades.

77. On the basis of the above evaluation, officers are satisfied that the proposed development is in general accordance with the land use, building heights and building envelopes parameters set by the outline planning permission. In conclusion, there are no objections to the principle of the development and the parameters established through the outline planning permission would be met.

CUH Masterplan (January 2010)

78. A strategic vision for the CUH Addenbrooke's site was set out in a masterplan prepared by Allies & Morrison which was published in January 2010. This set out guiding principles for restructuring the site and externalising entrances and activating a street-based approach to the campus. The strategic masterplan establishes the guiding principles to support the development of the wider CBC and sets the direction to ensure integration of development on the CBC Phase 1 land, as well as within the wider CBC Campus.

79. Whilst the CUH masterplan was not formally adopted by the Council, reference is made to the masterplan at paragraph 3.51 of the supporting text to Policy 17 of the Cambridge Local Plan (2018). Discussions on an update to the masterplan are currently underway.

80. Part of the campus transformation is to either establish or strengthen links to both east-west and north-south directions. This approach will help to create a more legible campus and a better-connected series of streets and open spaces. The proposed CCH largely follows the principles identified in the masterplan, and in particular responds to the future north-south link that passes between the Addenbrooke's Treatment Centre and Rosie Hospital. It creates a 'centre of gravity' to the north-west corner of the application site, providing a rationale for the location of the entrance forecourt and connections across Robinson Way.

81. Officers note that the 'centre of gravity' is located away from the public realm and corner identified in the masterplan at the junction of Dame Mary Archer Way and Robinson Way to the north-east. For reasons of hospital planning, it was not considered possible to deliver the hospital entrance in this location. Notwithstanding this, the public realm design, connection to the bus stop and architectural approach mean that this space is well integrated into the overall approach.

Environmental Impact Assessment

82. The outline planning application for the development of Phase 1 of the CBC fell within the remit of the Town and Country Planning Environmental Impact Regulations ('the EIA Regulations'). An Environmental Statement (ES) was submitted with that application, which identified the likely significant environmental effects of that development.

83. The application proposals are not considered to result in any significant environmental impacts which were considered over and above the original Environment Statement which accompanied the outline planning application. A formal screening opinion request was submitted to the local planning authority under the EIA Regulations 2017, prior to submission of the RMA. The Council's screening response issued in September 2021 confirms that the application proposals are not EIA development.

84. The RMA is accompanied by a statement of conformity of the proposals against the parameters assessed by the 2006 EIA. This demonstrates that the proposed development is substantially in accordance with the approved outline consent and concludes that the proposals are unlikely to give rise to any new significant environmental effects over and above those assessed in the 2006 EIA. Officers agree with this conclusion.

Principle of Development - Conclusion

85. The proposed development of this allocated site will play a key role in delivering the final part of the vision identified for Phase 1 of the CBC through outline planning permission 06/0796/OUT. Subject to specific policy criteria being met (and other material considerations satisfied as discussed below) the proposals are acceptable in principle. The proposed development is therefore in accordance with Policy 17 of the Cambridge Local Plan 2018.

Context of Site, Design and External Spaces

86. The design of the scheme is based on a number of key principles (integration, healing, sustainability, access to the outdoors, homely, adaptability, playful) developed through co-design and collaboration with stakeholders, including patient groups, local charities and clinicians.
87. The evolution of the detailed design and appearance of the CCH is well illustrated and summarised within the submitted Design and Access Statement (DAS). It follows advice offered by the Greater Cambridge Shared Planning Service (GCSPS) Urban Design Officer during pre-application discussions. The scheme has also been considered by Cambridgeshire Quality Panel.
88. The proposed site layout responds to the constraints of the site and the approved outline PP's and planning conditions. The layout, form and scale of the proposal has evolved during pre-application discussion in collaboration with officers and in response to Quality Panel feedback.
89. The design principles have resulted in an organisational plan of the building with three main blocks organised around a central integration hub. The hub creates a legible plan which offers good visibility of the horizontal and vertical circulation routes from the heart of the hospital. A series of break out spaces connect to the central organisational hub creating a variety of scales of space and opportunities for activity at different levels within the hospital building.
90. The approach is supported in design terms, which will create a welcoming and easily understood building for patients and visitors with a good level of ground floor activity helping to engage with the public realm. In accordance with the advice offered by the GCSPS Urban Design Officer, details of signage and wayfinding have been secured by planning condition **(Condition 5: Wayfinding and Signage)**.

Scale and Massing

91. The scale and massing of the building is consistent with the overall envelope established through the PPs as part of the outline approval. A series of views have been submitted to show the proposed building massing in its context. These show how the proposed development will be seen against the established backdrop of the existing hospital buildings.
92. The proposals seek to further model this envelope to respond to the prevailing site context whilst delivering the required floorspace and spatial organisation needs of the hospital. At the pre-application stage, the relationship with the Rosie Hospital to the north, and how the entrance of the building would be read as part of the elevation were a key consideration.
93. The building heights PP allows for a building that is considerably taller than the Rosie Hospital, which presents a challenge in terms of how to achieve a convincing relationship between the different building 'massings' and a good street section. The approach taken by the CCH is to establish a 'datum' that forms a plinth to the new

hospital, and which aligns with the parapet of the Rosie Hospital opposite. The interstitial floor then forms a clear break between the lower plinth and the floors above.

94. Notwithstanding the approved massing envelope, the shadow impact of the proposed hospital on the Rosie Hospital forecourt space has been assessed through a Sunlight Study (page 166 of the DAS). The images reveal that the forecourt area will receive adequate sunlight between 9am and 3pm on the 21 March/21 September. The façades of the Rosie Hospital are likely to experience some shading because of the new hospital, but these will migrate across the elevation. Given the massing envelope consented through the Outline Planning Permission, and the indicated shadowing shown in the DAS, officers are of the view that the impact of the new hospital will be acceptable.
95. The entrance and associated 'integration hub' that pushes all the way through the building is expressed as a recess on the upper floors of the north elevation to help break up the massing and define the way in and out of the building. The rooftop plant screen is then set back and faceted to create a more visual interest and provides something of a contrast to the more rectilinear forms below.
96. To the south of the site, the stepped down massing combines another recess that aligns with the integration hub and provides a modelling of this façade. The service yard will go some way to breaking up the east and west elevations.
97. Officers acknowledge that a building of this scale and massing will be visually prominent (especially whilst other CBC sites remain undeveloped). It is also clear that the proposals will significantly change the outlook from the Rosie Hospital, and impact on the existing character of the associated forecourt space. However, the proposed building form does seek to model the overall massing, within the constraints of the required floorspace, building organisation/clinical dependencies and within the plot area available.
98. Noting that further phases of the CUH/CBC have been approved and given the compliance of the proposals with the established Outline PP's, officers consider that the overall scale and massing is acceptable in design terms.

Frontage and Interface

99. Building interfaces with the existing context enable the building to provide a character and scale which contributes to the broader campus strategy. The northern edge is proposed as a 'civic space' serving entrances to both CCH and The Rosie Maternity Hospital from Robinson Way where the main public thoroughfare across CCH is. The front entrance of the building is located close to the future 'centre of gravity' of the CCH.
100. Existing trees along the northern frontage are to be retained where possible, with a landscape approach that also seeks to introduce new and replacement tree planting. A green link is also provided along the western edge of the plot that provides wider connectivity, offering pedestrian and cycle accessibility.

