Public Document Pack





Joint Development Control Committee - Cambridge Fringes

Date: Wednesday, 18 March 2020

Time: 10.30 am

Venue: Committee Room 1 & 2, The Guildhall, Market Square, Cambridge, CB2

3QJ

Contact: democratic.services@cambridge.gov.uk, tel 01223 457000

Agenda

- 1 Apologies
- 2 Declarations of Interest
- 3 Minutes (PAGES 3 8)

All Committee Members may vote on this item

- 4 18/0481/OUT & S/1231/18/OL Land north of (PAGES 9 Cherry Hinton 278)
- 5 Meeting Dates 2020/21 (PAGES 279 280)

Joint Development Control Committee - Cambridge Fringes Members:

Cambridge City Council: Cllrs Baigent, Page-Croft, Sargeant (Vice-Chair), Smart, Thornburrow and Tunnacliffe, Alternates: Moore, Price, Porrer and Lord

Cambridgeshire County Council: Cllrs Ashwood, Bradnam, Harford and Richards, Alternates: Harrison, Hudson, Kavanagh, Kindersley, Whitehead and Wotherspoon

South Cambridgeshire District Council: Cllrs Bygott, Chamberlain, Daunton, de Lacey (Chair), Williams and Wilson, Alternates: Cone, Hawkins, Howell and Hunt

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Public Document Pack Agenda Item 3

Joint Development Control Committee - Cambridge Fringes
Wednesday, 18 December 2019

JDC/1

JOINT DEVELOPMENT CONTROL COMMITTEE - CAMBRIDGE FRINGES

18 December 2019 10.30 am - 1.00 pm

Present: Councillors Page-Croft, Sargeant (Vice-Chair), Smart, Thornburrow, Ashwood, Bradnam, Richards, Chamberlain, Daunton, de Lacey (Chair), Williams, Wilson, Porrer and Wotherspoon

Officers Present:

Assistant Director Delivery, Cambridge City and South Cambridgeshire District

Councils: Sharon Brown

Delivery Manager (Strategic): Chris Carter

Principal Planner: Philippa Kelly

City Environmental Health Officer: Greg Kearney

Development Management Officer (Strategic & Specialist Applications): Helen

Wass

Legal Adviser: Keith Barber Committee Manager: Toni Birkin

Other Officers Present:

Joint Interim Assistant Director: Emma Fitch

Developer Representatives:

Director, RHP Architects: Kevin Myers

Associate Director, WSP Transport: Andi Redhead Morgan Sindall, Framework Manager: Andrew Cusick

Director - National Development and Planning, Strutt & Parker: David Fletcher

Project Manager, GCP: Tim Watkins

Landscape Architect, Mott MacDonald: Jo Morrison

FOR THE INFORMATION OF THE COUNCIL

19/52/JDCC Apologies

Apologies were received from County Councillor Harford (County Councillor Wotherspoon was present as alternate) City Councillor Tunnacliffe (City Councillor Porrer was present as alternate) South Cambs District Councillor Bygott (no alternate available) and City Councillor Baigent (no alternate available).

19/53/JDCC Declarations of Interest

Councillor	Item	Interest
Councillor Ashwood	19/58/JDCC	Personal: Ward Councillor representing the area and member of resident's association in the area adjoining the site
Councillor Thornburrow	19/58/JDCC	Personal: Ward Councillor for Trumpington
Councillor Bradnam	19/55/JDCC	Personal: Ward Councillor for Milton, parish to the South East of the site

19/54/JDCC Minutes

The minutes of the meeting of the 20th November 2019 were agreed and signed as correct record subject to the following amendments:

Councillor Wilson to be added to the attendance record.

Councillors Sargeant and de Lacey declared personal interests as members of Cambridge Cycling Campaign.

Spelling corrections to item 19/50/JDCC paragraph 5, Exiting should read existing and Marley should read Marleigh.

19/55/JDCC C/5000/19/CW (19/0493/CTY) - Veolia ES (UK) Ltd, Cowley Road, Cambridge

The Committee received Section 73A planning application to continue the development without compliance with conditions 5 (hours) and 7 (noise limit) of planning permission reference C/05004/12/CW to enable 24 hour operation of the Waste Transfer Station (WTS) including maintenance depot.

David Bridgwood (National Planning Manager, Veolia) addressed the Committee in support of the application.

The Committee made the following comments in response to the report.

- i. Sought clarification regarding the maps and visual images provided by the applicant as part of their planning application which appeared to be out of date.
- ii. Raised concerns regarding noise levels impacting on the new hotel in the area.

iii. Requested clarity on the proximity of the nearest domestic dwelling units.

In response to Members' questions the Joint Interim Assistant Director stated that it was unlikely that there would be any restriction to working hours and noise limits associated with the activities of the nearby bus depot. The depot had been in its current location for some time. The Strategic Sites Manager confirmed that Stagecoach's current planning permissions were unrestricted.

In response to questions regarding the consultation process, the Assistant Director Delivery, Cambridge City and South Cambridgeshire District Councils confirmed that as the planning service was a shared service, the Planning Policy Team would consider applications such as this as a joint matter. She undertook to develop a consultation protocol for future applications of this nature.

The depot had been in its current location for some time. The Strategic Sites Manager confirmed that Stagecoach's current planning permissions were unrestricted.

In response to questions regarding the consultation process for the application, the Committee was reminded that Cambridge City and South Cambridgeshire District's planning services operate as a shared service thus the Planning Policy Team (as part of the shared service) considers applications such as this one on behalf of both planning authorities. The Assistant Director Delivery however undertook to develop a consultation protocol for future applications of this nature to avoid the possibility of any procedural irregularities in relation to consultation duties/responsibilities for the shared service.

The Joint Interim Assistant Director stated that time limited permissions had been suggested by the Planning Policy Team. An Area Action Plan was under development for the area and a Members' briefing would be delivered shortly. The depot had been in its current location for some time. The Strategic Sites Manager confirmed that Stagecoach's current planning permissions were unrestricted.

In response to questions regarding the consultation process for the application, the Committee was reminded that Cambridge City and South Cambridgeshire District's planning services operate as a shared service thus the Planning Policy Team (as part of the shared service) considers applications such as this one on behalf of both planning authorities. The Assistant Director Delivery however undertook to develop a consultation protocol for future applications of

this nature to avoid the possibility of any procedural irregularities in relation to consultation duties/responsibilities for the shared service.

The Joint Interim Assistant Director stated that time limited permissions had been suggested by the Planning Policy Team. An Area Action Plan was under development for the area and a Members' briefing would be delivered shortly.

The Assistant Director Delivery, Cambridge City and South Cambridgeshire District Councils acknowledged that time limited permissions had been suggested by the Planning Policy Team. However, the Area Action Plan was an emerging document, whilst the Minerals and Waste Local Plan was adopted, so the officer report in her opinion provided a very fair and reasonable approach that Cambridgeshire County Council officers had taken legal advice on. A Members briefing from the policy team would be delivered shortly to help provide the Committee future guidance on this.

The Committee:

Unanimously resolved to grant the application for planning permission in accordance with the Officer recommendation, for the reasons set out in the Officer's report, subject to the planning conditions as set out in the Officer's report.

19/56/JDCC Darwin Green 2/3

Withdrawn from agenda.

19/57/JDCC Wing Primary School

The Committee received a presentation from Kevin Myers (Director, RHP Architects), Andi Redhead (Associate Director, WSP Transport) and Andrew Cusick (Framework Manager, Morgan Sindall) regarding the Wing Primary School.

The presentation gave an update on improvements to the design of the school since it was last considered by this committee.

Members raised comments/questions as listed below. Answers were supplied, but as this was a pre-application presentation, none of the answers were to be regarded as binding and so are not included in the minutes.

1. Would there be a direct route to the School from the Park and Ride

Site?

- 2. Where would the drop off point be for school buses?
- 3. Would delivery vehicles have a safe turning area within the Site, or would they be forced to reverse out of the site?
- 4. Where would mini buses be able to park on Site?
- 5. Can a cross section be provided to demonstrate the ventilation within the school building?
- 6. Asked for more details on the roof window locations.
- 7. Would window shading be available to cool the school hall?
- 8. Can longer term thermal modelling be produced to help inform the climate change concerns?
- 9. Would cyclists have a dedicated access route into the school?
- 10. Regarding shared pedestrian access to and egress from to the school. Would this be safe?
- 11. Who would be using the upper floor classrooms and would there be access for wheelchair users?
- 12. Questioned the window aspects and orientations? How has this been considered from a solar gain perspective?
- 13. The building was expected to be BREEAM excellent. Why not deliver an aspirational design and aim for BREEAM outstanding?
- 14. Stated that changes to access points did not address the Committee's previous concerns regarding pedestrian and vehicle conflict points. Not clear what type of crossing being proposed and level of detail missing from the presentation to help Members consider this point.
- 15. Why has gas heating been included when the use of gas was being phased out?
- 16. Had the use of grey water for toilets been considered?

19/58/JDCC Junction 11 - South West Travel Hub (new Park and Ride site around Trumpington)

The Committee received a presentation from David Fletcher (Director – National Development and Planning, Strutt and Parker), Tim Watkins (Project Manager, GCP) and Jo Morrison (Landscape Architect, Mott MacDonald) regarding the South West Travel Hub at Junction11 of the M11.

The presentation gave an update on the project and the design revisions.

Members raised comments/questions as listed below. Answers were supplied, but as this was a pre-application presentation, none of the answers were to be regarded as binding and so are not included in the minutes.

- 1. Was this a travel hub or an additional car park?
- 2. Unclear how coach, buses and cycle spaces have been designed into the proposal?
- 3. Would there be a potential to increase capacity later should there be a need?
- 4. Requested clarity on the number of cycle spaces.
- 5. Questioned how many parking bays included vehicle charging points.
- 6. Asked if there was going to be a building on the site?
- 7. Suggested that toilet facilities could ease the pressure in the city centre facilities if the site was used by day visitor coaches.
- 8. The proposed cycle route feeds into a narrow cycle path into the city and would be problematic.
- 9. Had the numbers of people likely to use this car park to access the Country Park been considered?
- 10. Where would the cycle route out of the site and away from Cambridge go?
- 11. Why there were no improvements to the M11 crossing points as part of this scheme, as the cycle route shown appears to be a dog leg that may discourage users because of the additional mileage?
- 12. Would the Guided Bus access the site?
- 13. Similar layout had not proved popular elsewhere as they were uneconomic for bus companies.
- 14. Would there be a bus stand to allow drivers to take breaks without blocking the through route?
- 15. Have coach visitor numbers been modelled?
- 16. Would there be a connection to the proposed South Rail Station and had this been modelled into the transport assessment and need for the facility?
- 17. Would the use of Trumpington Park and Ride coach spaces be encouraged?
- 18. Would charging points for electric taxis be provided?
- 19. More details regarding the potential future expansion options were needed.
- 20. Plans needed to be clearer regarding the role of coach parking. Which coaches was it expected to serve?

The meeting ended at 1.00 pm CHAIR

Agenda Item 4

JOINT DEVELOPMENT CONTROL COMMITTEE (CAMBRIDGE FRINGE SITES)

Report by: Joint Director of Planning and Economic Development

Date: 18 March 2020

Application

Number

18/0481/OUT

Agenda Item

Date Received

29 March 2018

Officer

Philippa Kelly

Target Date

31 March 2020

(with agreement)

Parishes/Wards

Cherry Hinton

Site

Land North of Cherry Hinton, Coldhams Lane, Cambridge

Proposal

Outline planning application (all matters reserved except for means of access in respect of junction arrangements onto Coldhams Lane, Cherry Hinton Road and Airport Way) for a maximum of 1200 residential dwellings (including retirement living facility (within Use Class C2/C3)), a local centre comprising uses within Use Class A1/A2/A3/A4/A5/B1a/D1/D2, primary and secondary schools, community facilities, open spaces, allotments,

landscaping and associated infrastructure.

Applicant

Marshall Group Properties Limited and Endurance Estates

Strategic Land.

Recommendation

Approve subject to conditions and prior completion of

Section 106 Agreement.

Application Type

Outline

Departure: No

Application

S/1231/18/OL

Agenda Item

Number

Officer

Philippa Kelly

Date Received

29 March 2018

Target Date 31 March 2020

(with agreement)

Parishes/Wards Teversham

Site Cambridge Airport, Newmarket Road, Cambridge.

Proposal Outline planning application (all matters reserved except for

means of access in respect of junction arrangements onto Coldhams Lane, Cherry Hinton Road and Airport Way) for a maximum of 1200 residential dwellings (including retirement living facility (within Use Class C2/C3)), a local centre comprising uses within Use Class A1/A2/A3/A4/A5/B1a/D1/D2, primary and secondary schools, community facilities, open spaces, allotments,

landscaping and associated infrastructure.

Applicant Marshall Group Properties Limited and Endurance Estates

Strategic Land.

Recommendation Approve subject to conditions and prior completion of

Section 106 Agreement.

Application Type Outline **Departure:** No

SUMMARY

The development proposed accords with the adopted development plans for the following reasons:

- The site is allocated for development as Land North of Cherry Hinton, part of Cambridge East, in the adopted Cambridge Local Plan 2018 and South Cambridgeshire Local Plan 2018.
- 2. The proposals are consistent with the site allocation requirements of policy 13 of the Cambridge Local Plan 2018 and policy SS/3 of the South Cambridgeshire Local Plan Local Plan 2018. It has been demonstrated that acceptable mitigation of environmental

and health impacts (including noise) from Cambridge Airport can be provided and secured by planning conditions and planning obligations through a Section 106 Agreement.

- The application proposals demonstrate that the future development of Land North of Cherry Hinton will not prejudice the potential delivery of development on wider safeguarded land at some point in the future if it becomes available.
- 4. The continued authorised use of Cambridge Airport is not considered to pose a safety risk. Ongoing activities at Cambridge Airport will not have a significant adverse impact on prospective residential amenity and any new residential use will have an acceptable level of amenity and will not impede on the ongoing use of the airport.
- 5. The residual highway impacts will not be severe.
- 6. The proposed development is in accordance with the Cambridge East Area Action Plan 2008 and the Land North of Supplementary Planning Cherry Hinton Document 2018, in that the proposals will contribute to the creation of a sustainable edge community on the eastern Cambridge with a provision of residential units with a mix of tenure and social infrastructure.
- 7. The indicative design and layout will set a framework for a high quality and distinctive new neighbourhood.

RECOMMENDATION

APPROVAL subject to planning conditions and prior completion of a Section 106 Agreement.

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APPENDICES

Reference	Title
Appendix A	Glossary of Terms
Appendix B	Government Guidance
Appendix C	Development Plan Documents
Appendix D	Supplementary Planning Guidance
Appendix E	Proposed Planning Conditions
Appendix F	Site Location Plan
Appendix G	Parameter Plans
Appendix H	Indicative Masterplan
Appendix I	Environmental Health Consultation Response on behalf of the Councils'
Appendix J	Cambridgeshire Quality Panel Minutes 04 June 2018
Appendix K	Location Plan showing Site, Site Allocation and Administrative Boundary

1. EXECUTIVE SUMMARY

- 1.1 This report relates to outline planning applications (the Applications) for the Site which is located within the administrative boundaries of Cambridge City Council and South Cambridgeshire District Council (the Councils'). The Applications fall within the wider Cambridge East development site.
- 1.2 The submitted proposals (as amended) seek permission for up to 1200 dwellings (including a retirement living facility for up to 90 spaces), a local centre (up to 1850 square metres of floor space, including a food store not more than 500 square metres), a community hall (up to 250 square metres within the local xentre), schools, open space and landscaping (including allotments) and new access junctions to the site, with all matters reserved except for three principle access junctions.

- 1.3 Cambridge East is allocated for a major mixed-used development on the edge of Cambridge. The Councils' jointly adopted the Cambridge East Area Action Plan (the Cambridge East AAP) in February 2008, which planned a new urban quarter to Cambridge (up to 10,000 to 12,000 dwellings) and provided for an early phase of development North of Newmarket Road. This allocation was dependent on the relocation of Marshalls Aerospace.
- 1.4 In 2010, the main landowner, Marshall of Cambridge, announced that the relocation of Cambridge Airport will not happen before at least 2031. The Cambridge Local Plan 2018 (CLP) and the South Cambridgeshire Local Plan 2018 (SCLP) (the Local Plans) carry forward the allocations for the parts of the Cambridge East AAP allocation that can be delivered with Cambridge Airport remaining operational. The remainder of the land is identified as being safeguarded so that it can be brought forward for development at a later date through a review of the Local Plans, if circumstances change.
- 1.5 The Land North of Cherry Hinton (LNCH) site is allocated for development in policy 13 of the CLP and policy SS/3 of the SCLP for approximately 1200 dwellings. It is anticipated that approximately 780 dwellings will be in Cambridge and approximately 420 dwellings in South Cambridgeshire. Policies advise that development proposals should make provision for education facilities, a local centre with community hub, open space and a spine road connecting Coldhams Lane with Cherry Hinton Road.
- 1.6 Further planning guidance on the development of the application site (the Site) is set out in the Land North of Chery Hinton Supplementary Planning Document (LNCH SPD), which was adopted by the Councils' in November 2018. This document is material to the consideration of the Applications.
- 1.7 In 2019, Marshall of Cambridge announced plans to relocate and redevelop the Cambridge Airport site by 2030. The Cambridge Airport site has been submitted as a site option and will be considered fully through the preparation and subsequent adoption of the new Greater Cambridge Local Plan.
- 1.8 The Applicants have confirmed their commitment to deliver the Site ahead of Cambridge Airport relocating. Both Marshall Group Properties and Endurance Estates Strategic Land intend to bring forward the development of LNCH promptly, once outline planning permission has been granted for the scheme.