Elevations and Materials

101. The ongoing detailed scheme design led to some minor realignments to the building windows during the course of the application, to better serve the intended function and arrangement. The character and general appearance of the external elevations remain as per the original submission.
102. The elevations of the building have been designed to create a legible series of components and materials that have been selected to provide technical performance, visual coherence and interest at all scales. The elevations use the organisational approach dictated by the high, medium and plant technology spaces in the building to help inform the overall rationale for the façades of the building.
103. The central organisational hub creates a strong linking element all the way through the plan form of the building and which extends upwards through the different levels. It also provides the location for a setback section to the northern façade which will be repeated, albeit at a reduced scale, to the southern façade of Phase 2.
104. The interstitial plant floor emphasises the plinth of the building and the datum with the Rosie Hospital to the north. Horizontal reconstituted stone bands and fair-faced concrete create an overall ordering framework to the elevations. The setback section at ground and first floors along Robinson Way helps to define the entrance and provide a weather protected approach to the building.
105. The sawtooth façade, ceramic fins and profiled panels are three key component parts that make up the majority of the elevation. This is interspersed with glazed panels and louvred panels that provide the building with its necessary technical performance. This is all crowned by a plant screen that mitigates the visual impact of roof mounted plant.
106. The DAS provides a comprehensive description of the approach taken to selecting the colour palette for the building and the way in which it is applied to the elevations using ceramic louvres. A key requirement for the hospital which was identified by children during consultation exercises, was that it should be colourful and playful which is a contrast to the usual more subdued approach often taken to such buildings.
107. The proposed materials palette reflects the design approach to the building, which seeks to create a homely atmosphere that allows for some normality of everyday life to continue for patients and their families, whilst needing to feel cheerful and welcoming for both patients and visitors alike.
108. A domestic material palette is proposed to be used in the internal spaces of the building, whilst the external materials includes a palette of seven colours which have been developed that resonate with the wider landscape context of the site - this palette of greens, greeny blues, oranges and buffs was inspired by the cornfields and native planting of the East Anglian landscape. A more neutral/muted palette formed by either reconstituted stone or fair-faced concrete is also employed for the overall framing/structure of the building that helps to rationalise the colour usage and provide a coherence to the design.

109. The approach taken to the composition of the building and the rationale for the materials used and their application to the elevations is successful and supported in design terms. Conditions have been recommended to require the details of all materials for the external surfaces, including sample panel (**Condition 2: Materials; Condition 3: Sample Panel**).

Cambridgeshire Quality Panel

110. The Cambridgeshire Quality Panel reviewed the emerging proposals on 2 August 2021. The Panel were generally supportive of the proposals. A number of specific points were raised which are set out in Table 2 below.

Table 2: Quality Panel Issues and Officer Responses.

Issues and Recommendations of Quality Panel	Response
Explain how the design responds to the emerging new Masterplan and reinforces connections to surrounding buildings and spaces.	Sections 2.8 and 2.9 of the DAS sets out how the design for the CCH has been informed by and accords with the design principles set out in the emerging Masterplan (which build from the 2010 intentions and respond to the emerging requirements and demands on the campus).
Provide scaled cross sections of the design and streetscape and reconsider the scale and experience of courtyard spaces for users	Section 4.10, 5.7 - 5.10 and 5.19 of the DAS provide a detailed consideration of the character of the external amenity space, including courtyard spaces.
Could the design be improved by occupying the prominent North east corner	Section 2.9 and 71 of the DAS explains the rationale for positioning the building at the north-west corner of the site and orienting the main entrance along the northern façade along Robinson Way.
Develop the planting strategy across the scheme to reduce its internal hardness and reinforce the healing power of nature	Section 5.11, 5.12 5.15 of the DAS set out the planting design objectives, including the creation of a variety of colours, textures and scents around the hospital to enhance the character of spaces.
Use of colour generally supported but must be more than façade decoration	Section 4.5 of the DAS sets out in detail the approach to the façade design, which include the consideration of designing for children, the context, building scale and technical requirements.

<p>Applaud environmental and energy ambitions but ensure firm targets are embedded in scheme</p>	<p>Chapter 6 of the DAS (and Energy Statement) set out the environmental sustainability strategy. The project has a vision of 'net zero carbon and high environmental sustainability' as a guiding principle.</p> <p>The NHS is committed to achieving net zero carbon emissions by 2045 will serve in establishing embodied carbon targets for CCH.</p>
<p>Review SuDs to ensure it is fit for purpose and future proofed.</p>	<p>Chapter 6.8 and 6.9 of the DAS identifies the surface water drainage system showing the resilient measures provided for in extreme cloud burst events. Details of the SuDS are set out in the Drainage Strategy.</p>

111. Officers are of the view that the issues raised by Quality Panel have been satisfactorily addressed through the application submission.

Inclusive Access

112. The application proposals were discussed at a meeting of the City Council's Disability Consultative Panel in July 2021. The Panel were pleased by the scheme's approach to securing accessibility throughout the design process and made a number of recommendations for improvements.

113. The Panel's recommendations have been incorporated into the scheme as part of design development, with others to be incorporated at the next stage, when the interior layout and design of the building is finalised. Section 7.9 of the DAS provides a detailed account of the scheme discussion with the Panel.

114. On the basis of the above, officers are satisfied that the accessibility of Policies 56 and 57 of the Cambridge Local Plan 2018 have been met.

Phasing of Development and Meanwhile Uses

115. The proposals rely on an Underground Service Corridor that physically connects the proposed CCH to the existing subterranean logistics routes that run throughout the Addenbrooke's site on the opposite side of Robinson Way. This link is integral to the operation and management of the CCH. The proposed service corridor sits outside of this RMA and requires a separate planning application (reference 21/04337/FUL), the report for which can be found elsewhere on this Agenda).

116. Whilst this RMA is for a single scheme, it is proposed that the CCH will be delivered in two construction phases. The Phase 1 accommodation, comprising approximately 34,500 square metres of integrated health care services will be located in the northern section of the site. The smaller Phase 2 mass (comprising an additional integrated ward and expansion to theatres and critical care), will be located in the southern section of the site, with a total floor area of approximately 11,800 square metres.

117. The delivery of both phases in one construction phase would be subject to funding, and as such the proposal is to develop Phase 1 to the north, followed by Phase 2 to the south. This approach allows for there to be a pause in the construction of the scheme, if required at that time.
118. The application proposals present the finished Phase 1 with a meanwhile landscape scheme in place. Once Phase 2 progresses, the final landscape scheme would be delivered, and the final Phase 2 block constructed. Whether the scheme pauses at Phase 1 or moves straight to Phase 2, the submitted plans provide for appropriate landscaping along with pedestrian access and cycle provision to always be in place.
119. Under the first phase of the CCH proposals, the meanwhile landscape will contain a series of play spaces, gardens, activity space and vegetation, offering recreation space for patients, family members and staff. This landscape includes a playground for younger children and staff garden, as well as flowering meadow around the perimeter. It is proposed that the amenity spaces will be relocated to the roof terrace of Phase 2, once built.
120. As part of the meanwhile use proposals, a pop-up power and water point is proposed. This will be integrated into the landscape surface material, allowing for coffee and/or food trucks and stalls to temporarily set up and access power and water.
121. During the course of the application, minor updates were made to the meanwhile landscape use, in response to comments received from the landscape officer, and to co-ordinate with the positioning of external doors and routes.
122. Officers are satisfied that the meanwhile use area is acceptable, subject to the recommendation of a planning condition which secures a Phasing Plan, to ensure that the meanwhile use amenity space provision is provided in time to cater for the needs of users (**Condition 25: Phasing Plan**). This condition will ensure the delivery of the meanwhile uses on the Phase 2 land, should the site not be delivered in a single continuous phase of development.

Fire Strategy

123. Whilst matters relating to fire safety fall under Building Regulations, a Departmental and Area Agencies Fire Advisory Review Statement accompanies the application submission. The Statement provides guidance on the space allocations for the proposed clinical services and research facilities and the allied ancillary accommodation that is also required to serve them, to ensure reasonable separation of high fire risk areas from high dependency patients. The design of the scheme has taken full consideration of these requirements.
124. In accordance with the consultation advice offered by Cambridge Fire and Rescue, a planning condition has been recommended which requires details of fire hydrants to be approved prior to the commencement of development (**Condition 10: Fire Hydrants**).

Context of Site, Design and External Spaces – Conclusion

125. The proposed design, form and layout of the building has been carefully considered, with regard had to the context of the site and the surrounding area. Officers are therefore satisfied the application proposals are acceptable, and in accordance with Policies 55, 56 and 57 of the Cambridge Local Plan and the NPPF.

Transport Issues

Transport Impact

126. The transport impact of the wider CBC development CBC of which this RMA forms part, was assessed at outline planning stage. The EIA for the outline planning application secured mitigation measures to ensure that the transport impact of the CBC development is acceptable.

127. The EIA statement of conformity submitted in support of the application confirms that the type of land use, access and movement arrangements for the CCH are consistent with that previously assessed in the 2006 ES. The trip generation was based on the quantum of development, drawn from the overall consented maximum on a phase-by-phase basis. There would be no change to the trip generation, or the transport and accessibility assessment undertaken for the outline planning permission.

128. The subject application is wholly within the outline consent and within the development limits in respect of the approved floor spaces within the outline permission. As such, officers are satisfied that potential transport impacts have been assessed within the EIA which accompanied the outline application and secured through relevant mitigation and planning conditions through that consent.

Access and Servicing

129. The primary access of the new hospital will be from the north, where the main entrance is positioned. Secondary entrances are provided for ambulance arrivals, discreet patient entrance and staff arrivals to the south of the site. Servicing is contained to one primary servicing route which access the site from Dame Mary Archer Way to the east.

130. The main building access routes and points are:

- Visitors by car will park in the Multi-Storey Car-Park and walk along Robinson Way to the main entrance.
- Visitors with blue-badge parking permits will be able to park in the CCH car-park in the north-east corner of the site, and then make the short journey to the main entrance.
- People may be dropped off by taxi or car, using the short-term drop-off spaces at the front entrance.
- Pedestrians from Addenbrooke's existing campus will arrive along Robinson Way to the main entrance.
- Cyclists will enter the site from routes on Robinson Way to the north or Dame Mary Archer Way via the proposed green link to the south.

- Staff coming from the south of the site may use the secondary entrance off the green link.

131. Neither Robinson Way nor Dame Mary Archer Way are adopted public highways: the CBC is owned by the Applicant. Whilst the Local Highway Authority has raised no objections to the proposed access and servicing arrangements, officers have reviewed these arrangements and are satisfied that they are well designed with appropriate arrangements for visitors and users. Furthermore, the servicing arrangements are also considered to provide for the safe manoeuvring of refuse and other vehicles.

Travel Plan

132. The effect of traffic generation resulting from the development of Phase 2 on the existing highway network was considered at the outline planning application stage. As the proposed development is in line with the outline permission, no further assessment of traffic generation is required.

Cycle Parking

133. A Cycle Parking Strategy Note has been submitted in support of the application, which presents information relevant to the proposed number, mix and location of cycle parking for the CCH. A total of 234 staff cycle spaces and 130 visitor cycle spaces are proposed. These parking numbers have been determined by an estimation of CCH visitor and staff arrivals, together with previous campus travel plan mode share data.

134. During the course of the application, amendments were made to the staff cycle provision. The staff cycle parking has been consolidated, with Phase 1 staff cycle parking to be located in a large, secure and covered enclosure in the southern meanwhile landscape. In Phase 2, all staff cycle parking will be relocated into two permanent cycle storerooms on the ground floor of the Phase 2 building. These rooms have increased in size to accommodate the required number of cycle parking spaces.

135. All visitor spaces are provided during Phase 1 and will be retained during Phase 2. These are located mainly along the north forecourt and situated close to the main entrance. These include an over provision for off-gauge cycles, such as cargo-bikes. The precise details of the proposed cycle parking will be required through Planning Condition 59 of the outline planning permission.

136. The proposal would provide high quality cycle parking for staff and visitors, which would promote the use of sustainable transport modes. Officers are satisfied that the proposal is in accordance with Cambridge Local Plan 2018 Policy 82 with regard to cycle parking.

Car Parking

137. Condition 53 on the outline planning permission requires car parking provision for any clinical research and treatment (D1 and/or clinical in-patient treatment) uses to be provided at a ratio of 1 space for every 72 sqm of gross floor area measured externally (or any such ratio agreed in writing with the Local Planning Authority that provides a lesser amount of car parking provision). Condition 55 on the outline planning

permission requires at least 5% of the parking provision to be accessible for disabled users.

138. Following a request for further information in respect of car parking demand arising from the development, and the car parking strategy for CCH, the Applicant provided an update in February 2022. This notes that the application documentation originally referred to an anticipated parking demand of 295 spaces. This assumed that 100% of the floorspace proposed to be used by the University was additional to existing operations on the CBC.

139. The February 2022 update advises that since the application was submitted, the University has advised that the initial assumption of all floorspace being additional to existing operations was incorrect. The revised estimate is that around a fifth of University staff will be new. This reduces the University derived staff car parking from 69 spaces to 16, and the original total car parking requirement of 295 spaces down to 242 spaces.

140. Parking need for the first phase of the CCH is limited to 35 spaces, given that the hospital will largely draw together current functions into a single facility. These spaces can be accommodated through existing car parking provision, and on-plot disabled car parking provision.

141. The largest parking need for CCH will arise from Phase 2. This will generate 207 car park spaces. The Applicant has confirmed that there are a range of options for accommodating this parking need across the CBC, by the active management of CUH and University campus car parking, through a site wide parking strategy, travel plan and permitting system.

142. The precise car parking solution for accommodating the CCH car parking need will be confirmed closer to the planned opening of the CCH. This will be influenced by a number of active factors including the opening dates of major transport infrastructure schemes (including Cambridge South Station the progress of the Cambridge Cancer Research Hospital, and the ongoing response to the Covid-19 pandemic).

143. Options for accommodating the Phase 2 CCH parking need could include:

- Bringing forward temporary car parking capacity on any undeveloped parts of the site, to provide interim capacity ahead of transport investment in the accessibility of the CBC; and/or
- Managing down parking demand to create headroom within the existing car parks within the hospital, capitalising on the mode shift potential of the major transport schemes proposed and reflecting the improving modal shift being delivered through the CBC Transport Strategy.

144. Given the range of options available for meeting the CCH parking requirements, a planning condition has been recommended to secure details of the car parking provision prior to the opening of CCH (**Condition 26: Car Parking Provision**).

145. The third-party representation is noted regarding the impact of the proposed CCH on on-street parking in residential areas close to the application site. Officers are satisfied that with the proposed planning condition as described above in place, appropriate car parking provision can be provided within the CBC to serve visitor and patient needs arising from the proposed development.

Highways – Conclusion

146. On the basis of the above evaluation and given public transport improvements secured through the outline permission, cycle provision and associated infrastructure, officers are satisfied that the proposals are acceptable with regard to transport issues, and in accordance with Local Plan Policy 82 and the NPPF.

Environmental Issues

Airport Safeguarding

147. The site is within an area of protected airspace for Cambridge Airport, which is required to be kept free of obstruction from tall structures. Whilst Cambridge International Airport (Air Safeguarding) has not objected to the proposal, it is considered appropriate to recommend a condition which controls the use of cranes and other tall equipment during the construction of the CCH (**Condition 24: Construction Cranes**).

148. Within airport safeguarding zones, the creation of new habitats may attract and support populations of large, and or, flocking birds. This is usually the case where an extensive network of SuDS is proposed with the development. In the case of this RMA, the main SuDS will be blue roofs, rain gardens and permeable paving with sub-base attenuation. On this basis, officers are satisfied that the SuDS network proposed raises no airport safeguarding issues.

149. Whilst the MOD have not provided any comments to date, officers are satisfied that the proposals do not conflict with Policy 37 of the Cambridge Local Plan 2018. Whilst the recommended condition for tall plant and cranes was not applied to the outline consent, this is considered to be reasonable and necessary in the interests of airport safeguarding and safety.

Air Quality, Odour and Dust

150. The ES that supported the original outline planning permission concluded that the air quality impacts of the development were not significant and there were no outdoor air quality conditions imposed on the permission. The proposal will be an all-electric

energy solution, with no gas-fired boilers, whilst traffic generation from the development will be within the parameters assessed as part of the 2006 ES.

151. In accordance with pre-application advice provided by the Council's Environmental Health Officers, a Statement of Conformity was submitted with this RMA to identify whether the proposal would give rise to likely significant effects that have not already been considered at the outline stage.

152. Whilst the construction process has the potential to create adverse impacts on air quality, these can be controlled through the requirement for submission of a Construction Method Statement as part of outline planning condition 23.

153. The application proposals have been reviewed by the Council's Environmental Health Officer who is satisfied that there will be no unacceptable or significant adverse impacts on health and quality of life arising from air quality, odour and dust. The proposal is therefore in accordance with Policy 36 of the Cambridge Local Plan 2018.

Archaeology and Heritage

154. No objection is raised to the proposal in terms of above-ground heritage assets. In terms of below ground heritage assets, an archaeological investigation was secured under the outline planning permission and has been undertaken for the site in advance. The site has been trench evaluated and partially excavated.