- 1.9 The submission of the Cambridge Airport site as a site option in the Greater Cambridge Local Plan does not affect the determination of the Applications, which have been considered on their own merits.
- 1.10 The submitted Parameter Plans (PPs) include key spatial fixes relating to the land uses and movement and access across the Site. They also set out the parameters relating to building heights and open space.
- 1.11 The PPs have been submitted with the Applications for formal approval along with an Illustrative Masterplan and detailed access plans. The proposed parameters of development demonstrate that the Site can accommodate the quantum of development proposed, making effective use of land and maintaining the context of the Site.
- 1.12 The proposals are considered to align with the development plan policy framework and objectives of creating a sustainable community which will enhance the special character of the City and its setting, as guided by the LNCH SPD.
- 1.13 The development will deliver a significant number of new homes, which will help to maintain the Greater Cambridge five-year housing land supply and deliver affordable homes. The proposals include a minimum of 40% affordable housing (480 units), which accords fully with development plan policies.
- 1.14 Policy objectives of delivering the social objectives of sustainable development will be further met by the application proposals, in the form of a new primary and secondary school, community facilities, healthcare improvements, and provision for sports and open space.
- 1.15 National planning policy places a clear emphasis on the importance of economic growth and delivering economic benefits as a key component of sustainable development. The Applications will generate significant positive economic impacts during the construction and operational phases of the development.
- 1.16 In terms of environmental impacts, the proposed development will contribute to an improvement in habitat quality and biodiversity net gain. Provision is made to ensure prudent use of natural resources at the Site, and measures to minimise waste and pollution. Mitigation and adaptation to climate change will be facilitated through the proposed Site wide sustainability strategy, fulfilling policy objectives of demonstrating excellence in sustainable development.

- 1.17 The agreed transport mitigation package will also bring environmental benefits, through the prioritisation of sustainable travel. To this end, the proposals are supported by a large Section 106 package of sustainable travel interventions to support the development. As such, the development will be able to successfully mitigate its highway impacts and promote sustainable travel.
- 1.18 Overall, the proposed development will bring significant public benefits that accord with the three dimensions of sustainable development set out in the National Planning Policy Framework 2019 (the NPPF) social, economic and environmental. Having taken into account the provisions of the development plans, the views of statutory consultees, as well as all other material planning considerations, the proposed development is recommended for approval subject to planning conditions and the prior completion of a Section 106 Agreement.

2. GLOSSARY OF TERMS

See Appendix A

3. SITE DESCRIPTION/AREA CONTEXT

- 3.1 The Site is a parcel of land approximately 56 hectares in size which is located on the eastern side of Cambridge, to the north of Coldhams Lane and Cherry Hinton (Appendix F). It is located within the administrative boundaries of Cambridge City Council and South Cambridgeshire District Council (Appendix K).
- 3.2 The majority of the Site (approximately 32 hectares) falls within Cambridge City (Cherry Hinton Ward). The village of Teversham, which is within South Cambridgeshire District, is situated to the north/north-east of the Site.
- 3.3 To the west and north of the Site is Cambridge Airport and associated land. The southern side of the Site borders existing dwellings along Teversham Drift, March Lane, Reilly Way and Church End. The eastern boundary of the Site is formed by Cherry Hinton Road and Airport Way. To the immediate north of the Site is agricultural land which is within the Cambridge Green Belt. Coldhams Lane forms the southern Site boundary.
- 3.4 The Site includes arable fields and semi-improved grassland. Large open arable fields are supported on the north-eastern side of the Site, some of which are bounded by fragmented hedgerows and scattered hedgerow

trees. The west and south-western side of the Site comprises airport land and is managed as open grassland. This part of the Site includes an existing building associated with the airport activities, which is connected by a track to Cambridge Airport.

- 3.5 A public right of way crosses the Site in a south to north direction, connecting Teversham and Cherry Hinton.
- 3.6 The Site generally falls in a north-westerly direction with highest elevations in the south-west and south-east corners. There is a shallow ridge to the east, where land slopes north-eastwards towards Airport Way and land west of the ridge slopes north-westwards towards a watercourse.

Site Constraints

- 3.7 The Site lies within an area of the lowest defined flood risk (Flood Zone 1) which has a less than 1 in 1:1000 annual risk of flooding. The Site overlies West Melbury Marly Chalk, which is designated as a principal aquifer
- 3.8 Several watercourses traverse the Site. An Awarded Watercourse ('Main Drain') is located across the western part of the Site and flows through the centre of the Site in a north-easterly direction, forming the boundary between the farmed land and open scrubland at the upstream end and between the farmed land and the airport towards the downstream end.
- 3.9 A number of ditches across the Site drain into the Main Drain: a tributary flows in an easterly/north-easterly direction from the adjacent airport site; two ditches drain from the north-west and south-east to the central area of the Site and a ditch runs along the eastern site boundary.
- 3.10 The Main Drain has been identified as supporting an existing water vole population, which is a protected species under the Wildlife and Countryside Act 1981 and a priority species in the UK Biodiversity Action Plan. Field surveys have also identified the presence of protected species of bats and birds within the Site.
- 3.11 There are no ecological designations within the Site itself. Two non-statutory nature conservation sites are located along the eastern side boundary: two County Wildlife Sites (Teversham Drift Hedgerow and Airport Way Roadside Verge) and Teversham Protected Road Verge.
- 3.12 The northern part of the Site is designated as Green Belt within the administrative area of South Cambridgeshire District Council. The Green

Belt designation continues beyond the northern and eastern boundaries of the Site.

- 3.13 There are no designated heritage assets within the Site, although the Site is located within an area where archaeological assets have previously been identified.
- 3.14 An existing 12-inch diameter intermediate pressure gas main enters the Site towards the west from Coldhams Lane and exits the Site to the north of the roundabout on Cherry Hinton Road/Airport Way.

4. THE PROPOSALS

- 4.1 Outline planning applications were submitted to both Cambridge City Council and South Cambridgeshire District Council on 29 March 2018. Formal amendments were submitted in March 2019, May 2019 and November 2019. Although two separate planning applications have been submitted, this is to reflect the cross-authority boundary nature of the proposed development and is for administrative purposes only. The development must be considered as a single entity, except where specific issues relate solely to land within either one of South Cambridgeshire or Cambridge City administrative boundaries. Any such issues will be addressed in detail within the assessment of the proposals laid out within this report.
- 4.2 The Site extends the allocated site boundary as defined in Local Plans and the LNCH SPD. The Site includes all land required for the proposed development captured by the Applications, including highway improvement and access works, and provision of playing fields to the north. The proposals have been fully evaluated on the basis of the red line application Site boundary as submitted. A location plan which identifies the application Site, the Local Plan Site allocation boundary and the administrative boundary of the Councils' can be found at Appendix K.
- 4.3 The proposals have been discussed with the Councils' officers as part of detailed pre-application work which was undertaken between Summer 2016 and March 2018. As part of this dialogue, three developer led public exhibitions were held in the local community, which were attended by representatives from the City, the District and the County Council.
- 4.4 Prior to the submission of the applications, developer presentations were also made to the Joint Development Control Committee (JDCC), on 14 March 2018 and 13 December 2018.
- 4.5 Following submission of the applications, a post submission officer update was presented to the JDCC in June 2019. Technical briefings were also made to JDCC Members in respect of education (November 2019), transport (November 2019), contamination (December 2019) and noise (January 2020).

- 4.6 The Applications seek outline planning permission for the following development, with all matters reserved (except for the means of access in respect of junction arrangements onto Coldhams Lane, Cherry Hinton Road and Airport Way) for the following:
 - A maximum of 1200 dwellings (Class C3), including retirement living facility (up to 90 spaces) (Use Class C2/C3).
 - Local Centre up to 1850 square metres of floor space, including a food store not more than 500 square metres.
 - Community hall (Class D2) up to 250 square metres (within the Local Centre).
 - Two form entry primary school.
 - Six form entry secondary school.
 - New primary access street from Cherry Hinton Road to Coldhams Lane
 - Means of access/junction arrangements onto Coldhams Lane, Cherry Hinton Road and Airport Way.
 - Pedestrian and cycle routes.
 - Open space and landscaping, including allotments.
 - Ancillary works and infrastructure.
- 4.7 Three principle access junctions to the Site are being applied for in full with the Applications:
 - <u>Junction 1</u>: Airport Way/Cherry Hinton Road Access Signalised Junction.
 - <u>Junction 2</u>: Cherry Hinton Road/Gazelle Way Roundabout Access.
 - Junction 3: Coldhams Lane Site Access Signalised Junction.
- 4.8 As an outline planning application, a series of Parameter Plans (PPs) are submitted for approval (Appendix G), which will give clear, positive foundations for what the future detailed development proposals should include. An Illustrative Masterplan has also been prepared (Appendix H) which is underpinned by the PPs which are submitted with the Applications, relating to the following:
 - Land Use (PP 01)
 - Movement and Access (PP 02)
 - Building Heights (PP 03)
 - Landscape and Green Infrastructure (PP 04)
 - Urban form (PP 05)

Amended Plans and Additional Information

4.9 Following the statutory consultation period and initial officer assessment of the Applications, additional information was submitted to the Local Planning

Authorities for review. These revisions relate to the following formal submissions:

June 2018 – Landscape and drainage consultation response schedule.

March 2019 - Amended documents pack including updated Planning Statement, Design and Access Statement, Sustainability Statement addendum, updated Environmental Statement (ES) and appendices (updated chapters relating to noise, ecology and nature conservation, traffic and transport, air quality, water resources, ground conditions and built heritage).

May 2019 – Secondary School specification upgrades providing additionally for community use.

November 2019 - Ecology Survey Update 2019.

December 2019 – Remediation Options Sustainability Statement and ES Review.

November 2019 – Revised junction access drawings.

February 2020 - Updated Arboricultural Impact Assessment (AIA).

4.10 A full re-consultation exercise was undertaken in respect of the updated ES and associated documentation, received in March 2019. Further limited reconsultation was also undertaken with regard to the other amendments submitted, the details of which can be found on the Applications files.

<u>Application Documentation</u>

4.11 As amended, the outline applications as put forward for consideration comprise:

Document	Issued	Note
Application Form	March 2018	
Ownership Certificates		
Application Drawings	March 2018 and March 2019	PPs covering the following land use issues have been put forward for approval: Land Use and Amount, Movement and Access, Building Heights, Landscape and Green Infrastructure, Urban Form.

		The Masterplan has been put forward for information/illustrative purposes.
Planning Supporting Statement	Updated March 2019	
Design and Access Statement	Updated March 2019	
Sustainability Statement and Addendum	March 2018 + Addendum 25 March 2019	
Utilities Strategy	March 2018	
Health Impact Assessment	March 2018	
Energy Statement	March 2018	
Waste Management Strategy	March 2018	
Site Waste Management Plan	March 2018	
Arboricultural Report	March 2018	
Arboricultural Impact Assessment	Updated February 2020	
Statement of Community Involvement	March 2018	
Environmental Statement with associated Appendices.	Updated March 2019	See Para. 4.19.
Memorandum of Understanding – Housing	23 January 2020	
Community facility strategy	V4 17 January 2018	

4.12 The drawings and documents to be approved are listed within **Condition 5** (Compliance with Plans).

Environmental Impact Assessment (EIA)

- 4.13 The development proposals have been assessed as falling within the remit of the Town and Country Planning (Environmental Impact Assessment) (EIA) Regulations 2011 (as amended) (the EIA Regulations). This is because of the characteristics, location and potential impacts of the proposed development. The EIA process ensures that any potentially significant effects of the development are considered and, where appropriate, mitigated by measures to prevent/avoid, reduce and where possible offset.
- 4.14. The EIA Regulations require the ES to identify the 'likely significant environmental effects' of a development. The government's Planning Policy Guidance highlights that the ES should focus on the 'main' or 'significant' environmental effects only, and that the ES should be proportionate.

Scope

- 4.15 An Applicant who wishes to make an application necessitating EIA development may request a Scoping Opinion from the LPA in accordance with the EIA Regulations. A Scoping Opinion sets out the LPA's opinion on the information in the ES that should be provided.
- 4.16 A request for a Scoping Opinion was submitted to the Councils' on 09 August 2016 by LDA Design on behalf of Marshall Group Properties Ltd and Endurance Estates Strategic Land Ltd. It was accompanied by an EIA Scoping report (dated August 2016).
- 4.17 Following a consultation process, the Councils' issued a joint Scoping Opinion on 06 October 2016. The Applicant confirms (and officers are satisfied) that the submitted ES is based on the advice set out in the EIA Scoping Opinion and the EIA Regulations.

Methodology

4.18 The ES considers the likely significant effects of the proposed development during its construction and once it is complete and operational. The ES assesses the maximum quantum, physical extent and development principles defined for the proposal, as set out in the submitted PPs which are put forward for approval.

Topics

4.19 The ES assesses the following topics:

Landscape and Visual Impacts		
Ecology and Nature Conservation		
Archaeology and Built Heritage		
Traffic and Transport		
Noise and Vibration		
Air Quality		

Water Resources
Ground Conditions
Socio-Economics
Agricultural Land Use
Cumulative Impacts

- 4.20 ES Addendums have been submitted by the Applicants in response to requests for further information. A review of the ES was also carried out by the Applicants in December 2019 to provide a status update on the assessments undertaken as part of the ES. This confirmed the robustness of the baseline information and the conclusions of the assessments presented within the ES.
- 4.21 Having assessed the submitted Applications, officers are satisfied that the ES and other additional information provided complies with the 2011 EIA Regulations and that sufficient environmental information has been provided to assess the environmental impacts of the development proposals.

5. SITE HISTORY

Reference	Reference	Outcome
16/5256/PREEIA and S/2105/16/E2	including approximately	tension Opinion Issued 1200 October 2016 school,

6. PUBLICITY

6.1	Advertisement: Adjoining Owners: Site Notice Displayed:	Yes Yes Yes
6.2	Technical Briefing - Education Technical Briefing - Transport Technical Briefing - Contamination Technical Briefing - Noise	20 November 2019 20 November 2019 18 December 2019 22 January 2020

6.3 Over 1300 neighbour notification letters were sent out by the LPA's. In addition to the standard consultation letters, statutory press notices and the display of site notices, the Applications have been subject to extensive consultation and publicity.

- 6.4 Prior to the submission of the Applications, the Applicants held a series of public meetings, exhibitions and workshops to seek public/stakeholder views on the proposed development.
- 6.5 The proposals have also been discussed with officers as part of comprehensive pre-application work, as well as presentations to the Cambridgeshire Quality Panel, Disability Panel, the JDCC and the Cambridge East Community Forum.

7. POLICY AND MATERIAL CONSIDERATIONS

EIA Directives and Regulations – EIA Regulations

- 7.1 Whilst new EIA regulations came into force in 2017, the former 2011 EIA regulations continue to apply to the Applications. This is because the transitional arrangements set out within Regulation 76 of the Town and Country Planning (Environmental Impact Regulations) 2017 are applicable to this application. Regulation 76 provide specifically that the Town and Country Planning (Environmental Impact Regulations) 2011 will continue to apply where an applicant has submitted either an ES or requested a Scoping opinion prior to 16 May 2017.
- 7.2 A Scoping Opinion for the proposed development was sought from the Councils' in August 2016. The Town and Country Planning (Environmental Impact Regulations) 2011 will therefore continue to apply to the ES which supports the Applications. The ES has been submitted in accordance with the 2011 Regulations and has been reviewed and updated since the Applications were submitted in March 2018.
- 7.3 European Union legislation with regard to environmental assessment and the planning regime remains unchanged despite the UK leaving the European Union on 31 January 2020. The government passed secondary legislation in October 2018 to ensure the continued operation of the EIA regime

The Conservation of Habitats and Species Regulations 2017

- 7.4 Consideration has been given to the application of the Conservation of Habitats and Species Regulations 2017 ('the Habitats Regulations'). Regulation 63 of the Habitats Regulations requires that the decision making authority before deciding to...give permission...for a plan or project which is likely to have a significant effect on a European site and is not directly connected with or necessary to the management of that site, must make an 'appropriate assessment' of the implications of the plan or project for that site in view of the site's conservation objectives.
- 7.5 The Site is not in the vicinity of designated (European) sites of nature conservation importance and is not within such a designation. The Councils' are satisfied that the Applications are unlikely to have a significant effect on a European designated site, either on its own or in combination with other

projects and would not result in likely significant effects on European designated sites.

Planning and Compulsory Purchase Act 2004 (as amended)

7.6 Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that applications are determined in accordance with the development plan unless material considerations indicate otherwise. The development plan for the two LPAs are for Cambridge City Council, the Cambridge Local Plan 2018 (CLP) and for South Cambridgeshire District Council, the South Cambridgeshire Local Plan 2018 (SCLP). The development plan context is summarised in Appendix C.

Community Infrastructure Levy Regulations 2010 (as amended)

- 7.7 The Community Infrastructure Levy Regulations 2010 (as amended) (the CIL Regulations) generally set out regulations relating to the Community Infrastructure Levy (CIL). Part 11 refers specifically to planning obligations (including those in Section 106 Agreements) and is relevant to the consideration of these Applications and will influence the final content of Section 106 Agreement, in the event that planning permissions are granted.
- 7.8 CIL Regulation 122 imposes limitations on the use of planning obligations. It states (where there is no CIL charging regime), a planning application may only constitute a reason for granting planning permission for the development if the obligation is:
 - (a) necessary to make the development acceptable in planning terms;
 - (b) directly related to the development, and
 - (c) fairly and reasonably related in scale and kind to the development.

Equalities Act 2010

7.9 The Applications have been assessed against the relevant sections of the Equalities Act 2010. It is not considered that the Applications discriminate against people with protected characteristics (age, gender reassignment, being married or in a civil partnership, being pregnant or on maternity leave, disability, race including colour, nationality, ethnic or national origin, religion or belief, sex, sexual orientation) specified in this Act. Consideration is given to the issue of accessibility in Section 12 (Inclusive Access) of this report.

Relevant Central Government Guidance and Advice

7.10 See Appendix B.

Relevant Development Plan Documents and Policies

7.11 See Appendix C.

Supplementary Planning Documents and Material Considerations

7.12 See Appendix D.

8. CONSULTATIONS

Cambridgeshire County Council (Transport Assessment Team)

Applications as Amended:

8.1 **No objection.** Comments. The Transport Assessment Team are now satisfied with the details of the Transport Assessment in terms of the predicted trip generation and the proposed schemes of mitigation. Should the LPA be mindful to approve this application, the proposed mitigation should ideally be secured via the Section 106 agreement or suitably worded conditions. Recommends conditions.

Applications as Submitted:

8.2 Support in principle to the development. Unable to sign off the Transport Assessment/Mitigation package at this stage. Requests further information.