155. An Archaeology Memo accompanies the application, which provides a high-level summary of the archaeological potential and significance of the site. This recognises that more detailed assessment will be required to draw all the existing data together and to match the work done on the other areas of CBC as required by outline planning condition 60. The County Archaeological Officer has confirmed the approach as set out in the Memo.

156. As such, the impact of the application proposals on archaeology and heritage assets on the site have been appropriately considered. The development is therefore compliant with Policy 61 of the Cambridge Local Plan 2018.

Artificial Lighting

157. The application proposals have the potential to cause artificial light pollution on intrinsically dark landscapes and nature conservation, and adverse impacts on quality of life / amenity. Planning conditions 28 and 29 of the outline planning permission relate to lighting, and require further information to be submitted once the detailed lighting strategy is known. With these safeguards in place, officers are satisfied that the scheme is acceptable with regard to artificial lighting, and in accordance with Policy 34 of the Cambridge Local Plan 2018.

Contaminated Land

158.A Contaminated Land Technical Note has been submitted in support of this application, in accordance with advice offered at the pre-application stage. This includes a review of historical desk-based information and historical intrusive ground investigation with respect to contaminated land at Cambridge Biomedical Campus (CBC) relevant to the CCH.

159.The Technical Note makes recommendations for further ground investigation, and an acceptable investigation scope has been presented. The Technical Note has been reviewed by the Council's Scientific Officer who has confirmed the acceptability of the information provided. Outline planning conditions 33 and 34 relating to contaminated land remain of relevance and will be the subject of further discharge of condition applications, should approval be forthcoming.

160.On the basis of the above evaluation, the proposals are acceptable with regard to contaminated land, and in accordance with Policy 33 of the Cambridge Local Plan 2018.

Drainage and Flood Risk

- Surface Water Drainage

161.The application proposals are accompanied by a Drainage Strategy and SuDS report which sets out the proposed surface water management strategy for the site. As part of this strategy, a feasibility assessment of viable SuDs measures was undertaken to ensure that surface water is appropriately managed.

162.Based on relevant network modelling, and in order to full the site drainage requirements, the following SuDS are proposed: blue roofs, rain garden and permeable paving with sub base attenuation. The surface water generated will be stored within the porous medium of the blue/green roofs, prior to flowing into rainwater downpipes located at roof level, conveyed via a series of pipes. The pipes will connect into downstream drainage features below ground.

163.Surface water run-off from the hard-standing areas will be infiltrated via proposed permeable paving with subbase attenuation. A geotextile membrane will ensure no surface run-off enters the ground water table. The surface water will be conveyed into the below ground drainage system via a series of pipes. The proposed surface water runoff will then be routed to the north-western extents of the site, flowing in a southerly direction to an outfall at the existing surface water swale feature.

164.During the course of the application, additional information (including a technical briefing note dated 18 November 2021) was submitted to address a holding objection initially raised by the Lead Local Flood Authority (LLFA). Following review of the additional information submitted, the LLFA withdrew their objection, and provided confirmation that the surface water from the proposed development can be managed on site and discharged to the existing swale previously designed to accommodate drainage at the site and wider area.

165. In accordance with the technical advice offered by the LLFA and City Drainage Officer, planning conditions have been recommended to secure the detailed design of the surface water scheme, including the SuDS **details (Condition 11: Detailed Surface Water Scheme; Condition 15: Surface Water Drainage Scheme Verification)** and details of the measures used to avoid additional surface water run off from the site during construction **(Condition 12: Construction Phase)**.

- Flood Risk Considerations

166. The application site is identified as a 'high risk' from surface water flooding. Whilst there is no restriction on the type of development that can be permitted, there has been historic flooding within the vicinity of the application site. This is associated with high intensity rainfall events causing surface water flooding, with flood water entering the lower levels of The Rosie Hospital, including the service corridor.

167. To ensure the proposed development is safe from flood risk, a robust drainage strategy has been devised which includes a range of flood resilience measures. The ground floor level of the building is proposed at 15.35m AOD to ensure that all thresholds are above the flood levels in Robinson Way, to ensure flood water does not enter the building. In addition, measures are included to ensure the basement is protected from flooding.

168. In accordance with the advice offered by the City Drainage Officer, the details of the flood resilience measures are secured by planning condition **(Condition 13: Detailed Flood Resilience Measures; Condition 14: Flood Resilience Works Timing)**.

169. On the basis of the above evaluation, and subject to the conditions as described, the site surface water drainage strategy is considered acceptable and in accordance with Policies 31 and 32 of the Cambridge Local Plan 2018.

- Foul Water Drainage

170. It is proposed that foul water is to be discharged from the proposed buildings via a series of soil vent pipes located within the building footprint. The foul water will be collected via a series of internal manholes and conveyed away from the site via a final foul water demarcation manhole.

171. In accordance with the advice offered by Anglian Water, details of the foul water drainage strategy are secured by planning condition **(Condition 16: Foul drainage)**. With this condition in place, officers are satisfied that the development is acceptable with regard to foul water drainage.

172. The Council's Sustainable Drainage Officer the County Council as Lead Local Flood Authority, and Anglian Water have considered the proposals and are satisfied that the details provided are acceptable subject to the conditions as described above. On this basis, the proposals are in accordance with the Cambridge Local Plan with regard to drainage and flood risk.

Ecology and Biodiversity

173. The application is accompanied by an Ecological Impact Assessment and Biodiversity Design Opportunities statement. The Statement has been prepared in the context of the CBC site-wide nature conservation management plan.
174. The Ecological Impact Assessment and Biodiversity Design Opportunities report presents the results of an Extended Phase 1 Habitat Survey and Ecological Impact Assessment (EclA) undertaken at the site. In addition, the report details ecological mitigation and biodiversity enhancement measures that have been proposed to be embedded into the development and documents the results of a Biodiversity Net Gain (BNG) calculation.
175. Ecological mitigation and biodiversity enhancement measures include artificial bat boxes to be installed on existing trees within the site, the provision of landscaping of a diverse structure and mix of canopy heights to ensure that birds have safe and easy commuting corridors throughout the site.
176. The proposals also seek to focus design around house martins (an existing large house martin colony is located approximately 300m north east of the site), and propose a house martin colony wall to entice breeding pairs to the site. The City Council Nature Conservation Projects Officer has confirmed acceptability and advised that no risk to aviation will be posed, given the small size of these birds, and that they forage low.
177. The exact location and design of the house martin colony wall will require further discussion, to ensure the potential for colonisation is maximised. The detailed design can be secured by condition **(Condition 20: Ecology – Nest Boxes)**.
178. Whilst the outline consent only seeks a net biodiversity enhancement, the project design has sought to embrace the emerging move to Biodiversity Net Gain (BNG). During the course of the application, and in accordance with advice offered by the City Council's Nature Conservation Projects Officer, further information was submitted regarding the calculation of the BNG metric, including the assumptions made.
179. With biodiversity measures embedded into the scheme, including new habitat creation, the development will result in a BNG of over nearly 10%. This is welcomed by officers. In the interests of conserving and enhancing ecological interest, planning conditions have also been recommended relating to the requirement of details of a Landscape and Ecological Management Plan (LEMP) **(Condition 21)** and details of green roofs **(Planning Condition 19)**
180. On the basis of the above evaluation, and subject to the planning conditions as described, the proposals are considered to be a positive addition to the wider local ecological landscape. The development is therefore in accordance with Cambridge Local Plan 2018 Policies 69 and 70.

Landscape (including Landscape Amenity Space Strategy) and Trees

- Landscape Approach

181.The landscape design approach has been developed to provide an inclusive and adaptable public realm, which is visually appealing, adaptable and legible. It combines hard and soft landscaping to create spaces for users which is both calming and playful.

182.The GCSPS Landscape Officer was involved in the pre-application process and provided detailed advice. During the course of the application, additional information was also provided with regard to landscape issues, in response to the consultation advice offered.

183.An overshadowing study which was undertaken on the advice of the Landscape Officer provides confidence that the interior courtyards and ward gardens will receive sufficient daylight throughout the day and year. Recommended **Condition 17 (hard and soft landscaping)** includes the requirement for the planting details of all amenity spaces to be provided, together with the submission of a more detailed sunlight study /shade analysis for the courtyards and terraces. This will ensure that these spaces will receive adequate light for the selected planting scheme. Details of the growing medium and irrigation methods are also secured via this condition.

184.Additional relevant planning conditions have also been recommended in respect of green and blue roofs (**Condition 19: Green and Blue Roofs**) and the management/maintenance of all landscaped areas (**Condition 18: Landscape Maintenance and Management Plan**).

185.In terms of hard landscaping, the scheme will include a range of street furniture and play equipment. Proposed planning condition **17 (hard and soft landscaping)** secures this detail. The details of a store for gas bottles (identified on the proposed site plans on the north-eastern side of the site) can also be secured by condition (**Condition 22: Gas Store**).

- Amenity Space Strategy

186.The application submission includes an amenity space strategy for the site, in support of outline planning condition number 14. This defines the essential requirements and proposed uses of the internal and external amenity spaces, including the Phase 1 meanwhile use.

187.The Council's Landscape Officer has reviewed the amenity space strategy for the site and is satisfied that the details provided are acceptable. On this basis, planning condition 14 of the outline planning permission is recommended for approval.

- Arboricultural Issues

188.A Tree Survey, Arboricultural Impact Assessment (AIA), Preliminary Arboricultural Method Statement & Tree Protection Plan accompanies the application proposals. This identifies the arboricultural related implications of the proposals.

189.Thirteen individual trees are identified in the AIA as requiring felling in order to achieve the proposed development. These include pine trees along Robinson Way, which are located to the north of the proposed hospital. The trees have been graded as category 'B' individual trees and landscape features, and low quality/poor longevity individual trees/landscape features.

190. None of the assessed trees which require felling are found to be of high quality or value. The loss of these trees is considered to be justified by the benefits of the development proposals and the new landscaping and tree planting that is proposed. This will include replacement planting along the hospital and road frontage, with specimens which will be more suitable for the context. Relevant planning conditions have been recommended (**Condition 17: Hard and Soft Landscaping**).

191. The alignment of the proposed building does not encroach within the root protection areas of any trees that are to be retained. No specialist foundation designs or construction techniques are therefore required to prevent damage to tree roots. A condition has been recommended to ensure the protection of existing trees during construction (**Condition 23: Detailed Arboricultural Method Statement and Tree Protection Plan**).

192. Whilst the Application will result in some tree losses, given the site context and quality of the trees, this is not considered to be considered significant in arboricultural and landscape terms. Compensatory mitigation can be secured through planning conditions.

193. On the basis of this assessment, the proposals are considered to respond to site context and provide a high quality development with regard to trees and landscape issues. The proposals are therefore in accordance with Policies 55, 56, 57, 59 and 71 of the Cambridge Local Plan 2018.

Noise and Vibration

194. The development proposals provide for plant and general acoustic performance to a high standard so as not to add to the ambient noise levels. A Noise Statement was submitted as part of the application, which includes a noise assessment. This uses surveyed data from several surrounding locations around the site and over a period of time. This ensures that there is a wide understanding of the noise context.

195. The proposals have the potential to cause noise arising from plant equipment, including Air Source Heat Pumps (ASHPs), which are anticipated to be the noisiest plant items. The application proposes to include ASHPs on the roof of the building, behind a solid screen. The Noise Statement concludes that the scheme will be comfortably capable of meeting acceptable noise levels. The Environmental Health Officer has reviewed the Noise Statement and agrees with these conclusions.

196. The scheme will also include emergency generators on the roof, to maintain power to the hospital in case of emergencies, with testing only to be conducted during daytime hours. The emergency plant has been designed to meet the +5dB noise limit at the site boundary, which is considered acceptable. A planning condition has been recommended which will control the use of the emergency generators (**Condition 9: Standby Emergency/Back up Generator Operation**).

197. Officers are satisfied that the scheme design will be capable of fully addressing the noise related conditions imposed by the outline planning permission. Given that the

detailed design of mechanical services has yet to be finalised, a bespoke planning condition has been recommended (**Condition 7: Noise Insulation Scheme Post Construction/Installation Verification and Completion Report**).

198. Officers note that the proposals have the potential to cause noise and disturbance arising from servicing/deliveries, given the relationship to nearest noise sensitive receptors (properties on Vawser Way to the south-east of the application site, approximately 50m from the application site boundary). In accordance with the technical advice offered, a condition has been recommended to restrict night time servicing and deliveries (**Condition 8: Servicing Collections and Deliveries Times**).

199. On the basis of the above evaluation, and subject to the recommendation of planning conditions as described above, the application is considered acceptable with regard to noise and vibration, and in accordance with Policies 35 and 36 of the Cambridge Local Plan.

Sustainable Construction and Design

200. The application submission demonstrates how seeking to achieve net zero carbon has played a significant role in determining the design of the scheme. In order to demonstrate compliance with the emerging NHS Net Zero Carbon Buildings Standard, a net zero carbon route map has been proposed. This has influenced the energy strategy for the proposals, and also the façade design and wider strategies around health and wellbeing.

201. The following sustainable construction targets are proposed:

- (1) The scheme has been developed in line with Passivhaus principles with an aspiration for this to be the UK's first certified Passivhaus hospital. This will be an all electric hospital with no use of fossil fuels.
- (2) Targeting WELL platinum with gold accreditation as a minimum.
- (3) An aspiration for BREEAM 'outstanding' with achievement of 'excellent' as a minimum. The current BREEAM score is 76.47% with a potential score of 85.99%. This exceeds the requirements of condition 37 of the outline approval, which requires BREEAM 'very good'.

202. The design of the façade has been influenced by increased thermal performance and low carbon design. In order to reduce excess solar gain in the summer and associated cooling loads, the façade incorporates ceramic fins to provide shading, with the set back on the windows also providing some shading. The bedrooms have mixed mode ventilation, with windows capable of being opened to provide natural ventilation.

203. With regards to the route map for net zero carbon, this gives consideration to both operational and embodied carbon, with targets set for both. Targets are taken from the emerging NHS Net Zero Carbon Building Standard. For embodied carbon, the Tier 1 target, which considers the sub structure and super structure including the façade) is set at 306 kgCO_{2e}/m², while for structural components (excluding the façade elements included in tier 1) a target of 210 kgCO_{2e}/m².

204. Whole life carbon assessment carried out to inform the design of the proposals shows that for Tier 1 the scheme is current at around 250 kgCO_{2e}/m², and around 178 kgCO_{2e}/m² for the structural elements. The whole life carbon assessment process will continue through to the detailed design stage in order to further reduce the embodied carbon associated with the scheme, with particular attention being paid to the façade. This approach is supported by officers.

205. With regards to operational emissions, energy target levels currently for new build hospitals are at around 270 to 435 kWh/m²/annum. Industry targets for buildings targeting net zero carbon set an interim target for 2020-2025 of around 260 kWh/m²/annum for hospital buildings, reducing to 140 kWh/m²/annum between 2030-2035 with a Paris proof target of 110 kWh/m²/annum. At present by following Passivhaus principles this has reduced energy requirements to between 260-220 kWh/m²/annum, with further reductions from renewable energy and future connection to the 5th generation heat network currently being proposed as part of the updated masterplan for the campus anticipated. This approach is supported.

206. In terms of the energy strategy and meeting the requirements of condition 35 of the outline approval (which requires a 10% reduction in carbon emissions from the use of onsite renewable energy), Part L calculations suggest a 34% reduction in emissions using the current calculation methodology. Of this reduction, 12% can be attributed to photovoltaic panels (600 m²) and solar thermal (50m²), which would be located on the roof along with other plant including the proposed air source heat pumps. This approach is supported.

207. Officers note that the Part L methodology is not particularly accurate, and as the detailed design progresses and modelling is undertaken using the more accurate PHPP methodology required for Passivhaus, this carbon reduction and contribution from renewable energy is likely to improve, and predicted energy could achieve under 150 kWh/m²/year.

208. The application proposals demonstrate how the development will respond and adapt to climate change and carbon reduction, through embedding sustainable design principles. On the basis of the above, officers are satisfied that the application is in accordance with policies 28, 29, 30 and 31 of the Cambridge Local Plan 2018, and guidance contained in the Greater Cambridge Sustainable Design and Construction SPD.

Utilities

209. The gas enclosure Technical Note which supports the application identifies existing Cadent gas infrastructure located adjacent to the proposed CCH. There is no technical or landowner reason for why the Gas Cabinet cannot be relocated. The precise location of the re-sited gas cabinet would be a matter to be agreed with the input of Cadent Gas and the Addenbrooke's Estate Team. This falls outside the planning process.