Cambridgeshire County Council (Highways Development Management)

Applications as Amended:

- 8.3 **No objection.** Comments. The proposed changes will require additional road safety input. Requests that the application not be granted planning permission until this has been completed.
- 8.4 Reviewing the proposed amendments to Junctions 1, 2 and 3 in comparison to the previous revisions, the changes to junctions appear overall to be improvements to the design.
- 8.5 The proposed widening of Junction 1 has the potential to create some additional problems for non-motorised users when negotiating the junction. Confirmation should be sought from the Major Developments team that such a widening is required.
- 8.6 Junction 3 does not cater well for cyclists wishing to gain access to the shared use path heading east (on the northern side of Coldhams Lane). Suggests replacement of pedestrian crossing on the south-eastern side of this junction with a Toucan crossing.

Applications as Submitted:

8.7 Further information is required in relation to the proposed main junctions, and the design of the proposed shared use footway/cycle way on Coldhams Lane.

Cambridgeshire County Council (Archaeology)

8.8 **No objection**. Recommends that the site should be subject to a site wide programme of archaeological investigation. Recommends condition.

Cambridgeshire County Council (Flood and Water Management)

8.9 **No objection**. Recommends conditions/informatives relating to the following: strategic and detailed surface water drainage strategies for the site; maintenance arrangements for surface water drainage system (including all SuDS features); ordinary watercourse modelling.

Cambridgeshire County Council (Fire and Rescue)

8.10 No objection. Requests provision of fire hydrants. Access and facilities for the Fire Service should be provided in accordance with the Building Regulations Approved Document BS Section 16. 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.

Cambridgeshire Quality Panel (meeting 4 June 2018)

- 8.11 **No objection**. Comments provided relating to the following:
 - Delivery of public infrastructure.
 - Delivery and maintenance of community facilities and public open space in the longer term.
 - Incorporation of exemplar features for cycle provision.
 - Making best use of blue infrastructure.
 - Delivery of Passive house measures.
 - Division of land parcels.
 - Incorporation of trees within development scheme.
 - Aspiring to a 20% overall energy efficiency target.
 - Facilitation of recycling, bike and EV charging spaces on all housing plots
 - Development of health and well-being theme

Greater Cambridge Shared Planning Service Conservation Officer

8.12 **No objection.** The development proposed is acceptable subject to the imposition of planning conditions relating to a scheme of archaeological investigation in accordance with the advice of the County Archaeologist.

Greater Cambridge Shared Planning Service Sustainability Officer (Design and Construction)

Applications as Amended

8.13 No objection. The development proposed is acceptable, subject to the imposition of conditions relating to BREEAM, sustainability strategy and exemplar of sustainability; water conservation, energy and carbon reduction; overheating

Applications as Submitted

8.14 Further information is required before the scheme can be supported.

Greater Cambridge Shared Planning Landscape Team

Applications as Amended

- 8.15 **No objection.** Detailed comments provided. Previous officer comments regarding such items as landscape and visual impact mitigation and the treatment of site boundary areas can be dealt with at Design Code stage.
- 8.16 Further testing will be required as part of the reserved matters process, to ensure that the drainage strategy is robust enough to deliver usable open space, particularly in the primary amenity green spaces. The impact of the 1 in 30 year storm event on these spaces will need to be understood in detail.

Applications as Submitted

8.17 It is not possible to fully comment or conclude on the proposed development. Requests further information.

Cambridge City Streets and Open Space team

8.18 **No objection.** Detailed comments provided. Requests further information relating to boundary treatments of outdoor sports and recreation provision. Recommends condition relating to management responsibilities for public open space/play provision, playing fields, MUGA and allotments across the development.

Cambridge City Council Nature Conservation Officer (on behalf of Cambridge City Council and South Cambridgeshire District Council)

Applications as Amended

8.19 No objection. Comments. The Ecology Survey update confirmed that that the development site has not changed significantly between the preparation of the original ES (which was based on an ecological desk study in 2016 and species surveys in 2016 and 2017), and the new desk study and field survey carried out in October 2019. It concludes that the Ecology Chapter of the submitted ES (as updated in March 2019) can still be relied on in the decision-making process. This information has been reviewed, and the approach taken and conclusions are supported. The Technical Note: Ecology dated 19 December 2019 has also been reviewed. This document addresses previously raised queries relating to Biodiversity Net Gain, botanical richness

along Airport Way and the ecological impacts of the proposed remediation. Recommends conditions relating to Ecological Design Strategy, Landscape and Environmental Management Plan and Biodiversity Surveys.

Applications as Submitted

- 8.20 **No objection**. Comments. The residual effects on all ecological receptors and deemed long term positive, with the exception of ground nesting farmland birds associated with open field arable habitats.
- 8.21 In order to achieve a no net loss principle it is unclear why no offsite mitigation is proposed for these species. Recommends offsite mitigation solutions for skylarks. Recommends all the proposed mitigation measures (including retained and created habitats) are secured through a site wide Ecological Design Strategy condition. Encourages a commitment to biodiverse green roofs, with appropriate regard to aircraft safeguarding issues. Recommends conditions to ensure mitigation of grassland.

Greater Cambridge Shared Planning Service Urban Design Team

Applications as Amended

8.22 **No objection.** The amendments and clarifications relating to phasing, building heights, street sections and site plan have been provided. They are considered acceptable in urban design terms, and the application is supported.

Applications as Submitted

8.23 It is not possible to comment on the proposed development. Requires further information relating to in order to make comments.

Cambridge City Council Community Services Team

8.24 **No objection**. Comments. The on-site provision of community facilities is acceptable. The size of the facility planned is adequate. Agreement with an approach which is developer led and with a local management solution.

Cambridge City Council Public Art Officer

8.25 Comments. As part of the application, the Council would expect to see a detailed Public Art Strategy which has been developed by an experienced arts consultant in support of the planning application. A public art budget of £800,000 is recommended, to provide mitigation for the development both in environmental and social terms.

Cambridge City Council Growth Projects Officer

8.26 No objection.

South Cambridgeshire District Council Development Officer

8.27 **No objection.** The HIA is very comprehensive. Satisfied with methodology used and that the Applicant has considered and included officer advice. It has not been possible to determine which multiplier for average household size has been used to produce the population for the site.

Cambridge City Council Disability Consultative Panel

8.28 **No objection.** Comments. Panel were pleased by the scheme's dedication to ensuring accessibility throughout the design process and made recommendations for signage and navigation strategies on site, as well as other facilities that would improve everyday access for the residents.

Cambridge City and South Cambridgeshire District Joint Housing Development Officer

Applications as Amended

- 8.29 No objection. Comments. Officers have been working closely with the Applicants to agree a Memorandum of Understanding for the affordable housing scheme. The application accords with the current Affordable Housing SPD 2008 guidance for all sites capable of over 15 units or 0.5 hectares to provide 40% affordable housing. Of the proposed total 1200 units, 480 (40%) are to be affordable.
- 8.30 The current Cambridge Local Plan, South Cambridgeshire Local Plan & Greater Cambridge Housing Strategy require that the split between Social Housing for Rent & Intermediate tenures is 75/25% for Cambridge & 70/30% for South Cambridgeshire. To avoid issues around seeking different split on separate parts of the site, a 73/27% split has been provisionally agreed.
- 8.31 The Affordable Housing mix that was originally proposed was too heavily weighted in favour of larger properties. For both CCC & SCDC there is now a higher need for smaller properties for rent, particularly one bed dwellings. The following indicative mix has been proposed for the site:

No of Beds	%	
1	50 - 55	
2	25 - 30	
3	10 - 15	
4	5 - 10	

- 8.32 The proposed mix is more reflective of current and likely future need, based on general needs housing and allows for more flexibility phase by phase
- 8.33 With 480 Affordable Homes to be provided on this site, it has been agreed that Council Officers and the Affordable Housing Provider (AHP) will work closely together to produce a bespoke Local Lettings Plan for this scheme.

Cambridge City Council Sustainable Drainage Engineer

Applications as Amended

8.34 Comments. Remediation techniques may impact on the quality and type of SuDS that are delivered. The provision of the SuDS should be one of the key considerations in the preparation of remediation strategy and the remediation should support the delivery of the SuDS and not hinder or constrain it.

Applications as Submitted

8.35 Detailed comments provided. It is not possible to comment on the proposed development. Requests further information.

Cambridge City Environmental Health Officer on behalf of Cambridge City Council and South Cambridgeshire District Council

Applications as Amended

8.36 **No objection.** Detailed comments provided. The development proposed is acceptable subject to the imposition of planning conditions/informatives relating to the construction phase; noise and vibration; lighting; air quality; odour; cessation of airport uses; phasing; site wide design code; allotment provision.

See Appendix I for full planning consultation response dated 02 March 2020.

Applications as Submitted

8.37 It is not possible to fully comment and reach an informed decision about the acceptability of the proposed development. Additional information requested.

Cambridge International Airport

8.38 **No objection**. Recommends planning conditions to safeguard the operational aspects of the airport, relating to the following: Construction Management Strategy; Landscaping Scheme; Control of Lighting; Wildlife Hazard Management Plan; Carbon Reduction and Renewable Energy (including PV cells), Navigational aids impact assessment.

Natural England

Applications as Amended

8.39 **No objection**. Comments. The LPA should ensure that the development will provide sufficient informal open space to meet the additional and growing recreational demands of new and existing residents and deliver biodiversity net gain. The Skylark compensation strategy is welcomed. An appropriate

condition of obligation should be attached to any planning permission to secure these measures.

Applications as Submitted

- 8.40 No objection. Comments. Note and generally support the findings and mitigation measures detailed in the ecological assessment. Measures to mitigate the negative impacts to farmland birds, through the permanent loss of around 50 hectares suitable habitat, have not been provided. The applicant should be requested to provide details of off-site measures to adequately address the impact to local biodiversity.
- 8.41 A development of this scale should incorporate significant landscape scale enhancements to demonstrate delivery of net biodiversity gain. In this location the development should provide enhancements which contribute towards targets for chalk grassland, woodland and farmland bird habitats.

Environment Agency (EA)

Applications as Amended

- 8.42 No objection. Withdrawal of holding objection. Previous comments raised have now been satisfactorily addressed. The submitted draft bespoke conditions (04 December 2019) are considered to be relevant. The additional information provides the EA with the confidence that the remediation strategy to address the identified PFAS contamination on site (and prevent further migration offsite) has reasonable prospects of being deliverable.
- 8.43 The use of a Section 106 agreement will address long-term environmental liabilities in relation to the maintenance of capping systems, on-going ground water monitoring requirements and further necessary groundwater contamination treatment. Recommends additional conditions relating to surface water drainage strategy and piling risk assessment.

Applications as Submitted

- 8.44 **Objection**. Insufficient information has been submitted in relation to known contamination below the site and its associated risk to groundwater.
- 8.45 The Environment Agency considers the current and previous uses of the site and surrounding areas to be potentially contaminative. Preliminary site investigation works have identified elevated concentrations of hydrocarbons in groundwater beneath the site as well as elevated concentrations of PFOS and PFOA and dissolved metals in surface water.
- 8.46 Given the sites heavy contaminative history and environmental setting, it is considered to be of high sensitivity and could present potential contaminant linkages to controlled waters.

Anglian Water

Applications as Amended

8.47 **No objection**. Recommends conditions relating to phasing plan for foul water drainage works.

Applications as Submitted

- 8.48 **No objection**. Comments. There are assets owned by Anglian Water or those subject to an adoption agreement within or close to the development boundary that may affect the layout of the site.
- 8.49 The site layout should take an existing sewage pumping station situated adjacent the application site into account, and accommodate this infrastructure type through a necessary protective buffer (cordon sanitaire).
- 8.50 Foul drainage from this development is in the catchment of Cambridge Water Recycling Centre which currently does not have capacity to treat the flows from the development site. AW are obligated to accept the foul flows from the development with the benefit of planning consent.
- 8.51 Recommends condition relating to surface water drainage strategy and informative relating to trade effluent discharge

Cambridgeshire Constabulary (Architectural Liaison Officer)

8.52 No objection. Comments. There is no specific section in the documentation regarding security or crime prevention. The planning statement mentions NPPF Paragraph 58 Good Design (Create Safe and Accessible environment where crime and disorder, and the fear of crime and disorder, do not undermine quality of life or community cohesion). This mixed development could benefit from consultation regarding Secured by Design for the residential, commercial retail and education premises.

Sport England

Applications as Amended

- 8.53 **No objection**. Comments. Considers that the proposals go some way to meeting community sport requirements generated by the new development. Raises concern regarding lack of dedicated community sports provision.
- 8.54 Accepts proposed enhancements to improve the community sports facility offer. The proposed upgrade to a four-court sports hall, will enhance community provision.
- 8.55 Recommends conditions relating to assessment of ground conditions of the land proposed for the playing field and community use agreement.

Applications as Submitted

8.56 **Objection**. The proposals do not make adequate provision for outdoor/indoor community sport. Recommends that public provision for outdoor sport is included on a separate site, providing approximately 3 hectares of pitch space, supported by changing facilities and car parking.

Historic England

Application as Amended

8.57 **No objection**. The updated Environmental Statement takes previous advice into consideration. The updated document fully reflects that advice and the requirements of Paragraph 189 of the NPPF.

Applications as Submitted

- 8.58 Concerns raised on heritage grounds. Based on an analysis of the development site's location and its relationship to its surroundings, consider it unlikely that the development will affect the significance of the designated heritage identified.
- 8.59 The methodology applied by the Archaeology (ES) Chapter is considered to be formulaic and does not adequately allow an informed planning decision to be reached by the non-specialist. Recommends additional information is provided to address concerns.

Cambridgeshire Wildlife Trust

Applications as Amended (November 2019)

- 8.60 **No objection.** Comments. Should Biodiversity Net Gain through an off-site habitat creation project funded by the developer through a Section 106 Agreement be legally secured, this would address the original objection related to biodiversity loss.
- 8.61 Remain concerned regarding the levels of strategic greenspace provided on site, and the potential demands for countryside recreational and dog walking to be displaced to sensitive nature conservation sites nearby.

Applications as Amended (March 2019)

8.62 **Objection**. The current proposals will result in a net loss of biodiversity and will add to the emerging deficit in strategic natural greenspace within Cambridgeshire. Welcomes submission of a Skylark compensation strategy. Clarification sought of now the strategy will be delivered and guaranteed for a period of 25 years. Further clarification sought in respect of the Biodiversity Impact Assessment calculator.

Applications as Submitted

8.63 **Objection**. Comments. Although the on-site ecological impacts and mitigation measures have been fully catalogued, this is insufficient in itself to make the proposed development sustainable. Concerned that the quantity and quality of the greenspaces will not meet the recreational needs of the expanded population. The application does not appear to provide a measurable net gain in biodiversity.

Highways England

8.64 No objection.

NHS England

- 8.65 **No objection**. Comments. The proposed development is likely to have an impact on the services of two main GP practices and two branch surgeries operating within the vicinity of the application site. The GP practices do not have capacity for the additional growth resulting from this development and cumulative development in the area.
- 8.66 The proposed development will likely have an impact on the NHS funding programme for the delivery of primary healthcare provision within this area, and specifically within the health catchment of the development. NHS England would therefore expect these impacts to be fully assessed and mitigated.
- 8.67 Requests a developer contribution of £435,291 to mitigate primary healthcare impacts.

Cadent Gas Network

8.68 **No objection**. Operational gas apparatus has been identified within the application site boundary. This may include a legal interest in the land which restricts activity in proximity to Cadent assets in private land. The applicant must ensure that proposed works do not infringe on Cadent's legal rights and any details of such restrictions should be obtained from the landowner in the first instance.

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

9. REPRESENTATIONS

Fen Ditton Parish Council

9.1 No comments to make.

Teversham Parish Council

- 9.2 **Objects** to the Applications on the following grounds:
 - Development in Green Belt.
 - Impact of noise and pollution on users of proposed secondary school.
 - Visual impact of proposed secondary school and earth bund along Airport Way.
 - Lack of pre-school provision.
 - Lack of access by Teversham residents to proposed outdoor sports facilities and allotments.
 - Highways Issues:
 - Impact of increased traffic on Teversham village.
 - Highway mitigation should be provided including safer crossing points on Airport Way for cyclists and pedestrians from the Newmarket Road direction.
 - Opportunity to relocate County Council lay-bye from Cherry Hinton Road Teversham further away from the village.
 - New bus service should be routed through Teversham.
 - Submitted plans for roads and footways unclear.
 - Affordable housing provision:
 - At least 40% of social housing should be provided.
 - Greater percentage of homes for social affordable rent should be provided than the proposed 75/25 split.

Cambridge Cycling Campaign (Camcycle)

Applications as Amended

- 9.3 **Objection** to the proposals on grounds of the proposed layout of the road which proposes motor traffic passing through the site and in front of the proposed primary school.
- 9.4 The design of the access junctions now provide separation between the carriageway and the pathway at junctions. The overall geometry is considerably improved.

Applications as Submitted

- 9.5 **Objection** on the following grounds:
 - Walking and cycling infrastructure should be implemented before first home is occupied.

- Location of primary school should be moved away from roads.
- Shared space designs should not be used on any road with more than an insignificant level of car traffic.
- Main junction design should be with separate spaces for walking and cycling, with cycleways that are geometrically appropriate for cycling.

Cambridge Past, Present and Future

Applications as Amended

9.6 No objection. Comments. Supports provision of off-site mitigation for biodiversity loss. Seeks clarity on Biodiversity Impact Calculation. The cumulative impact of all developments in the Cambridge area on strategic greenspace should be considered. Welcomes additional information regarding school playing fields and the Green Belt.

Smarter Cambridge Transport

Applications as Submitted

- 9.7 **Objects** to the application on highways grounds for the following reasons:
 - The implications of a through-road for general traffic have not been properly considered.
 - The proposed through road will be used as a bypass even with a 20mph speed limit.
 - The new access road should be designed as a bypass, connecting Coldhams Lane and Gazelle Way.
 - Displacing traffic from the eastern end of Coldhams Lane, Teversham Drift and Cherry Hinton High Street will encourage people to make more local trips.
 - Modal shift from driving is needed to offset motor vehicle trips generated by the development.

Mill Road Medical Practice

9.8 Comments. Provision of land for an on-site health facility is supported. Identifies intention for practice to relocate the existing branch on Cherry Hinton High Street to the new on-site facility. Should delivery of the facility on-site not be achieved within an appropriate time span, a financial contribution should be sought as an alternative.

Savills on behalf of Anderson Group

9.9 Comments. The submitted Transport Assessment which accompanies the planning application does not appear to make any allowance for vehicular

traffic that could be associated with the future development of Land South of Coldhams Lane.

Teversham Playgroup Committee, Teversham Primary School

9.10 Comments. Unclear if provision has been made for Early Years childcare within the development. Questions how demand for early years provision from the development site will be met. A new purpose-built building for Teversham Playgroup will provide an opportunity for provision to be increased.

Third Party Representations

9.11 In addition to the above, over 25 third party representations were received from local residents. The following section provides a summary of the issues raised.

Support for development

Objection to development on following grounds:

• Principle of Development

- Overdevelopment of site.
- Existing unoccupied housing stock should be used.

Design Issues

- Character and community of Cherry Hinton will be harmed.
- Scale of proposed 4 storey buildings out of character with surroundings.
- Visual impact and loss of views towards Cambridge.
- Drawings inaccurate.

Residential Amenity

- Impact on existing residential amenity noise, overshadowing, traffic, privacy and overlooking.
- Impact on prospective amenity due to proximity of Cambridge Airport.

Housing Issues

A minimum of 40% affordable housing should be provided.

Transport Issues

- Local road network already at capacity.
- More should be done to accommodate increase in car use arising from development.

- Mitigation should include widening existing roads, increasing infrastructure elsewhere in Cambridge, and improving road surfaces.
- Traffic impact should be considered alongside impact of other approved developments in area.
- Questions whether traffic impact study undertaken on Teversham High Street.
- Proposed 'Spine Road' will become gridlocked.
- Development will become a rat run for cars driving down Airport Way wanting to turn right down Coldhams Lane.
- Proposed 20mph zone will not be policed or enforceable.
- Unsuitable to have a 60mph road adjoining the development.

Cycling and Pedestrians:

- Cycle network and linkages should provide better connectivity to Cambridge city centre.
- Effect of introducing extra cyclists via new cycleways onto surrounding roads needs careful consideration.
- Connected cycle route should be provided.
- Safe road crossings for cyclists should be made along Coldhams Lane, Airport Way and Teversham Drift.
- Pedestrian access from Teversham should be provided.
- Shared use cyclist and pedestrian paths should be replaced with segregated paths.
- Footway improvements required on development edges.

Proposed Accesses

- Primary entrance to site near Cherry Hinton Road should be a roundabout and relocated.
- Coldhams Lane cannot accommodate additional traffic.
- Traffic lights at junction with Coldhams Lane should be replaced with a roundabout.
- Additional access through Teversham Drift will facilitate uncontrolled street parking by non-residents.

Public Transport:

- Existing public transport services infrequent, and do not appropriately serve the area.
- Detail of proposed bus service should be provided.
- Proposed bus service for Teversham is inconvenient with services proposed at peak and school times only.
- Further measures to encourage public transport use required.

Ecology and Biodiversity Issues

- Loss of green space.

- Design and use of proposed green areas unclear.
- Hedgerows should not be altered.
- Green space should be maintained between plots.
- Blocking of existing wildlife corridors.

• Impact on Green Belt

 Principle of development (including acoustic bund and playing fields) in Green Belt.

Education Issues

- Existing early years learning service at capacity.
- Development needs to accommodate provision for early years childcare.
- Existing schools need to be supported by local authorities to ensure not adversely affected by new schools.
- A new school in this location may not be the most efficient use of funding.
- Delivery of proposed primary school should not precede first phases of development.

Health Care and Community Issues

- Existing health services at capacity.
- Proposed development will increase servicing pressures.
- New dentist and GP practices required.
- Scope for co-locating facilities within the development.
- Outsourcing current hospital based services into the community should be considered.
- Community sport facilities should not be located within school sites and should be owned/controlled by an accountable public body to ensure public access.

Utilities and Servicing Issues

- Lack of water to service the development.
- Unclear how waste will be disposed of.
- Proposed dwellings are located above existing major gas infrastructure.

Sustainability Issues

- Proposed energy efficiency promises are vague.
- Proposal does not do enough to deliver sustainability targets.
- Development should meet Passivhaus sustainability standards

The above third party responses are a summary of the comments that have been received. Full details of the consultation responses can be inspected on each of the Application files.

10. PLANNING ASSESSMENT

10.1 From the consultation responses and representations received and an inspection of the Site and its surroundings, the assessment has been structured under the following headings:

REPORT	PLANNING ASSESSMENT – KEY ISSUES		
SECTION			
11	PRINCIPLE OF DEVELOPMENT		
11	PRINCIPLE OF DEVELOPMENT		
	National Policy Context and Five-Year Land Supply		
	Local Plan Policy Context		
	Green Belt Development		
	Cambridgeshire and Peterborough Minerals and Waste Core		
	Strategy		
12	LAND USE PARAMETERS		
	Land Use and Amount Movement and Access		
	Building Heights		
	Landscape and Green Infrastructure		
	Urban Form		
	Illustrative Masterplan		
	Phasing Inclusive Access		
	Cambridgeshire Quality Panel		
13	ACCESS AND TRANSPORT		
	Transport Strategy		
	Transport Assessment		
	Framework Travel Plan		
	Off-site Transport Strategy		
	Site Access Car and Cycle Parking		
	Other Transport Issues		
	·		
14	HOUSING DELIVERY		
	Quantum, Density and Mix		
	Affordable Housing		
	Accessible Housing and Internal Space Standards		

	Self and Custom Build		
	Age Exclusive Housing: Retirement Living Facility		
15	SOCIAL AND COMMUNITY INFRASTRUCTURE		
15	SOCIAL AND COMMUNITY INFRASTRUCTURE		
	Edwartian		
	Education		
	Community Facilities		
	Local Centre		
	Health Care Provision		
	Community Development and Support		
	Libraries		
	Open Space, Children's Play Space and Sports facilities		
	Public Art		
	Provision for Waste and Recycling		
	Other Community Issues – crime and emergency services		
16	ENVIRONMENTAL CONSIDERATIONS		
	Agricultural Land Use		
	Airport Safeguarding		
	Air Quality, Odour and Dust		
	Archaeology and Heritage		
	Contamination and Unexploded Ordnance		
	Drainage and Flood Risk		
	Ecology and Biodiversity		
	Landscape, Trees and Lighting		
	Noise and Vibration		
	Sustainable Construction and Design		
	Utilities		
17	IMPACT ON RESIDENTIAL AMENITY		
1			
18	CUMULATIVE IMPACTS		
18	CUMULATIVE IMPACTS		
18 19	CUMULATIVE IMPACTS THIRD PARTY ISSUES		

- 10.2 As this is a cross boundary development proposal, the Applications have been considered against both development plans. A summary of the planning policy context for both LPA's is provided for each topic area. Where policies of relevance to the assessment are contained in only one of the Local Plans, this is stated in the report.
- 10.3 For the avoidance of doubt, there are two planning applications which will give rise to two separate planning permissions being issued by each of the LPAs, specific to the land that falls within their administrative area.

11. PRINCIPLE OF DEVELOPMENT

National Policy Context and Five-Year Housing Land Supply

- 11.1 Policies in the NPPF are themselves material considerations which need to be brought into account when determining planning applications. Such policies may support a decision in line with the development plan or they may provide reasons which 'indicate otherwise'.
- 11.2 Paragraph 59 of the NPPF states to support the Government's objective of significantly boosting the supply of homes, it is important that a sufficient amount and variety of land can come forward where it is needed, that the needs of groups with specific housing requirements are addressed, and that land where permission is granted is developed without unnecessary delay.
- 11.3 The presumption in favour of sustainable development is at the heart of the NPPF and this is set out at Paragraph 11. This states that plans and decisions should apply a presumption in favour of sustainable development. For decision-taking this means (inter alia): 'approving development proposals that accord with an up-to-date development plan without delay'.
- 11.4 Paragraph 12 of the NPPF qualifies that the presumption in favour of sustainable development does not change the statutory status of the development plan as the starting point for decision making. It advises that where a planning application conflicts with an up-to-date development plan permission should not usually be granted.
- 11.5 The Site is one of six allocated strategic sites around Cambridge which has been included in the Greater Cambridge joint housing trajectory. The Greater Cambridge Housing Trajectory and Five-Year Housing Land Supply (November 2019) relies on the site being deliverable, with first reserved matters application expected to be submitted by October 2021, and completion of first dwelling anticipated by March 2023. The Applicants have confirmed that this is the anticipated project programme for the build out of the Site.
- 11.6 The published Five-Year Housing Land Supply document identifies the Greater Cambridge housing supply figure as 5.3 years. The deliverability of some sites has subsequently been challenged at appeal. At the time of writing this report, it has been held that Greater Cambridge can demonstrate a housing supply of 5.07 years (Planning Appeal Ref: APP/W0530/W/19/3220761; Land to the rear of Nos 30 and 32 New Road, Over, CB24 5PJ).

Local Plan Policy Context

11.7 The growth strategy for sustainable development within the Cambridge subregion is set out in Local Plan policies. Policy 3 of the CLP and policy S/6 of the SCLP identify a development strategy which focusses new development in and around the urban area of Cambridge. The principle of residential

- development of the site is well established in terms of local planning policy and endorsed by the LNCH SPD.
- 11.8 Land at Cambridge East was taken out of the Green Belt (through the Cambridge Local Plan 2006 and Cambridge East Area Action Plan (AAP) (2008)) for the development of a new major urban extension to the city of up to 12000 homes. This was dependent on the relocation of activities at Cambridge Airport. The Marshall Group has been actively looking into relocation options for airport activities since 2006. In 2019 they announced they had a deliverable relocation option and intended to relocate from Cambridge.

Cambridge East Area Action Plan (AAP)

- 11.9 The Cambridge East AAP identifies the three areas that together form the wider Cambridge East development area comprising: (a) the application site (Land North of Cherry Hinton); (b) Land North of Newmarket Road (Wing/Marleigh) and (c) Cambridge Airport. Together these areas will form an urban quarter of 10,000 12,000 homes, delivering the vision under policy CE/1 for "a modern, high quality, vibrant and distinctive new urban quarter for Cambridge which will complement and enhance the character of the city and protect and enhance the environmental qualities of the surrounding area."
- 11.10 The Cambridge East AAP represents a long-term vision for its area. It sets out aspirations and objectives for creating district and local centres, housing, employment, leisure and community facilities, and guiding principles relating to landscape, biodiversity, water strategy and sustainability.
- 11.11 Since the adoption of the Cambridge East AAP in 2008, there have been a number of changes in circumstances. Policy 13 of the CLP and policy SS/3 of the SCLP which relate specifically to the Site have replaced policies CE/3 and CE/35 of the Cambridge AAP. All other policies in the Cambridge East AAP have been retained. The rest of the Cambridge East site is safeguarded for longer term development beyond 2031. Development on safeguarded land will only occur once the site in question becomes available and following a review of the Local Plans as part of the emerging Greater Cambridge Local Plan.

Cambridge and South Cambridgeshire District Local Plans

- 11.12 The Local Plans play a key role in establishing how many jobs and homes are required to meet the objectively assessed needs of the Greater Cambridge area for the period to 2031 and set out the spatial strategy for future development.
- 11.13 Land at Cambridge East is identified for development within the Local Plans. The Site is identified as site R47 (LNCH) within the plans. Policy 13 of the CLP allocates the land for the development of approximately 780 dwellings during the plan period, along with adjoining land within the District for approximately 420 dwellings (allocated in policy SS/3 of the SCLP). These

policies advise that proposals for the development of the site should 'make provision for a primary and secondary school, a local centre with a community hub, open space and a spine road connecting Coldhams Lane with Cherry Hinton Road'.

- 11.14 Local plan policies 13 and SS/3 identify that proposals for residential development of the site will be supported subject to a number of detailed criteria:
 - Acceptable mitigation of environmental and health impacts (including noise from Cambridge Airport).
 - A Masterplan submitted for development of the Site which safeguards the appropriate future development of the wider safeguarded land.
 - Continued authorised use of Cambridge Airport does not pose a safety risk.
- 11.15 The Local Plan site allocations are supported by the LNCH SPD. This is a planning guidance document that sets the framework principles and masterplan for the Site and is a material consideration alongside the development plan.

The LNCH SPD

- 11.16 The LNCH SPD was formally adopted by the Councils' in October 2018. It is a material consideration in the determination of any planning applications coming forward on the application site.
- 11.17 The document provides more detailed site-specific planning guidance, to achieve the vision of creating a vibrant, high quality and distinctive extension to the existing settlement. It sets out guidance and detail on the implementation of Local Plan policies 13 and SS/3 and will be discussed throughout this report and in the assessment of the Applications.
- 11.18 The LNCH SPD establishes the strategic framework that will guide the appropriate development on the Site. As well as establishing the overall framework it also assesses character and makes recommendations about the likely form of development in the future. As such there are elements that translate easily into the PPs and accompanying Design & Access Statement. There are other elements that will be more appropriate to a future process such as the Design Code to be prepared for the Site. The LNCH SPD along with the PPs and Design Code will be important considerations when assessing future reserved matters applications for the Site.
- 11.19 Of particular relevance to the PPs is Section 5 of the LNCH SPD which establishes 'Framework Principles and Masterplan'. These have been used to inform the proposed PPs submitted in support of the Applications. Officers

are satisfied that the Applications are consistent with the guidance contained within the LNCH SPD.

Green Belt Development

- 11.20 Local Plan policies seek to protect the Green Belt, to ensure the preservation of the unique character of Cambridge, to maintain and enhance the quality of the setting of the City, and to prevent merging of communities with one another. These policies advise that new development in the Green Belt will only be approved if it accords with national planning policy as set out in the NPPF.
- 11.21 Policies NH8 and NH10 of the SCLP refer to development in the Green Belt. These policies seek to ensure that any development proposals within the Green Belt do not have an adverse effect on rural character and openness. They also offer support to proposals for new buildings to provide appropriate facilities for outdoor sport and outdoor recreation. where they will not harm the openness of the Green Belt.
- 11.22 At a site-specific level, policies in both Local Plans accept that development on part of the Cambridge Green Belt will be acceptable for school playing fields as part of the development of the LNCH site allocation, recognising that this is common practice elsewhere around Cambridge and in line with national policy on Green Belt.
- 11.23 The Site boundary extends north beyond the site boundary as defined in the Local Plan site allocation and LNCH SPD. This part of the Site (which covers an area of approximately 1.8 hectares), is currently in agricultural use and falls within the Green Belt. The proposals that this part of the site will provide playing fields (for the secondary school and wider community use), and informal open space.
- 11.24 Paragraph 145 of the NPPF provides guidance on the types of development which may be appropriate in the Green Belt. Material changes in the use of land for the provision of 'appropriate facilities' for outdoor sport and recreation is not considered an inappropriate use of designated Green Belt land, provided that the facilities preserve the openness of the Green Belt and do not conflict with the purposes of including land within it.
- 11.25 Given the circumstances, the principle of development within the Green Belt is considered acceptable for the recreational purposes proposed, thereby in accordance with national and local planning policy. The impact of the change of use on the Green Belt is considered in detail in the subsequent Landscape, Lighting and Trees section of this report.
 - Cambridgeshire and Peterborough Minerals and Waste Core Strategy 2011
- 11.26 The majority of the Site falls in the Cambridge East Area of Search in respect of the Cambridgeshire and Peterborough Minerals and Waste Site Specific Proposals Plan (2012) and an Area of Search allocated by the adopted Site

- Specific Proposals Plan for waste management development (Policy SSP W1E).
- 11.27 The Cambridge East Area of Search is surrounded by a Waste Consultation Area designated through Site Specific Proposal Plan Policy SSP W8H, and Policy CS30 of the adopted Core Strategy. This latter policy requires that development will only be permitted within the Waste Consultation Area when it is demonstrated that this will not prejudice existing or future planned waste management operations.
- 11.28 No provision is made for strategic waste management facilities within the site allocation policies of the Local Plans, and no objection has been raised by the County Council on minerals and waste grounds. On this basis, officers consider that the proposals do not conflict with the policy provisions contained within the Cambridgeshire and Peterborough Minerals and Waste Core Strategy 2011.

Principle of Development - Conclusion

- 11.29 The proposed development of this allocated site will play a key role in delivering housing and economic growth in Cambridge East and the Greater Cambridge area during the current Local Plan period. It will enable strategic housing development to take place as set out in the Cambridge East AAP, policy 13 of the CLP and policy SS/3 of the SCLP. It will also make a valuable contribution to the Councils' five-year housing land supply the Councils' shared trajectory is reliant on the delivery of this Site.
- 11.30 The allocation of this site for development means that the application proposals are, subject to specific policy criteria being met (and other material considerations satisfied), acceptable in principle. The proposed development is therefore in accordance with Cambridge Local Plan policies 3, 4 and 13, South Cambridgeshire Local Plan policies S/6 and SS/3, the LNCH SPD and the NPPF.

12. LAND USE AND PARAMETER PLANS (PPs)

- 12.1 PPs fix the key principles for the development. A series of five PPs have been submitted to inform key thematic principles for the development. These are:
 - Land Use and Amount (PP 02)
 - Movement and Access (PP PP003)
 - Building Heights (PP PP004 Rev A)
 - Landscape and Green Infrastructure (PP 06)
 - Urban form (PP PP007)

Land Use and Amount

- 12.2 Policy 13 of the CLP and policy SS/3 of the SCLP allocate the application site for the development of approximately 1200 dwellings. The submitted outline planning application proposes a total number of up to 1200 dwellings. The Applications propose a total number of up to 1200 dwellings, including affordable housing at Local Plan levels.
- 12.3 The Land Use PP and Illustrative Masterplan identify the different land uses across the Site. Whilst most of the Site will be in residential use, the development also includes land for education (including a new secondary school to the north with associated playing fields including community sports provision), a mixed use local centre, landscaping, access roads and associated infrastructure. Areas of public open space are also located throughout the Site, including strategic open space and allotments.
- 12.4 The distribution of uses and their interrelations, along with the mix of uses proposed, is considered to positively contribute to Local Plan policy 13 and SS/3 objectives of achieving a range of uses appropriate to the area, and supporting a vibrant, high quality and distinctive extension to the existing settlement.
- 12.5 The Land Use PP also illustrates the broad location and indicative alignment of the primary and secondary streets which link Coldhams Lane in the south to Cherry Hinton Road in the east. It proposes an option for the development edge at the north west boundary. The precise location of built development will be defined by the final drainage design and the proposed re-routing of the watercourse, which is subject to a separate procedure under the Land Drainage Act 1991. Sufficient flexibility and tolerance has been factored in for the built edge of this area to be adjusted as required to react to the detailed design solution.