Waste

210. The internal layout and external servicing arrangements have been informed by the waste needs of the hospital. Dedicated space has been provided for waste storage containers, and the waste will be transferred via the underground service corridor for central collection. Further details of the waste storage facilities will come forward under the discharge of condition 32 on the outline planning permission.

Environmental Considerations – Conclusion

211. The environmental implications of the proposals have been assessed through the supporting documentation and considered fully by officers. Subject to the recommended planning conditions as described above, the proposed development is found to accord with the environmental objectives of policies 28, 29, 30, 31, 32, 33, 34, 35, 36, 55, 56, 57, 59, 69, 70 and 71 of the Cambridge Local Plan 2018, guidance contained in the Greater Cambridge Sustainable Design and Construction SPD and the NPPF 2021.

Impact on Residential Amenity

212. The impact of the development proposals on existing residential amenity in terms of traffic impacts and noise from construction vehicles has been assessed as part of the above evaluation. Officers are satisfied that there will be no significant adverse impacts on existing residential amenity arising from the proposed development.

213. Additional safeguards in the interests of the protection of residential amenity are provided through the outline planning conditions and recommended **Condition 7 (Noise Insulation Scheme); Condition 8 (Servicing Collections and Deliveries Times)** and **Condition 9 (Standby Emergency /Backup Generator Operation)**.

214. On the basis of the above evaluation, and subject to the recommendation appropriate conditions as described, the application is considered acceptable with regard to impacts on residential amenity. The proposals are therefore in accordance with Policy 13 of the Cambridge Local Plan and the NPPF.

Third Party Representations

215. The third-party representation relating to noise impacts on local residential amenity and the impacts of increased car parking have been dealt with in the above sections on Access and Transport; Environmental Considerations (Noise and Vibration) and Impact on Residential Amenity.

Planning Balance and Conclusion

216. The principle of the proposed development is established by the adopted site allocation and the outline planning permission (06/0796/OUT (as amended by

21/01584/S73)). The proposed building and landscaping would provide for a high quality and sustainable development. The scale and massing, and structural landscaping, is in accordance with the outline parameter plans. The current proposal is targeting high sustainability aspirations, both in terms of construction and operation.

217. On the basis of the above evaluation, officers are satisfied that the proposal is in accordance with the relevant policies of the Cambridge Local Plan 2018 and other material considerations.

Recommendation

(1) Approve planning permission of reserved matters application reference 21/04336/REM subject to the planning conditions and informatives listed below in this report, with authority delegated to officers to undertake appropriate minor amendments of those conditions and informatives prior to issue of the planning permission.

(2) Approve the discharge of planning condition 14 (Amenity Space strategy) of outline planning condition (planning condition reference 06/0796/OUT in so far as it relates to the Cambridge Children's Hospital (CCH) proposals.

Appendices – None

Conditions

1. Plans Compliance

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

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

2. Materials

No development shall take place above ground level until details of all the materials for the external surfaces of buildings to be used in the construction of the development have been submitted to and approved in writing by the local planning authority. Development shall be carried out in accordance with the approved details.

Reason: To ensure that the external appearance of the development does not detract from the character and appearance of the area (Cambridge Local Plan 2018 Policies 55 and 57).

3. Sample Panel

No materials above ground level shall be laid until a sample panel/section [has been prepared on site detailing the choice of materials and fixing including junctions/interfaces between materials. The details shall be submitted to and approved in writing by the Local Planning Authority. The approved sample panel is to be retained on site for the duration of the works for comparative purposes, and works will take place only in accordance with approved details.

Reason: To ensure that the external appearance of the development does not detract from the character and appearance of the area (Cambridge Local Plan 2018 Policies 55 and 57).

4. Cycle Parking

The development, hereby permitted, shall not be occupied or the use commenced, until details of facilities for the covered, secure parking of cycles for use in connection with the development have been submitted to and approved in writing by the Local Planning Authority. The details shall include the means of enclosure, materials, type and layout. The facilities shall be provided in accordance with the approved details and shall be retained as such.

Reason: To ensure appropriate provision for the secure storage of bicycles (Cambridge Local Plan 2018 Policy 82).

5. Wayfinding and signage

Prior to first use of the building hereby approved, details of external wayfinding and building signage shall be submitted to and approved in writing by the local planning authority. The Development shall be carried out in accordance with the approved material sample and signage details.

Reason: To ensure that the external appearance of the development does not detract from the character and appearance of the area (Cambridge Local Plan 2018 policies 55 and 57).

6. Internal landscape, courtyard and breakout spaces

The development, hereby permitted, shall not be occupied or the use commenced until full details of design and intended function of the internal landscape, courtyard and break out spaces has been submitted to and approved in writing by the local planning authority. The development shall be carried out in accordance with the approved details.

Reason: To ensure that the external appearance of the development does not detract from the character and appearance of the area (Cambridge Local Plan 2018 policies 55 and 57).

7. Noise Insulation Scheme - Post Construction / Installation Verification & Completion Report

Within six months of first operation of any plant/equipment and on a phased basis as necessary Phases 1 and 2 respectively, a noise insulation scheme post

construction/installation verification and completion report for the buildings as approved, incorporating details of the plant/equipment installed with measured / predicted noise levels and demonstrating compliance with a building and/or plant noise insulation scheme to be approved under condition 31 of outline planning permission reference 06/0796/OUT (amended by Section 73 approval 17/2258/S73), shall be submitted to and approved in writing by the Local Planning Authority.

The noise insulation scheme insulation/attenuation scheme verification and completion report shall include details of the mitigation of noise emissions from all plant / equipment including any emergency standby generators and all reasonably practicable measures to reduce noise during testing and operation. The noise insulation scheme insulation/attenuation scheme as approved shall thereafter be maintained in accordance with the approved details.

Reason: To protect the amenity/quality of life of nearby properties and local areas in accordance with Cambridge Local Plan 2018 Policy 35.

8. Servicing Collections and Deliveries Times

Vehicular servicing collections and deliveries to the delivery compound / main entrance to the hospital off / on the Robinson Way façade are only permitted between 0700 to 2300 hrs. For avoidance of doubt this does not include the arrival and departure of emergency vehicles.

Reason: To protect the amenity/quality of life of nearby properties and local areas in accordance with Cambridge Local Plan 2018 Policy 35.

9. Standby Emergency / Backup Generator Operation

Any emergency backup / standby generator that is used shall operate as follows:

(i) Emergency Use Only

The emergency backup generator shall only be used in the event of standard mains electricity supply interruption / failure or in accordance with (ii) below. It shall not be used to supplement general energy demand, to feed electricity into the utility grid or as an alternative supply in the event of disconnection from the mains supply following for example non-payment or similar.

(ii) Hours of Running for Testing, Maintenance & Repair

Running of the backup generator as part of routine periodic testing, 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. Periodic testing, maintenance and repair shall only occur for a maximum duration of 25 hours in any calendar year. Accurate records of any testing shall be kept on site and shall be available for inspection at the request of the local planning authority.

In the event that the emergency backup generator is operated for an "unforeseen extended period of time" the local planning authority shall be immediately informed and a review / reassessment of the local air quality impacts of such operation shall be undertaken. The air quality impacts review / reassessment shall be agreed in writing with the local planning authority and if unacceptable adverse air quality impacts / effects are likely to arise an emergency generator air quality mitigation scheme shall be submitted in writing for approval. The approved scheme shall be implemented within a timescale to be agreed and shall be retained thereafter.

For the avoidance of any doubt an "unforeseen extended period of time" shall be defined as intermittent or continuous operation for a period greater than a week (168 hours) in any calendar month, exclusive of the permitted hours detailed in (ii) above for periodic testing, maintenance and repair.

Reason: To protect human health and amenity in terms of noise and local air quality in accordance with Policies 35 and 36 of the Cambridge Local Plan, 2018.

10. Fire Hydrants:

No development shall commence until a scheme for the provision and location of fire hydrants to serve that Development Parcel has been submitted to and approved in writing by the Local Planning Authority. The approved scheme shall thereafter be implemented in accordance with the approved details prior to first use.

Reason: To ensure the provision of adequate water supply infrastructure to protect the safe living and working environment for all users and visitors.