Movement and Access

- 12.6 National and local planning policies seek to prioritise sustainable travel methods and ensure that development mitigates transport impacts. In addition, the LNCH SPD recognises the importance of developing a transport and movement strategy for the Site, which encourages walking, cycling and the use of public transport as the most desirable modes of travel.
- 12.7 The amended Design and Access Statement sets out the approach to movement and circulation within the Site. This is based on the key principles identified within the LNCH SPD, namely:
 - 1. Reducing the need to travel by car within the development.
 - 2. Encouraging journeys on foot and by bicycle.
 - 3. Encouraging travel by public transport.
- 12.8 The spatial layout of the proposed development incorporates a number of broad principles in respect to access and movement. This includes the creation of walkable neighbourhoods by ensuring homes are located with good access to public transport routes, schools and on/off site local amenities;

the creation of a comprehensive network of interconnected streets and spaces that allow efficient movement, promoting a permeable walking and cycling network with strong links to the surrounding areas; and the provision of direct and convenient routes for pedestrians and cyclists and deliberately less direct routes for private cars, to discourage their use for short journeys. This will encourage residents to use more sustainable travel options, by reducing walk/cycle journey times.

- Proposed Spine Road (Primary Street)
- 12.9 In accordance with the provisions of Local Plan policies 13 and SS/3, the proposed primary street of the Site is shown as a spine road. This runs through the centre of the Site, connecting the two main access points to the Site: Coldhams Lane and Cherry Hinton Road/Gazelle Way.
- 12.10 During the design process, two options for the alignment of the spine road were considered along the northern perimeter and through the centre of the Site. The central alignment was agreed as the most suitable design option. This was considered to provide a more attractive pedestrian and cyclist environment, which would reduce the likelihood of the street being used as a bypass.
- 12.11 The role played by the spine road in respect of vehicular movements was the subject of considerable discussion at the pre-application stage. Discussion focused on whether this route would permit all traffic to move between the Coldhams Lane and Airport Way corridors. Assessment of two scenarios was undertaken by the Applicants prior to the submission of the Applications:
 - 1. A no-through route severed in the middle by a bus gate; and
 - 2. A complete link which can be used for through movements by all traffic.
- 12.12 The two options were considered by Cambridgeshire County Council's Economy and Environment Committee on 07 December 2017. It was resolved to approve the spine road as a connected, through route (Option 2). This option was considered to ease traffic on Church Road and Coldhams Lane in the short term. Evidence indicated that the through route connection would not induce additional strategic traffic into the area but would have a beneficial effect on the north end of Cherry Hinton village, where some local traffic relief to the Church End and Coldhams Lane is forecast.
- 12.13 The Applications provide a through route design in order to comply with the Highway Authority's recommendations as approved by the County Economy and Environment Committee. The detailed design and alignment of the spine road will be subject to a future reserved matters application. The principles of this route being a low speed street with a speed limit of below 20mph will be further explored through the Design Code (Condition 9 Site Wide Design Code).
- 12.14 Officers note that third-party representations raise the issue of the routing of the primary street through the development. This includes an objection on

behalf of Camcycle on the basis that the Illustrative Masterplan indicates the primary street passing by the proposed primary school. The precise alignment of the primary street and its relationship with other development will be a matter for the detailed design process.

- Proposed Street Hierarchy
- 12.15 The proposals included in the Applications, as demonstrated on the Movement and Access PP, identify the indicative alignments of the primary and secondary streets within the Site, together with the preferred alignment of the proposed cycle and pedestrian network.
- 12.16 The amended Design and Access Statement provides an accompanying commentary on the street hierarchy, which comprises primary, secondary and tertiary streets. The exact alignment and routing of proposed routes through the Site will be subject to the final design of the development and will be progressed through reserved matters phases. An allowance of 1m either side of the indicative routes provides a degree of flexibility at design code and the reserved matters stage.
- 12.17 Primary and secondary streets provide a width of 17.5m of adoptable highways land with footpaths and cycleways on each side of a 6.2m carriageway. It is proposed that a network of tertiary and side streets with shared surfaces will serve the residential areas and provide linkages to the primary/secondary streets. A bus route is proposed along the street network, with stops integrated along the route to serve the development.
 - Means of Access
- 12.18 Means of access and detailed junction design are proposed as part of the Applications. The Applications propose vehicular access to the Site from three locations:
 - 1. Airport Way new signalised junction.
 - 2. Gazelle Way/Cherry Hinton Road– new arm on existing roundabout.
 - 3. Coldhams Lane new signalised junction.
- 12.19 Detailed junction plans have been submitted for each of these access points. These are discussed in more detail later in the Access and Transport section of this report (Section 13).

Building Heights

12.20 The Building Heights PP identifies the maximum building heights permitted across the Site. Heights are expressed as a maximum, which allows for flexibility for the detailed design to be progressed pursuant to the permissions. Proposed building heights were considered as part of the pre-application dialogue with officers and have been designed to ensure the potential of the Site is maximised whilst respecting the character and visual appearance of the Site and the surrounding area.

- 12.21 The building height and urban form massing strategy is set out in the updated Design and Access Statement. The strategy proposes that building heights will range between 2.5 storeys (up to 10m above ground level) and 4 storeys (up to 15m above ground level). The mixed use/local centre with potential for residential use above is proposed to be up to 4 storeys (up to 16.5m above proposed ground level in height).
- 12.22 Lower heights will be located on the southern edge of the Site adjacent the existing built area of Cherry Hinton, with the tallest buildings located within the central area, (along the primary street and the western boundary of the airport edge), and also the secondary school to the north of the Site.

Landscape and Green Infrastructure

- 12.23 The landscape strategy for the Site has been informed by the existing landscape character and visual context of the Site and surrounding area. The Land Use PP and the Landscape and Green Infrastructure Plan identify new landscape features integrated with the drainage strategy. This includes linear parks, pocket parks, formal and natural play and allotments in line with policy requirements and the green infrastructure and open space principles identified in the LNCH SPD.
- 12.24 Key objectives of the green infrastructure are set out in the updated Design and Access Statement. This recognises the need to make best use of the existing landform and drainage pattern to achieve an efficient landscape and drainage strategy.
- 12.25 The proposals provide over 15 hectares of public open space, which is in excess of the provision required by the Local Plans. The updated Design and Access Statement specifies the proposals for strategic landscaping within the site, which includes the following key landscape spaces: North Park, West Park, Northern Fields, Pocket Parks, East Park, Play Park, Community Sports Pitches, Public Square, informal open space edge buffers and green corridor, and Allotments.
- 12.26 The Councils' Landscape Officers have revised the proposals and are satisfied that the landscape and green infrastructure proposals conform to the framework principles of the LNCH SPD by providing an optimum distribution and mix of accessible open space across the Site.
- 12.27 Subject to the recommendation of a condition to agree the Design Code set out in order to guide future reserved matters applications, the development proposals are considered acceptable with regard to landscape and green infrastructure (Condition 9: Site Wide Design Code).

Urban Form

12.28 The proposed urban form is set out in the amended Design and Access Statement which identifies how the development responds to its setting. The

- Urban Form PP provides an overview of the key design elements that define the urban framework and the form that the development will take. This forms the basis of what will be detailed through the Design Code.
- 12.29 It is proposed that the building form and appearance will be contemporary architectural styles, integrating characteristics of the traditional built form of Cherry Hinton. A traditional block structure forms the basis of the Illustrative masterplan, based on design principles which include the alignment of the primary street connecting the Airport Way junction to the secondary school and local centre. Perimeter blocks are arranged in linear pattern, defining the public and private realms.
- 12.30 Additional information was submitted to address concerns raised regarding distance between building elevations and tree planting areas. Officers are satisfied that sufficient space has been provided to accommodate the appropriate size of tree species. In addition, private frontages have been incorporated between building elevations and public footpaths to allow enough space between the tree planting and building elevation for the tree to mature without causing a potential nuisance.
- 12.31 The townscape framework includes a number of elements which will create a legible and visually attractive environment, including inter-connected nodal spaces, internal vistas and market buildings. The layout has also been designed to ensure strong development edges which provide appropriate buffers between the site and adjacent uses.
- 12.32 The subsequent Design Code phase will set the rules for the design of the new development and will provide a tool to achieve the design objectives and site character principles set out in the Applications. Design Codes are typically secured by means of planning condition and require approval prior to submission of the reserved matters. A relevant condition has been recommended (Condition 9 Site Wide Design Code).

Illustrative Masterplan

12.33 In addition to the suite of PPs as described above, an Illustrative Masterplan is submitted with the Applications. This demonstrates one possible form of future development, with conformity to the PPs referred to above. It demonstrates how key features, land uses, open space, movement strategy and access points could function together and deliver the quantum and type of development proposed. The detailed form of development will be secured at individual stages of reserved matters.

Phasing

12.34 The Applicants have confirmed an intention for submission of the first reserved matters application in parallel with the Design Code by October 2021, and commencement of infrastructure by March 2022. First housing completions are anticipated in the first quarter of 2023. This is a slippage of around 12 months from previous assumptions set out in the Applications as

- originally submitted, in part due to the on-going negotiations of the proposals. It is anticipated that the development will be built out at approximately 170 homes per annum.
- 12.35 Whilst the optimum approach for delivering the Site will be determined by the Applicants, the LPAs expect that education provision and community development will be brought forward and delivery secured at the earliest opportunity. The updated Design and Access Statement includes an indicative phasing plan which identifies the potential phasing of the development. Whilst noting that the land is in two ownership and developer(s) have not yet been appointed, a three-phase construction programme is proposed by the Applicants.
- 12.36 It is anticipated that the first phase of development will commence from the east, immediately adjacent Cherry Hinton Road. The indicative phasing plan identifies that Phase 1 will also include construction of the primary school. Phase 2 will consist of the land to the west of Phase 1, including the local centre. The final phase will consist of the western extents of the development, and the junction onto Coldhams Lane.
- 12.37 With regard to the phasing of the schools, the County Council has advised that there may be some surplus primary school capacity in the local area at the outset of the development. It may not therefore be essential for the primary school to be built as part of Phase 1. The development of the main access road would enable delivery of the majority of the infrastructure required for the secondary school site and may enable the opportunity to bring this facility forward at an earlier stage, should this be required.
- 12.38 A planning condition has been recommended which requires a site wide phasing plan which sets out the broad sequence of providing the key elements of the scheme to be submitted with the first reserved matters planning application (Condition 8 Phasing). Further discussions will also take place regarding whether it is also preferable to secure timings and phasing through a Section 106 planning obligation.
- 12.39 In accordance with the advice offered by the County Council, there is an expectation that the secondary school site will be identified as a separate phase not linked to other development, so as to provide clarity that it could be delivered at an early stage of the development. The exact timing of provision of education facilities will be in accordance with the requirements of the County Council and secured through the Section 106 Agreement, taking account of existing provision, predicted housing trajectory and new community needs.

Inclusive Access

12.40 Local Plan policies 56 and HQ/1 seek to secure high quality, accessible and inclusive development which allow for future changes in needs and lifestyles. Policy 57 of the CLP requires new buildings to demonstrate accessibility for all users.

- 12.41 The vision for the development reflects the Cambridgeshire Quality Charter for Growth which promotes planning for sustainable growth along the themes of Community, Connectivity, Character and Climate. The supporting documentation which accompanies the Applications confirms an intention for the development to be as inclusive as possible. This will be further considered at the reserved matters stages. In addition, the Design Code will require the consideration of accessibility in the design of streets and spaces.
- 12.42 The Applications were discussed at meetings of Cambridge City Council's Disability Panel on 28th November 2017 (pre-application) and 30 April 2019 (post submission). The Panel were pleased by the scheme's commitment to ensuring accessibility throughout the design process and made recommendations for signage and navigation strategies on site. These can be secured through the detailed reserved matters phases of the development.
- 12.43 On this basis, officers are satisfied that the accessibility objectives of policies 56 and 57 of the CLP and HQ/1 of the SCLP have been met.

Cambridgeshire Quality Panel

12.44 The Cambridgeshire Quality Panel reviewed the emerging proposals on 08 January 2018 (at pre application stage) and again on 04 June 2018 when the Applications had been submitted. A number of specific recommendations were made. The full minutes are attached as Appendix J. Issues and recommendations of the June 2018 meeting are tabulated below, together with the officer response.

	ISSUES AND RECOMMENDATIONS OF QUALITY PANEL	RESPONSE
1	Can smaller parcels of land deliver public infrastructure intended for the wider developable area? Is the development future proofed?	Section 106 provides the legal mechanism by which infrastructure can be secured across the Site. This enables the future proofing of the Site, even if small land parcels come forward for development at the reserved matters planning application stage.
2	Trim trails, play spaces, community access to school playing fields and community café are all welcomed. How will these be delivered and maintained in the longer term – are there mechanisms in place to secure this?	Section 106 provides the legal mechanism for securing and maintaining the public open space.
3	Welcome proposed cycle provision, but can exemplar features be incorporated?	The Applicants have worked with planning officers, County Council highways officers and representatives of CamCycle to ensure that the

		development proposals appropriately addresses the needs of cyclists.
4	Does the site make best use of blue infrastructure — the Panel would encourage the applicant to explore some of the opportunities discussed to enhance the development further.	These are outline applications, and as such the detail of the blue infrastructure will not be known until the detailed reserved matters planning application stage.
		The information submitted in support of this proposals demonstrates a SUDS solution, which is acceptable in principle to city and County drainage officers.
		Officers will welcome the further consideration of blue infrastructure at reserved matters stage.
5	Panel supports and encourages the Applicant to further explore and deliver Passive House measures	The Addendum to the Sustainability Statement confirms the commitment set out in the Energy Statement to delivering a portion of residential units to Passivhaus standard. A condition has been recommended which requires all future reserved matters planning applications to be accompanied by a sustainability statement which sets out how the requirement for the development to be an exemplar in sustainability will be achieved.
6	Each parcel of land for house builders to deliver should include streets rather than be divided up along streets, to enable a better designed development	This issue can be addressed at the detailed design stage.
7	Use trees for all their benefits and whilst providing bird habitat is an issue for the airport, smaller bird species can be encouraged that need not be a concern	The proximity to the Site to an operational airport operating under a Wildlife Hazard Management Plan is a constraint to development. Key risks are associated with potential for bird strikes.
		Whilst any elements that have the potential to attract foraging, roosting or breeding species within the flight path of the airport can be designed out, this does prevent the biodiversity opportunities of the Site from being maximized.

8	Consider in conjunction with the local planning authorities, a 20% over-all energy efficient target rather than the current approach	This target would exceed the current policy target of 10% set by Policy CE/24 of the AAP. The Energy Statement submitted as part of the submission identifies the approach to reducing building related carbon emissions. More detailed Energy Statements will be required at the reserved matters stage, when more detail is available in relation to carbon calculations.
9	Do facilitate recycling, bike and EV charging spaces on housing plots.	The Applications commit to the provision of electric vehicle charge points. Provision for domestic and commercial recycling and cycling parking is also secured as part of the Applications.
10	Continue to develop the health and well-being theme	Noted.

12.45 In the opinion of officers, the application submission adequately addresses the points made by Quality Panel.

Land Use Parameters – Conclusion

- 12.46 The proposed quantum and mix of uses is considered to positively contribute to the policy objectives of creating a new and distinctive sustainable community on the eastern edge of Cambridge. Movement within the site is founded on comprehensive development and the prioritisation of sustainable travel. Further consideration will be required at Design Code stage towards all non-motorised modes.
- 12.47 Officers are satisfied that the Applications, including the submitted PPs, accord with the established framework principles identified in the LNCH SPD. Subject to conditions relating to the requirement for a Design Code (Condition 9), Phasing Plan (Condition 8) and requiring development in accordance with the approved PPs (Condition 5), officers are satisfied that sufficient safeguards are provided to ensure commitments set within the Design and Access Statement will be followed through at the Design Code stage. The proposals therefore comply with policies 13, 55, 56, 57 and 58 of the CLP, policy SS/3 of the SCLP, the Cambridge East AAP, the LNCH SPD and the NPPF.

13. ACCESS AND TRANSPORT

13.1 The NPPF requires transport issues to be considered from an early stage of a development proposal, to ensure that the potential impacts on transport

networks can be addressed, and opportunities to promote alternative travel modes to the private car are maximised. Paragraph 109 states that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impact on the road network would be severe.

- 13.2 Within the national policy context, applications for development should, (amongst other things), give priority first to pedestrian and cycle movements, within the scheme and with neighbouring areas. They should also, as far as possible, facilitate access to high quality bus transport with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use.
- 13.3 In the local context, policy 5 of the CLP and policy TI/2 of the SCLP seek to ensure development proposals are consistent with and contribute to the implementation of strategic transport strategies and priorities. Site specific transport policies can be found in the Cambridge East AAP (policies CE/10 and CE/11), which require the prioritisation of sustainable travel methods and mitigation of the transport impacts of development. The LNCH SPD also recognises the importance of ensuring new development has strong connections to Cherry Hinton, surrounding neighbourhoods and Cambridge City centre.
- 13.4 The Applications are accompanied by a Transport Assessment (TA) and Framework Travel Plan (FTP), the methodology and scope of which has been agreed by County highways officers.
- 13.5 In reviewing the propsoals, the County Transport Assessment Team, has had regard to advice offered by the County Major Infrastructure Delivery team. During the course of the application, the Applicants worked with officers to address access and transport issues raised during the consultation process, which included a number of meetings with stakeholders.

Transport Strategy

- 13.6 The Applicants transport and movement strategy for the Site is based on the vision identified in the LNCH SPD. It works on maximising the location of the Site (which is close to facilities, services and jobs), and the promotion of sustainable travel for existing and future residents in the area. Three key principles are incorporated:
 - 1. Reducing the need to travel by car within the development, through offering permeability within the Site for pedestrians, cyclists and public transport.
 - 2. Encouraging journeys on foot and by bicycle through providing direct connections to strategic off-Site routes; and

3. Encouraging travel by bus by ensuring main routes within the Site accommodate buses and are designed to maximise the number of residents located within walking distance of a regular service.

Cycling and Walking Strategy

- 13.7 The Applications propose a comprehensive cycle and walking network within the Site. A network of new footpaths and cycleways will be provided which will connect to existing routes and provide a link between them. This includes a segregated shared foot path/cycle path between Airport Way and Coldhams Lane. The Illustrative Masterplan shows this path as running through the proposed linear park that bounds the full western edge of the development, connecting with Coldhams Lane via a Site access junction (Junction 3).
- 13.8 A number of segregated shared path connections are also proposed through the wider green infrastructure within the Site, allowing connections to Cherry Hinton and Teversham.

Transport Assessment (TA)

- 13.9 The TA and site wide FTP provide an assessment of the full development effects of the proposals in transport terms. From this, a package of mitigation measures has been proposed.
- 13.10 Officers note the third-party representation by Savills on behalf of Anderson Group. The TA which accompanies the planning application does not make any allowance for vehicular traffic that could be associated with future development of Land South of Coldhams Lane. The County Transport Assessment notes that the Land South of Coldhams Lane is identified in the CLP for outdoor recreation and some commercial element. This site has not been included in the TA methodology, as it is not a committed development (ie does not have the benefit of a planning permission).
- 13.11 During the course of the application, a TA Addendum (March 2019) was submitted which summarises changes to technical work arising from comments received from County highways officers and other stakeholders. The TA demonstrates that the Site can be developed without causing a severe impact on the transport network, subject to the development including a multi-modal mitigation package.
- 13.12 The TA considers both the construction and operational phases of the development, and the potential impact of vehicle trips generated on the highway network. The assessment considers a 'worse case' scenario of transport movements generated by the proposed development. The trips rates used within the trip calculations were adjusted to reflect the potential provision of sixth form (further education) facility at the proposed secondary school.
- 13.13 Both the TA Addendum and mitigation package has been assessed by the County Transport Assessment Team. Confirmation has been received that the

details of the TA in terms of predicted trip generation and the proposed schemes of mitigation are acceptable.

- Construction Phase Impacts
- 13.14 The TA concludes that the additional traffic generated by the construction phase of the development would not have a significant effect on the highway network. In accordance with advice from the County Transport Assessment Team, a condition has been recommended which requires the approval of a Traffic Management Plan (TMP) prior to construction commencing, to ensure that construction traffic mitigation measures (including construction traffic routing) will be implemented during this phase of the development (Condition 55: Highways Traffic Management Plan).
 - Operational Phase Impacts
- 13.15 The TA concludes that during the operational phase of the development (ie, when the Site has been fully built out) the majority of junctions within the agreed study area will continue to work within capacity or will not be severely impacted by the flows produced by the proposed development. The only location where improvement works will be required is at the Coldhams Lane/Barnwell Road roundabout.
- 13.16 The additional predicted trips using the Coldhams Lane/Barnwell Road junction as a result of the proposed development being fully built out are the equivalent of 177 Passenger Car Unit's in the morning peak and 170 Passenger Car Unit's in the afternoon peak. This represents an increase of 6% and 5% in the morning and afternoon peaks respectively.
- 13.17 A financial contribution is proposed towards remodelling the Coldhams Lane/Barnwell Road roundabout, to provide additional highway capacity and safe access across the roundabout for pedestrians and cyclists. This is discussed in more detail in the strategic infrastructure improvement section below.

Framework Travel Plan

- 13.18 The Framework Travel Plan (FTP) has been prepared as a result of the TA, in accordance with Paragraph 111 of the NPFF. Aimed at influencing the travel behaviour of all future site users, this document seeks to promote the most sustainable forms of transport. This is achieved by identifying measures to promote travel by modes other than by the private car.
- 13.19 Measures recommended in the FTP seek to reduce reliance on the private car, by encouraging cycling, walking and the use of public transport. Officers welcome the proposal to incorporate electric vehicle (EV) charging facilities across all land uses from the outset of the development, and the provision of a car club on Site. Relevant conditions have been recommended to secure the EV charging points (Condition 57 Site Wide Electric Vehicle Charge Point Provision and Infrastructure Strategy; Condition 58 Site Wide

Electric Vehicle Charge Point Provision and Infrastructure Scheme Strategy Delivery). The provision of a site wide car club can be secured as part of the Section 106 Agreement.

- 13.20 The FTP has been reviewed by the County Transport Assessment Team and is considered acceptable as an interim document. It is an expectation that a Full Travel Plan will be submitted for approval, which will identify all agreed mitigation scheme.
- 13.21 The requirement for a Full Travel Plan and its implementation (including the appointment of a Framework Travel Plan Co-ordinator who will be responsible for implementing the agreed measures) can be secured through the Section 106 Agreement.

Off-Site Transport Strategy

- 13.22 The development proposals for the Site are supported by a comprehensive off-site transport strategy that addresses and mitigates the transport impacts of the development. The approach to transport mitigation has been based on the need to ensure that the mitigation meets the relevant statutory tests set out in Regulation 122 of the CIL Regulations, namely: being necessary to make the development acceptable in planning terms; directly related to the development; and fairly and reasonably related in scale and kind to the development.
- 13.23 The transport mitigation package has been the subject of extensive discussions with County highways officers, planning officers and other stakeholders, and has been agreed in principle by the County Transport Assessment Team. It includes off-site measures relating to strategic transport projects, measures to facilitate cross City connectivity, and improvements to the existing footpath and cycle path network.
- 13.24 The agreed transport mitigation package is summarised below. It is proposed that provision will be made for these facilities/services through a Section 106 Agreement. Further details of the Section 106 process, including a summary of the agreed financial contributions is provided in Section 20 of this report (Section 106 Planning Obligations).

PROPOSED TRANSPORT MITIGATION MEASURE		
Strategic Infrastructure Improvements:		
Remodelling Coldhams Lane roundabout.		
Footpath and Cycle Path Improvements:		
Pedestrian and cycle improvements at Rosemary Lane, Norman Way and The Tins (including to Tins Bridge).		

Footpath improvements across Coldhams Common.

Strategic Connectivity Improvements:

Shared foot/cycleway (3m) along Coldhams Lane.

Upgrade to existing Barnwell Road pedestrian and cycle crossing.

Delivery of small-scale walking and cycling measures in the locality.

Public Transport Improvements:

Direct bus service to the City Centre via Coldhams Lane.

Improvements to existing bus stops on Cherry Hinton High Street.

Access Improvements:

Widening of existing footpath between site access / Gazelle Way roundabout and Tesco roundabout.

Signalised junction with Coldhams Lane.

Signalised junction at Airport Way.

Additional arm to Gazelle Way Roundabout and new toucan crossing on southern arm

Widening of existing cycleway/footway (3m) Airport Way / Church Road junction.

Footway widening between new signalised site access and Marshalls Close.

Other Improvements:

Environmental enhancement measures in Church End.

Traffic calming and cycle bypass on Cherry Hinton High Street close to Teversham Drift.

Travel Plan management and associated measures.

Table: Agreed off-Site transport mitigation

Strategic Infrastructure Improvements

- 13.25 The proposed development will increase trips through the Coldhams Lane roundabout junction which will require mitigation. The transport mitigation package includes an agreed financial contribution towards the remodelling of this roundabout. This is a strategic infrastructure scheme which is the responsibility of the Cambridge and Peterborough Combined Authority (CPCA).
- 13.26 The County Council has been funded by the CPCA to progress a range of potential design options for achieving the key aims of this project. This includes the provision of safer, direct and more convenient routes for cycling and walking.

Strategic Connectivity Improvements

- 13.27 The proposed development will increase trips towards the City centre for employment and leisure purposes by all modes of transport. Transport mitigation measures are proposed to reduce dependence on motor travel and encourage walking and cycling trips, by providing a safe route to link into existing infrastructure.
- 13.28 Proposed measures to improve strategic City connectivity include a financial contribution for improvements from the site access on Rosemary Lane to Norman Way and the Tins cycle route, as part of the Fulbourn Greenways Project.
- 13.29 The design upon which this contribution is based utilises the maximum space on Rosemary Lane, provides crossing facilities across Coldhams Lane and a widened connection along Norman Way. The contribution also includes costed improvements to the Tins Bridge.
- 13.30 Financial contributions have also been agreed for footpath improvements across Coldhams Common. This will help to encourage walking and cycling by providing a safe and direct route for pedestrians and cyclists to link into the Chisholm Trail, which is a County Council led scheme.

Other Footpath and Cycle Path Improvements

- 13.31 The proposed transport mitigation package also includes measures to improve connectivity through the improvement of local footpaths and cycle paths. A contribution is proposed to provide a shared footway/cycleway along Coldhams Lane, which will provide a direct route for pedestrians and cyclists to link between the site and Nuttings Road through to Barnwell Road. The upgrade and resurfacing of the existing Barnwell Road pedestrian and cycle crossing point is also proposed, to enhance the link between the proposed Coldhams Lane and Coldhams Common links.
- 13.32 Officers note that these improvements will positively address issues raised by CamCycle during dialogue with officers and the developer team in respect of junction design. The measures will improve connectivity between the

Coldhams Lane pathway and Barnwell Road and allowing enhanced access in respect of cargo bikes.

Public Transport Improvements

- 13.33 The public transport strategy for the site is based on providing public transport connectivity where no such connectivity currently exists. Based on an assessment of potential costs for providing a new bus service for the development, it has been identified that the proposed development can support a commercially sustainable operation requiring the purchase of two vehicles.
- 13.34 A proposed bus strategy has been agreed in principle with County Highways officers and Stagecoach bus operator. The outcome of the strategy is that the development site will be served by up to three buses per hour at peak times and two buses per hour off-peak to Cambridge city centre.
- 13.35 It is proposed that at morning and afternoon network peak and school times, the bus service will commence from/continue to the Marleigh/Wing development (Land North of Newmarket Road) via Teversham, to provide additional connectivity for workers in central Cambridge and for expected student numbers at the new North Cherry Hinton secondary school.
- 13.36 In the early mornings (pre morning peak period) and post-evening peak period the service will operate via Mill Road to provide access to Cambridge railway station. This will serve the needs of rail commuters to and from the new development. In the inter-peak (between 9:00 and 17:00 excluding school peak hours) the service would operate via Coldhams Lane.
- 13.37 The new bus service has been costed on providing access to and from the Marleigh/Wing development and would also serve Teversham. A relevant financial contribution has been agreed.

Site Access

- 13.38 The Applications propose three principle access junctions to the development site. Full details of these accesses, including detailed junction designs, have been submitted as part of the Applications.
 - Junction 1: Airport Way/Cherry Hinton Road Access Signalised Junction.
- 13.39 This junction is proposed to be a signalised four arm left/right staggered junction, formed off Airport Way/Cherry Hinton Road/the application site.
 - Junction 2: Cherry Hinton Road/Gazelle Way Roundabout Access
- 13.40 This access would see the addition of a fourth arm onto an existing 3 arm roundabout between Cherry Hinton Road and Gazelle Way.
 - Junction 3: Coldhams Lane Site Access Signalised Junction

- 13.41 This junction onto Coldhams Lane is designed to operate alongside the junction that serves the Weston Homes development on land at Hatherdene Close.
- 13.42 The proposed accesses have been considered on their own merits by Cambridgeshire County Council as Highway Authority. All three junctions have been subject to a Road Safety Audit and preliminary design checks.
- 13.43 The Road Safety Audit process has considered the needs of all road users, not just those travelling by motorised vehicle. Officers are satisfied that an appropriate balance has been taken between the need to give high priority to non-motorised vehicles users, with the requirement to cater for the types of vehicles that would use the three junctions, without causing conflict between the different user groups.
- 13.44 During the course of the Applications, meetings were held with County Transport Assessment Officers, Walking and Cycling Officers and representatives from CamCycle to discuss the detailed junction designs. This resulted in a number of design improvements (including separation of cycle route and carriage way at junctions where possible) to enable improved accessibility for cyclists and pedestrians. These amendments were formally submitted to the LPAs in November 2019.
- 13.45 Officers note that the size of Junction 1 has been queried by the County Highway Development Management Officer. The Major Developments team has confirmed that widening/alignment of this junction is necessary to allow large vehicles to negotiate it.
- 13.46 Third party representations raise concern that Junction 3 does not cater well for cyclists wishing to gain access to the shared use path heading east (on the northern side of Coldhams Lane). It has been suggested that the pedestrian crossing on the south-eastern side of this junction be replaced with a toucan crossing. Officers are advised that toucan crossings can only be provided where they link to cycle facilities on the opposte side of a road. It is not possible to install such a crossing in this location, as there is no space to provide off or on road cycle facilities on the opposite (southern) side of Coldhams
- 13.47 The access amendments have been reviewed by the County Transport Assessment team, who have confirmed acceptability from a highways perspective. The County Development Management Engineer has also reviewed the proposed amendments to the three junctions, and confirmed that, in comparison to the previous revisions, the changes proposed offer improvements to the design.
- 13.48 The Transport Assessment team has considered the proposals in detail and is satisfied that they meet the user requirements. Subject to planning conditions relating to the detail of Junctions 1, 2 and 3, the proposed access arrangements are considered acceptable in highways terms (Condition 49, Highways Details of Access Junction 1; Condition 50, Highways –

Details of Access Junction 2; Condition 51, Highways – Details of Access Junction 3).

Car and Cycle Parking

13.49 Secure cycle parking will be secured by way of planning condition (Condition 47, Highways - Cycle Parking) to ensure provision is in accordance with Local Plan requirements and cycle parking guidelines. It is an expectation that cycle parking will be considered early in the more detailed design stages and will generally be provided as Sheffield stands or within garages.

Other Issues

- Transport Improvements Teversham Village
- 13.50 The Applications will deliver enhancements onto Church Road, a signalised junction at Airport Way and walking and cycling enhancements, all of which will bring benefit to existing residents of Teversham.
- 13.51 The request made by Teversham Parish Council for traffic calming within the village, and the relocation of an existing lay-by has been considered by officers. It is not considered appropriate or reasonable to require such enhancements as part of the proposals brought about by these Applications, because they fail the statutory tests under Regulation 122 of the CIL Regulations.
- 13.52 The TA provides no evidence to suggest that additional trips generated by the development would have an adverse highways impact Teversham. The number of predicted vehicle trips through the village as a result of the proposed development is negligible at 4 two-way Passenger Car Unit trips during the morning peak. This would not trigger the requirement for addition traffic calming through the village
- 13.53 It would not be reasonable to require the Applicants to fund the costs of relocating an existing lay-by which is situated some distance from the application site, on land which is not within their control. Officers are of the opinion any such requirements either through a condition or a planning obligation would fail to meet the statutory tests required by Regulation 122 of the CIL Regulations.

Access and Transport - Conclusion

13.54 The Applications have been considered in the context of relevant transport and access policies as contained in the NPPF, the LNCH SPD and Local Plans. The proposed transport mitigation package and FTP would prioritise sustainable travel modes. Whilst the proposed development will generate additional traffic, the residual cumulative impacts will not be severe. On this basis, the proposed development is considered to accord with the NPPF, which in paragraph 109 states that development should only be prevented or refused on transport grounds where the residual cumulative impacts of

- development are severe. There are no such grounds to refuse these Applications on this basis.
- 13.55 The transport mitigation package includes the provision of strategic solutions. The mechanisms and timing of these off-site improvements and financial contributions can be secured by way of Section 106 Agreement and planning conditions as described above.
- 13.56 The proposed accesses to the Site are considered safe, having met the stringent requirements of a safety audit which has been approved by the Highway Authority. The development proposals would not lead to significant highway safety issues or hazards. Having considered the evidence and comments received from the Highway Authority, officers are satisfied that the proposed development would not lead to traffic danger or congestion of the highway network, including during morning and afternoon peak hours.
- 13.57 On the basis of the above evaluation, and subject to appropriate identified mitigation secured through planning conditions and obligations as part of a Section 106 Agreement, the Applications are considered acceptable with regard to highways and transport issues. The development proposals therefore comply with policies 5 and 13 of the CLP, policy SS/3 of the SCLP, policies CE/10 and CE/11 of the Cambridge East AAP, the LNCH SPD and the NPPF.

14. HOUSING DELIVERY

Quantum, Density and Mix

- 14.1 Policies within the Local Plans seek to ensure developments provide a balanced supply of housing and appropriate mix of dwelling sizes, types and tenures to meet projected household needs, including the needs of different groups in the community.
- 14.2 Specific guidance in respect of housing density is provided by the Cambridge East AAP and LNCH SPD. Policy CE/7 of the SPD seeks to achieve an average net site density of at least 50 Dwellings Per Hectare (DPH); whilst the SPD identifies an average overall net housing density requirement for the site of between 40-50 DPH.
- 14.3 The Illustrative Masterplan submitted in support of the Applications demonstrates an average residential density across the Site of between 40 to 50 dwellings per hectare, which accords with the LNCH SPD. Higher density areas correspond to building heights, with increased density towards the western boundary and central part of the Site around the local centre, and lower densities across the southern edges adjacent to existing settlement.
- 14.4 The PPs supporting the Applications demonstrate that at the proposed housing density, the development would respect the spatial development principles set out in the LNCH SPD. Officers are satisfied that the quantum of

housing development proposed (up to 1200 units) can be successfully delivered on the Site together with all the necessary infrastructure and open space.

- 14.5 A range of residential types, sizes and tenures are proposed by the Applications, including a minimum of 40% affordable housing. The proposed housing mix has been revised to reflect the Local Plan policy framework and market evidence. It is proposed that 53% of the total number of dwellings will be one- and two-bedroom units, 32% 3 -bedroom units and 20% 4-bedroom units. The Councils' Housing Officers have confirmed the acceptability of the proposed mix.
- 14.6 The agreed indicative market and affordable housing mix is set out in the table below.

	Market	Affordable	Total	%
1 bed apartment	72	252	324	27
2 bed apartment	112	32	144	12
2 bed house	68	100	168	14
3 bed house	324	60	384	32
4 bed house	144	36	180	15
TOTAL	720	480	1200	100

Table: Indicative Housing Mix

- 14.7 The LNCH SPD envisages that the 1200 residential units would likely comprise a mix of 35% apartments and 65% housing, based on initial capacity studies. The proposed housing mix represents a split of 39% apartments and 61% houses, which is considered appropriate given market evidence.
- 14.8 Officers note that the precise housing mix may differ as subsequent reserved matters phases are brought forward for further development. Each phase would need to have regard to the cumulative housing mix across the application site, and also the need for any specialist accommodation. The Section 106 Agreement will secure the details of the housing mix to allow for such flexibility. A condition has also been recommended requiring each residential parcel to be accompanied by a statement demonstrating how it accords with the agreed indicative housing mix for both market and affordable housing (Condition 11 Housing Mix).