11. Detailed Surface Water Scheme

No laying of services, creation of hard surfaces or erection of a building shall commence until a detailed design of the surface water drainage of the site has been submitted to and approved in writing by the Local Planning Authority. All elements of the surface water drainage system thereafter shall be maintained and managed in accordance with the approved management and maintenance plan. The scheme shall be based upon the principles within Cambridge Children's Condition 18 Drainage Strategy and SUDS Report Ref. CCHH-RAM-ZZ-XX-RP-C-510010 15/12/2021 and Technical Note 18/11/2021 which includes proposed indicative drainage plans and shall also include:

- A) Full results of the proposed drainage system modelling for the 3.3% Annual Exceedance Probability (AEP) (1 in 30) and 1% AEP (1 in 100) storm events (as well as 1% AEP plus climate change), inclusive of all collection, conveyance, storage, flow control and disposal elements and including an allowance for urban creep, together with an assessment of system performance;
- B) Detailed drawings of the entire proposed surface water drainage system, attenuation and flow control measures, including levels, gradients, dimensions

and pipe reference numbers, designed to accord with the CIRIA C753 SuDS Manual (or any equivalent guidance that may supersede or replace it);

- C) Full detail on SuDS proposals (including location, type, size, depths, side slopes and cross sections);
- D) Demonstration that the surface water drainage of the site is in accordance with DEFRA non-statutory technical standards for sustainable drainage systems;
- E) Full details of the maintenance requirements including any manufacturer specific ones and management arrangements of the surface water drainage system.

Reason: To ensure that the proposed development can be adequately drained and to ensure that there is no future increased flood risk on or off site resulting from the proposed development in accordance with Policies 31 and 32 of the Cambridge Local Plan 2018..

12. Construction Phase

No development, including preparatory works, shall commence until details of measures indicating how additional surface water run-off from the site will be avoided during the construction works have been submitted to and approved in writing by the Local Planning Authority. The applicant may be required to provide collection, balancing and/or settlement systems for these flows. This should include the maintenance proposals during construction. The approved measures and systems shall be brought into operation before any works to create buildings or hard surfaces commence and demonstrate that SuDS near or adjacent to the site can be protected.

Reason: To ensure that the proposed development can be adequately drained during the construction phase and to ensure that there is no increased flood risk on or off site resulting from the construction and that water quality is not affected in accordance with Policies 31 and 32 of the Cambridge Local Plan 2018.

13. Detailed Flood Resilience Measures

Prior to commencement of the underground service corridor, detailed design of the flood resilience works must be submitted to and approved in writing by the Local Planning Authority

Reason: To ensure there is no increased flood risk on site resulting from the proposed development and that the measures are robust and fully meet the needs of both hospitals in ensuring water entry has been reduced to an acceptable level of risk in accordance with Policy 31 of the Cambridge Local Plan 2018.

14. Flood Resilience Works Timing

Prior to the building hereby approved being serviceable all agreed flood resilience measures must have been completed in relation to the proposed underground services corridor and its connection into the existing underground services corridor.

Reason: To ensure that there is no increased flood risk on site resulting from the proposed development in accordance with Policy 31 of the Cambridge Local Plan 2018.

15. Surface Water Drainage Scheme Verification

Upon completion of the development, including rain gardens, swales, blue/green roofs, permeable paving, and prior to their handover to a management company or hospital estates function; a survey and report from an independent surveyor shall be submitted to and approved in writing by the Local Planning Authority. The survey and report shall be carried out by an appropriately qualified Chartered Surveyor or Chartered Engineer and demonstrate that the surface water drainage system has been constructed in accordance with the details approved under the planning permission and subsequent discharge of condition information. Where necessary, details of corrective works to be carried out along with a timetable for their completion, shall be included for approval in writing by the Local Planning Authority. Any corrective works required shall be carried out in accordance with the approved timetable and subsequently re-surveyed by an independent surveyor, with their findings submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure the effective operation of the surface water drainage scheme following construction of the development in accordance with Policies 31 and 32 of the Cambridge Local Plan 2018.

16. Foul drainage

No development, including preparatory works, shall be submitted until details of the foul water drainage works have been submitted to and approved in writing by the local planning authority. The development shall be in accordance with the approved details.

Reason: To ensure that the proposed development can be adequately drained and to ensure that there is no increased flood risk on or off site resulting from the proposed development.

17. Hard and Soft Landscaping

No development above ground level shall commence until full details of both hard and soft landscape works have been submitted to and approved in writing by the local planning authority and these works shall be carried out as approved. These details shall include proposed finished levels or contours; means of enclosure; car parking layouts, other vehicle and pedestrian access and circulation areas; hard surfacing materials; minor artefacts and structures (e.g. furniture, play equipment, refuse or other storage units, signs, lighting); proposed and existing functional services above and below ground (e.g. drainage, power, communications cables, pipelines indicating lines, manholes, supports); retained historic landscape features and proposals for restoration, where relevant.

Soft Landscape works shall include planting plans; written specifications (including cultivation and other operations associated with plant and grass establishment, topsoil and subsoil specification and irrigation methods); schedules of plants, noting species, plant sizes and proposed numbers/densities where appropriate, overshadowing studies to confirm light levels within terraces and an implementation programme.

Reason: In the interests of visual amenity and to ensure that suitable hard and soft landscape is provided as part of the development. (Cambridge Local Plan 2018; Policies 55, 57 and 59).

18. Landscape Maintenance and Management Plan

Prior to first occupation or the bringing into use of the development, hereby permitted, a landscape maintenance and management plan, including long term design objectives, management responsibilities and maintenance schedules for all landscape areas shall be submitted to and approved by the local planning authority in writing. The landscape plan shall be carried out as approved. Any trees or plants that, within a period of five years after planting, are removed, die or become in the opinion of the local planning authority, seriously damaged or defective, shall be replaced as soon as is reasonably practicable with others of species, size and number as originally approved.

Reason: In the interests of visual amenity and to ensure that suitable hard and soft landscape is provided as part of the development. (Cambridge Local Plan 2018; Policies 55, 57 and 59).

19. Green and Blue Roofs

No construction of the biodiverse (green) and blue roof(s) shall commence until the following details have been submitted to and approved in writing by the Local Planning Authority.

- a) The means of access for maintenance
- b) Plans and sections showing the make-up of the sub-base to be used which may vary in depth from between 80-150mm
- c) Planting/seeding with an agreed mix of species (the seed mix shall be focused on wildflower planting indigenous to the local area and shall contain no more than a maximum of 25% sedum)
- d) Where solar panels are proposed, biosolar roofs should be incorporated under and in-between the panels. An array layout will be required incorporating a minimum of 0.75m between rows of panels for access and to ensure establishment of vegetation
- e) A management/maintenance plan for the roof(s)

The roof(s) shall be constructed and laid out in accordance with the approved details and planting/seeding shall be carried out within the first planting season following the practical completion of the roof. The roof(s) shall be maintained as such in accordance with the approved management/maintenance plan

The green roof(s) shall not be used as an amenity or sitting out space of any kind whatsoever and shall only be used in the case of essential maintenance/repair or escape in case of emergency.

Reason: To help mitigate and respond to climate change and to enhance ecological interests (Cambridge Local Plan 2018 Policies 28 and 57).

20. Ecology – Nest Boxes

No development above ground level shall commence until a scheme for the provision of bat boxes and nest boxes, including provision for House Martins, has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include details of box numbers, specification and their location.

Reason: To conserve and enhance ecological interests, in accordance with Policy 57 of the Cambridge Local Plan 2018.

21. Landscape and Ecological Management Plan

No development shall commence until a Landscape and Ecological Management Plan (LEMP) has been submitted to and approved in writing by the Local Planning Authority. The LEMP shall include the following:

- a) Description and evaluation of features to be managed.
- b) Ecological trends and constraints on site that might influence management.
- c) Aims and objectives of management.
- d) Appropriate management options for achieving aims and objectives.
- e) Prescriptions for management actions.
- f) Prescription of a work schedule (including an annual work plan capable of being rolled forward over a five-year period).
- g) Details of the body or organisation responsible for implementation of the plan.
- h) Ongoing monitoring and remedial measures

The LEMP shall also include details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery. The plan shall also set out (where the results form monitoring show that conservation aims and objectives of the LEMP are not being met) contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved plan will be implemented in accordance with the approved details.