Affordable Housing

14.9 The NPPF states that LPAs should use their evidence base to ensure that their Local Plan meets the full objectively assessed needs for market and affordable housing. It also states that policies should be set for meeting the

- identified need for affordable housing, and that policies should be sufficiently flexible to take account of changing market conditions.
- 14.10 Policy 45 of the CLP requires residential development of 15 or more units to provide a minimum percentage of 40% affordable housing. Policy H/10 of the SCLP requires a minimum of 40% affordable homes on sites of 11 dwellings or more.
- 14.11 The Applications propose 40% of the dwellings will be affordable (480 units), which the Section 106 Agreement will secure.
- 14.12 The development will be tenure blind, with the affordable homes and the market housing integrated. Affordable housing will not be identified through location, segregation or the appearance of buildings.
- 14.13 A Memorandum of Understanding (MoU) on addressing the delivery of has been agreed by the Applicants and the Councils'. This is a statement of joint intent which sets out the broad principles that will be sought when making decisions about affordable housing provision, based on the following key principles:
 - 1. A minimum of 40% of housing to be affordable.
 - 2. Tenure mix to be 73% rented (social rent and affordable rent) and 27% intermediate (shared ownership).
 - 3. Phasing of affordable housing to be in accordance with the Affordable Housing Scheme, secured through the Section 106 process and based on the general principles as set out in the MoU.
 - Affordable Housing Tenure
- 14.14 The Greater Cambridge Housing Strategy acknowledges the significant affordability challenge for Greater Cambridge households across a range of income levels. Whilst the provision of affordable rent remains the highest priority to support households on the lowest incomes, there is also recognition that there is a growing 'affordability gap', where middle income households are being squeezed out of the market; with limited housing options for low cost home ownership or the private rented sector. Having a blended mix of different tenure types provides greater choice for those unable to access the open market.
- 14.15 Shared ownership is generally the traditional form of intermediate housing that provides an affordable option for households on median incomes who are able to raise a small deposit and qualify for a mortgage. The shared ownership model gives the opportunity to initially purchase between 25-75% of the property and pay rent on the remaining equity purchase.

- 14.16 The guideline tenure split set out in the Greater Cambridge Housing Strategy between social and affordable/intermediate housing is currently 75/25 for Cambridge City and 70/30 for South Cambridgeshire. Discussions have taken place between City and District housing officers and the Applicants regarding the proposed affordable housing mix and tenure split. To avoid issues around seeking a different split on different parts of the site, a 73% rented (social rent and affordable rent) and 27% intermediate (shared ownership) split across the Site has been recommended by housing officers. The Applicants have confirmed the acceptability of this approach.
- 14.17 The precise detail of the affordable housing scheme, including tenure mix, location of units within the Site, and their transfer to a registered provider can be secured through the Section 106 Agreement.
 - Affordable Housing Indicative Mix
- 14.18 The affordable housing indicative mix has been the subject of detailed discussions between the Applicants and Councils' officers, to ensure that it reflects local evidenced need for smaller properties to be provided as social housing, and in particular one-bedroom properties.
- 14.19 The Affordable Housing Provision MoU proposes an overall affordable housing indicative mix which officers consider reflects current and likely future need, based on general needs housing (see table below).

No. Beds	Percentage	Dwellings	Proposed Tenure
1 bed	50-55	240-264	100% affordable rent and SO
2 bed	25-30	120-144	100% affordable rent and SO
3 bed	10-15	48-72	50% social rent 50% affordable rent and SO
4 bed	5-10	24-48	All social rent
TOTAL	90-110	432-528	

Table: Proposed agreed indicative affordable housing mix

- 14.20 The proposed housing mix planning condition will ensure that subsequent reserved matters applications include a schedule of affordable housing. This will enable the mix provided to respond to detailed design requirements and other factors, eg changes to the evidential basis for the provision of affordable housing (Condition 11: Housing Mix).
- 14.21 In accordance with the advice offered by Housing Officers, it is proposed that the Indicative Mix is reviewed following approval of the reserved matters

application that results in 600 or more homes being approved. This can be secured through the Section 106 Agreement.

- Nominations Agreement
- 14.22 It is understood that nominations for the affordable homes would be shared equally between the City and District, with each receiving 50% of these to meet their needs. The Councils' and Affordable Housing Provider will work together to produce a bespoke Local Lettings Plan, which will seek to achieve (amongst other things) priority to households within an agreed geographical radius or with a local connection.

Accessible Housing and Internal Space Standards

- 14.23 The Councils' are keen to ensure new housing (both affordable and market) is 'future proofed' through design, so that they can be easily adaptable to enable people to live independently in their own homes as they age.
- 14.24 Policy 50 of the CLP and policy H/12 of the SCLP require internal space standards for new residential developments, whilst policy 51 of the CLP requires all housing development to be of a size, configuration and internal layout to enable Building Regulations requirement M4 (2) 'accessible and adaptable dwellings' to be met; and 5 per cent of the affordable housing component of housing development sites of more than 20 homes to meet Building Regulations requirement M4 (3) 'wheelchair user dwellings' to be wheelchair accessible (or easily adapted for residents who are wheelchair users).
- 14.25 Whilst this level of detail is not normally expected at an outline planning application stage, the Applicants have confirmed an intention that all housing will be of sustainable standards i.e. complying with housing quality Indicators (HQI) scores for unit size, layout and noise, and nationally described space standards will be achieved. Relevant planning conditions have been recommended to ensure the Local Plan policy requirements in respect of accessible housing internal space standards are achieved (Condition 12 Internal Residential Space Standards; Condition 13 Accessible and Adaptable Dwellings, Condition 14 Wheelchair User Dwellings).

Age Exclusive Housing: Retirement Living Facility

- 14.26 With a rapidly ageing population, the Councils' are keen to promote a range of housing options to accommodate people and families throughout their lifetime (including housing specifically for older people), in line with the Councils' emerging Joint Housing Strategy.
- 14.27 The provision of specialist housing types for occupation by older people (including residential care) is supported by policy 47 of the CLP, subject to evidence of the demonstratable need for this type of development.

- 14.28 The description of the proposed development includes reference to some form of retirement living, in the form of up to 90 units of the 1200 overall to be specific homes for the elderly. The inclusion of an element of retirement living within the scheme provides flexibility should the need arise in the future.
- 14.29 In accordance with policy 47 of the CLP, a planning condition has been recommended which requires any reserved matters applications with retirement living to be accompanied by a market demand/economic case statement (Condition 15 Specialist Housing).

Self and Custom Build

- 14.30 The delivery of self-build and custom-build housing is strongly supported by legislation and national policy, offering the opportunity for residents to be involved in the design and construction of their own homes. Policy H/9 of the SCLP requires developers to provide plots for sale to self and custom builders on sites of 20 or more dwellings, although provides no details of the required level of provision. There are no equivalent policies in the Cambridge Local Plan.
- 14.31 Given the role Cambridge East will play in delivering housing over the current and subsequent period of the Local Plans, officers consider it reasonable that opportunities are sought to address the requirements as part of this development
- 14.32 Whilst there are no forecasts for future demand for self and custom build in the area, South Cambridgeshire keeps a register of those seeking self or customer build plots. At the time of writing this totalled over 500 people. A target of 5% self and custom build has been applied elsewhere on large strategic sites.
- 14.33 A 5% target is considered an ambitious target given the limited delivery of self and custom build elsewhere across the City. However, it has the potential to meet unmet demand across the Greater Cambridge area, and contribute towards the aims and objectives of policy H/9. A cumulative minimum target of 5% across the site is therefore recommended to be secured by the Section 106 Agreement, along with a mechanism for marketing self/custom build plots. The Applicants have agreed to this approach. A condition has also been recommended to secure the details of the self and custom build scheme (Condition 16 Self Build and Custom Build Scheme).

Housing Delivery - Conclusion

14.34 In summary, the overall quantum and density of the development is considered to make best use of a sustainable site. The development proposals demonstrate a good mix of house type sizes and tenures which would meet the needs of all sectors of society. This would contribute towards the LNCH SPD vision of a vibrant and livable community with a provision of a mix of tenure and social infrastructure.

- 14.35 The proposals include affordable housing options and total provision of a minimum of 40% affordable housing, in accordance with Local Plan policies. This would help meet future household needs within the Greater Cambridge area.
- 14.36 Subject to securing affordable housing by Section 106 planning obligations, and the conditions as identified, officers are satisfied that the proposals comply with policy 45 of the CLP, policies H/9 and H/10 of the SCLP, policy CE/7 of the Cambridge East AAP, and are in accordance with the LNCH SPD and national planning policy housing guidance contained in the NPPF.

15. SOCIAL AND COMMUNITY INFRASTRUCTURE

- 15.1 The social dimension of sustainable development identified by the NPPF includes social wellbeing. The NPPF's core planning principles include a requirement that developments take account of and support local strategies to improve cultural wellbeing for all, delivering sufficient community and cultural facilities and services to meet local needs.
- 15.2 Local Plan policies recognise the need for new strategic development to provide a range of uses appropriate to new communities, including education, community and healthcare facilities. Policy CE/6 of the Cambridge East AAP seeks to ensure that local centres provide the focus for neighbourhoods within Cambridge East. This policy advises that centres should be provided in accessible locations and provide for the day to day needs of local residents for convenience shopping and service provision. At a site-specific level, policy 13 of the CLP and policy SS/3 of the SCLP identify that on-site provision should be made for a primary and secondary school and a local centre with community hub
- 15.3 The LNCH SPD also recognises the importance of the local centre in reflecting the needs of the future population and supporting existing facilities within Cherry Hinton. It also identifies the need to locate community facilities centrally within the Site.
- 15.4 The Applications include provision for a range of community facilities/services to meet the demand of the residents. These include the following:
 - Primary and Secondary Schools.
 - Community Facilities.
 - Local Centre.
 - Health Care Provision.
 - Community Development and Support.
 - Library Provision.
 - Open Space, Children's Play Space and Sports facilities.
 - Public Art.
 - Provision for Waste and Recycling.

15.5 It is proposed that provision will be made for these facilities/services through the Section 106 Agreement. The Applicants have confirmed the acceptability of this approach, and the provision of the facilities and services as identified below. Further details of the Section 106 process, including a summary of the agreed financial contributions and infrastructure requirements is provided in Section 20 of this report (Section 106 Planning Obligations).

Education

- 15.6 The proposals include provision for a primary school and secondary school facilities, in accordance with the policies contained within the Local Plans. Cambridgeshire County Council, as the local children's services authority, has provided detailed advice in relation to the range of educational needs arising from up to 1,200 homes and confirmed the acceptability of the revised proposals.
- 15.7 In providing detailed advice in respect of the Applications, the County Council recognises that whilst the proposed development is intended to provide for itself in terms of infrastructure provision, it is also enabling wider benefits for secondary education across a broader area. The primary and secondary school sites identified in the Applications (including Parameter Plans) have been confirmed by the County Council as generally acceptable. Site specific educational requirements will be agreed as part of the subsequent detailed planning stages.
- 15.8 The County Council's education requirements are for the proposed development to provide the following:
 - Sufficient land on-Site for:
 - A 2 Form of Entry (FE) primary school (2.3 ha) serviced site; and
 - A 6 FE secondary school (5.7 ha) serviced site.
 - Financial contributions proportionate to the impact of the development, towards the build costs of the primary and secondary school.
 - Start-up costs towards the primary school.

Primary School and Early Years Provision

- 15.9 The LNCH SPD requires provision to be made for a 2 FE primary school on a 2.3 ha site to serve the needs of the community. In accordance with the LNCH SPD, the proposals make provision for a primary school site of this size. This will ensure sufficient flexibility to accommodate a 2 FE entry primary school, taking account of the existing supply of school places and forecasts of future need arising from projected population and household growth.
- 15.10 The County Council has advised that on the basis of the indicative housing mix (revised January 2020), the development proposals would not generate the demand for 2 FE primary school. Based on projected child yield arising

from the agreed indicative housing mix, primary age pupil demand projections indicate that the development proposals would generate the requirement for a 1.2 FE primary school. Officers note that it is not possible to build a school of this size, and in order to effectively mitigate the impact of the development, a 1.5 FE primary school (with early years) would be required.

- 15.11 On the basis that a 1.5 FE primary school will be required to mitigate the development impact, a proportionate financial contribution of the costs of building a 2 FE primary school has been requested (75% of the capital costs).
- 15.12 The Illustrative Masterplan identifies the primary school is to be situated in a central location within the development site, in close proximity to other community facilities. This is in accordance with the principles set out in the Cambridge East AAP and LNCH SPD. The Building Heights Parameter Plan identifies the building will have a maximum height of 3 storeys. The detailed design of the building will be developed at the reserved matters stage.
- 15.13 The indicative phasing plan contained in the updated Design and Access Statement identifies that the construction of the primary school will be within Phase 1 of the development. The opening timescale will be agreed with the County Council following an agreed period of house building and a process to review capacity and demand. This will be secured within the Section 106 Agreement.
- 15.14 It is proposed that the primary school will include early years provision (teaching and learning facilities for children up to the age of 5 years) depending upon the final housing mix and yield. At the request of the County Council, a financial contribution for early years provision has been sought.
- 15.15 Officers note the third party representations regarding the enhancement of existing pre-school facilities at Teversham. The County Education Officer has confirmed that a contribution has not been sought to improve existing pre-school facilities off Site because of the immediate preference for securing pre-school provision as part of a new build primary school.
- 15.16 Officers understand that if the delivery of the primary school is delayed, a review of the available early years options will be undertaken by the County Council. The review will include an assessment of whether surrounding settings (Teversham / North Cherry Hinton) have the potential for expansion to meet the demand arising from proposed development. This is likely to consist of a full options appraisal to understand the practicalities, cost, and achievable capacity.

Secondary School

15.17 The Applications propose a 6-form entry secondary school, of site area just under 7 hectares. The Illustrative Masterplan identifies that the secondary school will be located on the eastern side of the Site, close to key transport routes, served by the access from Airport Way. It will be a maximum of 3 storeys in height, with the detailed location, building design and boundary

- treatments building to be developed at the reserved matters stage. The current County Council construction standard requires BREEAM 'Very Good', which will be secured by planning condition (Condition 22 BREEAM).
- 15.18 The County Council is supportive of the general location of the proposed secondary school as identified on the Indicative Masterplan. It is an expectation that the school site would be available at an early stage, and transferred in line with the County Council's standard site specification.
- 15.19 The proposed secondary school would meet the needs of the development and a wider catchment area. The County Council has therefore requested a pro-rata contribution towards the capital costs of the new school, to mitigate the demand arising from the development. Based on projected child yield, secondary age pupil demand projections indicate that the development proposals would generate the requirement for a 1 FE secondary school one sixth of the proposed 6 FE school.
- 15.20 Taking this approach, a financial contribution has been sought, reflecting the overall level of demand projected to arise from the development. On the same basis of apportionment, the development would be expected to provide 1 ha of serviced site area at nil cost.
- 15.21 The County Council accepts that an element of the secondary school site in excess of that needed to mitigate the development will need to be purchased. The arrangements for this will be subject to separate negotiations with the developer.

Education – Summary

15.22 Cambridgeshire County Council has confirmed the acceptability of the Applications with regard to primary and secondary school provision, subject to them being secured through the Section 106 Agreement. On this basis, officers are satisfied that the approach to educational provision accords with policy 74 of the CLP, policy SC/4 of the SCLP, the Cambridge East AAP, the LNCH SPD and the NPPF.

Community Facilities

- 15.23 In accordance with policy 13 of the CLP, policy SS/3 of the SCLP, and the LNCH SPD, the development proposals include provision for a community hall (Use Class D2). A facility of up to 250 square metres is proposed within the Local Centre.
- 15.24 Officers have worked with the Applicants to agree the framework and key principles for delivering the community facilities. A draft Community Facilities Specification has been agreed by all parties. This sets out the proposed specification, components, process and engagement principles for delivery of the permanent community facility. It also makes provision for the delivery of temporary community facilities.

Permanent Community Facility

- 15.25 The community facility specification envisages that the facility will be a flexible and multi-functional space, providing opportunities for a variety of different activities to take place. It is an expectation that it will be designed in accordance with good practice principles set out in Sport England's relevant design guidance.
- 15.26 The detailed design (including precise layout and size) and delivery of the community facility will be subject to agreement through the design development process and secured through the Section 106 Agreement. It is an expectation that as part of this process, consultation will take place with key stakeholders and potential user groups, including local authorities, residents, faith groups and other community groups.
- 15.27 In terms of the timing of delivery, it has been agreed that the community facility will be constructed and fitted out ready to use, prior to the first occupation of the 500th dwelling.
- 15.28 The management and maintenance of the community facility will also be secured through the Section 106 Agreement, which will require details of a management strategy to be submitted. It is not envisaged that the Councils' will be involved in the managing of the facility, although support will be offered to the process for determining the appropriate management arrangements. This could be through a trust, existing Community Group, procurement/tender process to appoint a private management company, or by a new community organisation.

Temporary Community Facility

- 15.29 Temporary community facility provision has also been sought by officers, to ensure that community space is available from an early stage of the development of the Site and prior to the delivery of a permanent facility. This is recognised as helping to ensure a sense of community from the outset of the development, which will assist in addressing social isolation.
- 15.30 The draft Community Facilities Specification identifies that provision should be made for a temporary community facility to be provided on Site, prior to the first occupation of the 100th dwelling. Provision for this will be secured as part of the Section 106 Agreement.
- 15.31 Similar to other approaches adopted elsewhere across Cambridge, the temporary community facility may include a temporary building, use of vacant units within the local centre, or use of a vacant residential unit. Details of the temporary community facility will be secured as part of the Section 106 Agreement.

Community Facilities - Summary

15.32 The delivery of the community facility will be secured as part of the Section 106 Agreement as identified above. On this basis, the proposed development is considered to make appropriate provision for community facilities, in accordance with policies 13 and 73 of the CLP, policies SS/3 and SC/4 of the SCLP, the Cambridge East AAP, the LNCH SPD and the NPPF.

Local Centre

- 15.33 In accordance with Local Plan policies, a local centre is proposed as part of the development. The Applications identify the local centre as providing up to 1850 square metres of floor space, accommodating a range of potential uses within Use Classes A1/A2/ A3/ A4/ A5/ B1a/ D1/ D2. Of this, a food store (A1 use class) will be no more than 500 square metres.
- 15.34 The Illustrative Masterplan proposes that the local centre will be situated adjacent the primary school, in a centrally accessible location, in accordance with principles within the LNCH SPD and Cambridge East AAP.
- 15.35 The range of potential uses provides commercial flexibility to meet the needs of the local needs of the development, and market demands to ensure long term viability. The nature of the final provision of this infrastructure will be delivered as part of the reserved matters planning stage.