Reason: To ensure that before any development commences appropriate construction ecological management plan has been agreed to fully conserve and enhance ecological interests(Cambridge Local Plan 2018 policy 57).

22. Gas Store

Prior to the installation of the gas store, details of the gas store to be installed shall be submitted to and approved in writing by the Local Planning Authority. The gas store shall be installed in accordance with the approved details before the first occupation of the development and shall thereafter be retained as such.

Reason: In the interests of visual amenity, in accordance with Policies 55 and 56 of the Cambridge Local Plan 2018.

23. Detailed Arboricultural Method Statement and Tree Protection Plan

No development shall take place until such time as fencing for the protection of any retained tree within, adjacent to, or which overhangs the application site has been fully erected in accordance with a detailed Arboricultural Method Statement and Tree Protection Plan which shall have been submitted to and approved in writing by the local planning authority in advance. The fencing shall be retained intact for the full duration of the development until all equipment, materials and surplus materials have been removed from the site. Nothing shall be stored or placed in any fenced area in accordance with this condition and the ground levels within those areas shall not be altered, nor shall any excavations be made without the written consent of the local planning authority.

Reason: In the interests of visual amenity and safeguarding trees that are worthy of retention in accordance with Policy 71 Cambridge Local Plan 2018.

24. Construction Cranes

Prior to the use of any cranes and/or temporary tall structures required during the construction of the development, a strategy shall be submitted setting out the details of the cranes and other tall construction equipment, including the details of obstacle lighting. The development shall be carried out in accordance with the approved strategy.

Reason: To ensure that construction work and construction equipment on the site and adjoining land does not obstruct air traffic movements or otherwise impede the effective operation of air traffic navigation transmitter/receiver systems, Cambridge Local Plan 2018 Policy 27.

25. Phasing Plan

Prior to the commencement of development, a site-wide Phasing Plan shall be submitted to the Local Planning Authority for its written approval. The Phasing Plan shall include the sequence and timing for the delivery of the development, including:

- Phase 1; and
- Phase 2; and
- A mechanism for the review and amendment of the approved Phasing Plan; and
- The delivery of the meanwhile uses on the Phase 2 land, in the event that the site will not be developed in a single continuous phase of development, including external amenity space.

No development shall commence until such time as the Phasing Plan has been approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved phasing plan for the time being in force.

Reason: To clarify how the site is to be phased in order to ensure that amenity space provision is provided in time to cater for the needs and impacts of the development. in accordance with Policies 56 and 68 Cambridge Local Plan 2018.

26. Condition 26 (Car Parking Provision)

The development, hereby permitted, shall not be occupied or the use commenced, until details of the car parking spaces for use in connection with the development have been submitted to and approved in writing by the Local Planning Authority. The provision shall be in accordance with the Cambridge Biomedical Campus, Updated Parking Strategy (July 2018) (or any document superseding this strategy).

Reason: To ensure that there is adequate parking spaces for the development and for other buildings and uses on the Cambridge Biomedical Campus (Cambridge Local Plan Policy 17).

Informatives:

1. Materials

The details required to discharge the submission of materials condition (Condition 3) should consist of a materials schedule, large-scale drawings and/or samples as appropriate to the scale and nature of the development in question.

2. Fire Hydrants

The position of fire hydrants are generally agreed upon when the Water Authority submits plans to: Water & Planning Manager, Community Fire Safety Group, Hinchingbrooke Cottage, Brampton Road, Huntingdon, Cambs PE29 2NA. The cost of Fire Hydrants will be recovered from the developer.

The number and location of Fire Hydrants will be determined following Risk Assessment and with reference to guidance contained within the "National Guidance Document on the Provision of Water for Fire Fighting" 3rd Edition, published January 2007.

3. Access and facilities for fire service

Access and facilities for the Fire Service should also be provided in accordance with the Building Regulations Approved Document B5 Vehicle Access. Dwellings Section 13 and/or Vol 2. Buildings other than dwellings Section 15 Vehicle Access.

If there are any buildings on the development that are over 11 metres in height (excluding blocks of flats) not fitted with fire mains, then aerial (high reach) appliance access is required.

4. Environment Agency Permitting

The applicant is advised to contact the Agency's National Permitting team direct to discuss any new permitting requirements, and/or revision to any existing permit. This is irrespective of any planning approval.

Advice to applicant: Environmental Permitting. The Environmental Permitting (England and Wales) Regulations 2016 state that permitted sites should not harm human health or pollute the environment. The operator is therefore required to have measures in place which will include:

- prevention of pollution.
- to ensure that there is no harm to human health, the quality of the environment (including land, water environment and air), or the surrounding amenity.

See following link; www.gov.uk/guidance/check-if-you-need-an-environmental-permit

5. Contaminated Land:

If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until the developer has submitted a remediation strategy to the local planning authority detailing how this unsuspected contamination shall be dealt with and obtained written approval from the local planning authority.

Only clean, uncontaminated surface water should be discharged to any soakaway, watercourse or surface water sewer.

Site operators should ensure that there is no possibility of contaminated water entering and polluting surface or underground waters.

6. Dewatering:

Any small scale dewatering in the course of building or engineering works which is greater than 20 cubic metres per day and does not meet the conditions of the groundwater abstraction exemption under Regulation 5 of the Water Abstraction and Impounding (Exemptions) Regulations 2017 will require an abstraction licence from the Environment Agency.

The Environment Agency assesses applications to abstract water against local water availability. In groundwater bodies where water is already fully committed, there is a presumption against issuing new consumptive groundwater licences. In the case of dewatering we consider a licence to be consumptive where the water cannot be returned locally to the aquifer. Whilst this may be deemed acceptable for short-term dewatering where water is returned to the environment, this would be assessed on a case-by-case basis. However, in such cases a consumptive groundwater licence **may**

not be issued long-term and the applicant must ensure that any construction is engineered such that permanent dewatering will not be required. This is especially important if the development is proposing sub surface structures such as basements.

The need for a licence will be dependent on the duration of abstraction and the volume to be abstracted. Further information is available at <https://www.gov.uk/guidance/watermanagement-abstract-or-imp>

7. Greater Cambridge Sustainable Design and Construction SPD, (Adopted Jan, 2020)

Since the grant of outline planning permission certain new Supplementary Planning Documents (SPDs) have been adopted which are considered material considerations relevant to the proposed development and the discharge of outline conditions.

In terms of Environmental Health related matters any artificial lighting, contaminated land, noise / sound, air quality and odours / fumes related impact assessments including the consideration of mitigation shall have regard to the scope, methodologies, submission requirements and local planning policies of relevant sections of the Greater Cambridge Sustainable Design and Construction SPD, (Adopted January 2020) <https://www.cambridge.gov.uk/greater-cambridge-sustainable-design-and-construction-spd> and in particular 'section 3.6 – Pollution ' and the following associated appendices:

- 6: Requirements for Specific Lighting Schemes
- 7: The Development of Potentially Contaminated Sites in Cambridge and South Cambridgeshire: A Developers Guide
- 8: Further technical guidance related to noise pollution
- Due regard should also be given to relevant and up to date Government / national and industry British Standards, Codes of Practice, and best practice technical guidance.

8. EMGENI - Emergency / backup Generator Informative (amended)

To satisfy '*condition 31 – Insulation*' imposed on the approved Outline Planning Permission ref. 06/0796/OUT (as amended by 21/01584/S73), in respect of any backup generators the noise level from the generator associated with this application should not raise the existing background level (L90) by more than 5 dB(A) at the boundary of the premises subject to this application and having regard to noise sensitive premises.

Note: Only in exceptional circumstances where the applicant has shown that the above cannot be achieved and the need is for real emergencies (e.g. hospital operating theatre or emergency services) the following standard may be used.

9. Food safety

As some proposed uses include the provision of food to staff / the public, the applicant is reminded that under the Food Safety Act 1990 (as amended) such premises will need to register with Cambridge City Council as food businesses. In order to avoid additional costs, it is recommended that the applicant ensure that the kitchen, food preparation and foods storage areas comply with food hygiene legislation before construction / fit out starts. Contact the Commercial Team at Cambridge City Council on telephone number (01223) 457890 email: commercial@cambridge.gov.uk for further advice and information.

Report Author:

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