Health Care Provision

15.36 Specific Local Plan policies do not require on-Site health care provision. Policy 74 of the CLP 2018 supports the provision of new healthcare facilities where they are located in the area they are expected to serve, to meet an existing deficiency in healthcare provision or support regeneration of new development. Policy SC/4 of the SCLP recognises that the provision of health facilities in new development contributes towards the provision of community needs.

Health Impact Assessment

- 15.37 The Applications are accompanied by a Health Impact Assessment (HIA) (March 2018), in accordance with Policy S/2 of the SCLP. This considers the health care requirements of the new residents, and assesses how those needs will be fulfilled, taking into consideration existing facilities within the area.
- 15.38 The HIA suggests there is sufficient existing capacity to absorb the additional demand on existing healthcare services which would be generated by the new residents of the development. This is predominantly as a result of data derived from the NHS Choices website which states that local GP practices are still accepting patients. Officers are of the view that this is not an indication that a practice has the capacity to offer a full range of services for the local community.

Primary GP Health Services

- 15.39 Detailed consultation advice in respect of the provision of healthcare facilities has been provided by the Cambridgeshire and Peterborough Clinical Commissioning Group (CCG). This advice is supported by a Healthcare Impact Assessment, which provides the basis for requesting a developer contribution towards capital funding to increase capacity within the GP catchment area.
- 15.40 The HIA indicates existing GP practices within the catchment area do not have the capacity to accommodate the additional growth and resultant increased demand upon existing services arising from the proposed development. The primary healthcare services directly impacted by the proposed development are Mill Road Surgery, Cherry Hinton Medical Branch, East Barnwell Health Centre and Cornford House Surgery.
- 15.41 If unmitigated, the development would have an impact on primary healthcare provision in the area. A developer contribution has been requested by the CCG for off-site mitigation of the impacts of the development. This was reconfirmed in January 2020 as representing the capital cost of providing additional primary healthcare services at existing practice(s) in the vicinity of the development.

On-Site Provision

- 15.42 The documentation which supports the Applications confirms that the local centre has been designed to allow for on-Site health care provision in the future, if this is required. This would be subject to there being a demonstrable need for a new facility and that this can be viably delivered, managed and maintained to provide a long-term community resource.
- 15.43 The initial consultation response on behalf of NHS England advised that as an alternative to the financial contribution for off-Site improvements to existing GP practices, mitigation could be provided on Site through the provision of land for on-Site primary healthcare provision should the demand arise. Officers have sought further advice in respect of on-Site health care provision from the CCG. Confirmation was received in January 2020 that there are no current plans in place for on-Site provision.
- 15.44 The representation received on behalf of Mill Road Medical Practice is noted, which sets out support for an on-Site health facility, and an ambition of the practice to relocate the existing branch on Cherry Hinton High Street to a new on-Site facility. Officers are of the view that, in the absence of an identified project for an on-Site health care facility, it would not be reasonable to seek provision on Site. However, flexibility can be provided within the Section 106 Agreement for monies to be used on site, should a scheme come forward within a realistic timeframe. The CCG has confirmed that this would still enable mitigation of the impact of the development, regardless of which Practice (or other premises) within the Primary Care Network had the project.

15.45 Other healthcare facilities such as pharmacies and dental surgeries have not been sought by the NHS and would be delivered privately through the market. Such services could be facilitated through the other land uses included in the development specification.

Healthcare Facilities – Summary

15.46 Subject to securing a financial contribution to mitigate the healthcare impacts of the proposed development, the proposals are considered acceptable with regard to healthcare provision, and in accordance with policies 74 of the CLP, SC/2 and SC/4 of the SCLP, the Cambridge East AAP, the LNCH SPD and the NPPF.

Community Development Support

- 15.47 Local Plan policies recognise that new developments take time to develop and that support is needed to help people to settle and start the groups, clubs and activities found in more established neighbourhoods. Until established (which can be upwards of 15 years), a new community places increased financial pressure on Cambridgeshire County Council and other public sector authorities, due to factors including the significantly larger proportion of younger families than is present in the overall Cambridgeshire population.
- 15.48 The County Council's Strengthening Communities Team has provided detailed advice and justification for the provision of a number of short-term financial contributions to enable authorities to focus on early intervention and preventative services, in order to reduce reliance on public services.

Multi-Agency Support

15.49 A financial contribution has been sought towards a team co-ordinator to coordinate the multi-agency team to provide early intervention and prevention support for families. The co-ordinator will ensure the multi-agency team jointly plans provision across the new community, helping to provide a transition between services (including collaborative work with the Health Service). The post will also allow locally based support and advice to promote the formation of community groups in the area.

Community Development & Mental Health Training

15.50 A financial contribution has been sought for the provision of a 0.4 Full Time Equivalent Specialist Community Development Worker (SCDW), to be employed to support existing local authority community development workers, focusing on more traditional community development and placemaking activities. It is envisaged that the role will specialise in supporting more vulnerable residents of the development who often struggle to engage in more general community development work. The SCDW will work as park of the multi-agency team.

- 15.51 In addition, funding has been sought to provide Mental Health training to all the members of the multi-agency team, to ensure all are equipped to recognise any member of the community who may be struggling and provided early intervention.
- 15.52 Funding has also been sought to provide additional counselling for children moving to the development. This support will be reserved for those who are presenting with poor mental health as an intervention rather than a prevention.

Specialist Support

- 15.53 Funding has been sought to provide additional capacity for the specialist support required by the new community. Additional family workers (Locality Staff) will be sought as part of the multiagency team to bring experience of working across partner agencies to support vulnerable children, young people and families at an early stage.
- 15.54 In addition to the family workers, it is anticipated that the new development will become a Child and Family Zone. This means that child & family activities (also known as Sure Start or Children Centre Activities) will be delivered as outreach in the development. Funding has been agreed to contribute to a child & family worker, and some equipment to enable activities to take place.
- 15.55 Given the size of the development, funding has also been sought for an Independent Domestic Abuse Advisor (IDAA) to join the Multi-agency team and combat the anticipated increase on service demand created by a new development.
- 15.56 Recognising the high birth rates often seen in new developments, a contribution has been sought to increase capacity in the multi-agency local health visiting team. This will ensure that a health visitor is able to attend every first time mother in the development.

Kickstart and Activity Funding

- 15.57 A financial contribution has been sought to support the multi-agency team to run, promote activities, support and events to support residents of the new development. In addition to events and activities, Kickstart Funding has also been agreed to support the establishment of community groups and to support initial activities. This will be targeted at community-led groups which support:
 - Those with physical disability, learning disability and their carers
 - Integrating and supporting older people into the community
 - Supporting families and young people to thrive
 - Early intervention and prevention of mental ill health
- 15.58 It is envisaged that the Kick Start funding will sit alongside and compliment the Community Chest which is currently operated by Cambridge City Council.

This provides a resource for the multiagency team to use to incentivise community-led action.

Healthy New Towns Legacy

15.59 Cambridgeshire County Council has worked with the Health New Towns Initiative promoted By NHS England. As part of a demonstrator town, the Cambridgeshire Healthy New Towns project team have had access to detailed research and experience of all the other projects along with the work that they have done with Northstowe site. A financial contribution has been sought to deliver elements of that project to the Site.

Community Development Support - Summary

- 15.60 A range of financial contributions have been requested in respect of community development. Subject to securing the contributions through the Section 106 Agreement, the application proposals will provide appropriate community support to meet the needs of future residents.
- 15.61 On the basis of the above evaluation, the proposals are considered acceptable with regard to community development and in accordance with policy 85 of the CLP, policy SC/4 of the SCLP, policy CE/9 of the Cambridge East AAP, the LNCH SPD and the NPPF.

Library Provision

- 15.62 Local Plan policies require new development to include or contribution to the provision of services and facilities necessary to meet the needs of the proposals, including the provision of library facilities. Cherry Hinton library is situated in the heart of Cherry Hinton, approximately a mile from the centre of the Site. This facility currently provides the local library service to residents, together with the Central Library in Cambridge city centre.
- 15.63 Cambridgeshire County Council as statutory provider of the library service has advised that additional demands on Cherry Hinton Library will be brought about by the proposed development. A financial contribution has been requested to increase the capacity of the library building and service, to mitigate the impact of the development. This includes extension of opening hours and improvement of access to electronic resources, and integration of library space with existing community space on either side of the library.
- 15.64 Subject to securing the requested contribution through the Section 106 Agreement, the development is considered acceptable with regard to library provision, in accordance with policy 85 of the CLP, policy SC/4 of the SCLP and the NPPF.

Open Space, Children's Play Space and Sports Facilities

15.65 In keeping with other cross boundary fringe sites, the provision of public open space (POS), children's play space and sports facilities has been measured

against the LPA which has the largest portion of land within its administrative area of the red line site boundary. In this case, it is Cambridge City Council; accordingly policy 68 of the CLP is the relevant LP policy. This requires all residential development proposals to contribute to the provision of open space and recreation sites/facilities on site.

15.66 The table below outlines the public open space POS requirements for the proposed quantum of development as required under policy 68 of the CLP and relevant open space and recreation standards, and the amount of public open space provided as identified on the Illustrative Masterplan.

Type of Public Open Space (POS)	Local Plan policy standard (hectares per 1000 population)	POS required by policy (ha) (based on agreed 2.3/1000 household size multiplier)	Scheme provision
Outdoor sport provision (formal)	1.2	3.31	4.0ha
Informal open space	2.2	6.07	9.23 ha
Children and teenagers play space (formal and informal provision)	0.3	0.83	0.87 ha
Allotments (formal)	0.4	1.10	1.10 ha
Indoor sports provision (formal)	1 sports hall per13000 people.1 swimming pool per 50,000 people		To be provided as part of secondary school education provision.
Total POS provision		11.30 ha	15.20 ha

Table: Open Space Provision

15.67 The quantity of informal open space, allotments, formal outdoor playing fields and play space to be provided as part of the development proposals (as

identified on the Illustrative Masterplan) has been confirmed as acceptable by the City Council Streets and Open Spaces team, and in accordance with the agreed standards of provision as set out in Appendix I (Open Space and Recreation Standards) of the CLP.

15.68 The detailed distribution and layout of the POS will be a matter for the reserved matters process. Conditions are recommended relating to the details of the POS to be provided, to ensure that the recreational needs of residents are met (Condition 37 – Open Space Details). Planning obligations will secure the delivery and future management/maintenance of the open space provision.

Formal Outdoor Sports Provision

- 15.69 It is proposed that formal outdoor sports provision will be provided as part of the delivery of the secondary school site. This is in excess of that required by the City Council's agreed standards of provision. The Illustrative Masterplan identifies an area of approximately 4 ha for outdoor playing fields and a Multi-Use Games Area (MUGA).
- 15.70 It is proposed that the secondary school pitches and MUGA are made fully accessible for community use when not being utilised for the school curricular activities. Following concerns raised by Sport England in respect of pitch over-use and deterioration over the winter season, the Applicants agreed to make the following additional provision for enhancing the proposed formal outdoor sports provision:
 - Upgraded drainage to be applied to one sports pitch to allow for greater capacity of use.
 - ii. Upgrading of sports hall from 3 court to 4 court size (33m x 18m).
- 15.71 The additional provision will sustain both curricular and public use of the sports pitch to support league games and training by the school and local clubs and enhance community provision by enabling a greater range of sports to be accommodated within the sports hall. Sport England has confirmed the acceptability of these measures, subject to securing details of the playing field ground conditions by way of planning condition (Condition 33, Playing Fields Ground Conditions Details).

Informal Open Space

15.72 Over 9 hectares of informal open space is to be provided across the Site. The Illustrative Masterplan indicates that the majority of this space will be located along the green linear park, which includes approximately 6 hectares of natural green space. In addition, pocket parks and informal open space is to be provided across the development providing more immediate local access for residents.

15.73 The Illustrative Masterplan indicates that the informal open space may include multi-functional drainage features. Where these are to be delivered, the detailed design will be developed at the Design Code and reserved matters stages to ensure the appropriate form and function of these areas.

Children and Teenagers Play Space

15.74 Just under one hectare of play space for children and teenagers is shown to be provided across the Site. The Illustrative Masterplan indicates three Local Equipped Areas of Play (LEAP) and one Neighbourhood Equipped Area of Play (NEAP) are to be provided. In addition, play areas will be located throughout the site. Details have been secured by planning condition (Condition 36 – Site Wide Strategy for Youth Facilities and Children's Play).

<u>Allotments</u>

- 15.75 Two locations for allotments are shown to be provided on the Illustrative Masterplan one area on the northern part of the Site, the other to the south. The detailed location of the allotments will be subject to detailed reserved matters planning phase.
- 15.76. In accordance with consultation advice received from the Councils' Environmental Health and Landscape Officers, a planning condition has been recommended which requires the submission of an Allotment Management Strategy (Condition 35 Allotment Details).

Indoor Sports Provision

- 15.77 The scale of the proposed development does not trigger a requirement for on-Site provision of a swimming pool. However, the development will place additional burden on existing local services and contributions to the existing local infrastructure are considered appropriate.
- 15.78 A proportionate level of contribution for swimming pool provision for has been requested by officers for the provision of and/or improvements to the swimming facilities as identified in the City Council's Swimming Facilities Investment Strategy (June 2018) at Abbey Pool, Whitehill Road, Cambridge, which is within 1 mile of the Site. This is in line with the City Council's current Planning Obligations Strategy in lieu of on-Site provision.
- 15.79 An indoor sports hall is to be provided as part of the proposed secondary school. Community access will be secured by way of community access agreement as part of the Section 106 Agreement, to enable the indoor sports facilities to be used outside of school curricular use times.

Community Use and Access Arrangements

15.80 Officers note that Sport England raise concern that there is no dedicated outdoor community pitches for community use. The County Council has a

long-established practice of allowing and encouraging use of school facilities, as a means of securing community access to specific provision. The adoption of community access arrangements is an approach which has been successfully adopted on a number of new schools on new strategic developments across the Greater Cambridge area.

15.81 The County Council has worked closely with the Applicants and officers to make the most of this approach, through the enhancement of school facilities to deliver improvements in facilities for the wider benefit of the community. Officers are confident that with careful management of the school and community use, the pitches proposed can remain accessible and playable for the school and wider community. Community use provision (including management and maintenance arrangements) will be secured through the Section 106 agreement and by planning condition (Condition 34 – Use of Playing Fields).

Management/Maintenance Arrangements

- 15.82 The City Council's Open Space SPD provides for the transfer of public open space (including allotments), and future management/maintenance of these spaces by the City Council. The Streets and Open Spaces team have advised that consideration should also be given to investigation the transfer of the formal and informal open space to a Management Company.
- 15.83 It is proposed that the Applicants are provided with an option in the Section 106 Agreement to transfer areas of public space to the Council (with a commuted payment for maintenance). Otherwise, the land would need to be managed and maintained by a management company formed by the developer.
- 15.84 On the basis of the above assessment, and subject to securing through planning conditions and planning obligations as part of the Section 106 Agreement, officers are satisfied that the development proposals provide appropriate provision of public open space, children's play space and sports provision. The proposals therefore accord with Local Plan policies, the Cambridge East AAP, the LNCH SPD and the NPPF.

Public Art

- 15.85 Public art can make a significant contribution to the cultural wellbeing of a community and the physical landscape. The social dimension of sustainable development identified by the NPPF includes social wellbeing. The NPPF's core planning principles include a requirement that developments take account of and support local strategies to improve cultural wellbeing for all, delivering sufficient community and cultural facilities and services to meet local needs.
- 15.86 The Councils' are committed to the provision of public art within developments and the public realm: Policy 56 of the CLP encourages development proposals to embed public art as an integral part of the proposals, whilst

- policy HQ/2 of the SCLP encourages the provision of public art in residential developments comprising 10 or more dwellings. Policy CE/2 of the Cambridge East AAP recognises the importance of public art in giving a sense of place.
- 15.87 The Design and Access Statement which accompanied the Applications references public art, although does not provide detail. The Applicants have proposed a financial contribution in respect of the delivery of Public Art across the Site, secured as part of the Section 106 Agreement. Appropriate conditions have also been recommended which seek a public art strategy at design code stage, along with a public art delivery plan at reserved matters stage (Condition 43 Site Wide Public Art Strategy; Condition 44 Public Art Delivery Plan).
- 15.88 On this basis, officers are satisfied that the Applications are compliant with policy 56 of the CLP, policy HQ/2 of the SCLP, policy CE/2 of the AAP, the LNCH SPD and the NPPF with regard to the provision of public art.

Provision for Waste and Recycling

- 15.89 The NPPF requires Local Plans to consider a variety of infrastructure needs including waste management, as reflected in policies 85 of the CLP and policy SC/4 of the SCLP. The Greater Cambridge Shared Waste Service is responsible for the waste service. Section 106 contributions have been sought from the development towards the provision of a refuse vehicle and cardboard skips to serve the residents of the proposed development.
- 15.90 The developer will be required to provide a hardstanding area in a public realm area for the provision of bring banks for the collection of items such as textiles, small electrical items, bulbs and books (one hardstanding area for every 800 dwellings is considered large enough to place four banks). This detail will be secured as part of subsequent reserved matters phases.
- 15.91 Subject to the above, and the recommendation of planning conditions relating to details of on Site storage facilities for waste (including waste for recycling) and the provision of a Detailed Waste Management Plan (DWMP), the proposals are considered acceptable with regard to waste and recycling (Condition 66: Waste Construction Waste; Condition 67: Waste Waste Storage Details).

Other Community Issues - Crime and Security

15.92 Designing out crime and creating an environment for people that is, and feels, safe is an objective of national and local planning policies, including policy 57 of the CLP and policy HQ/1 of the SCLP. This would normally be addressed at a later stage of the planning process at detailed design stage and through the Design Code. The consultation response received on behalf of Cambridgeshire Constabulary notes that that the development would benefit from a secured by design approach to the residential, commercial, retail and education premises.

15.93 The Applicants have confirmed that secure by design has been considered throughout the design development and that further consideration of these issues will be given at the detailed design stage. A relevant informative will be included.

Conclusion - Social and Community Infrastructure

15.94 Subject to recommended conditions and Section 106 planning obligations, as detailed above, the proposed development is found to accord with the social and community objectives of Local Plan policies, the Cambridge East AAP and the LNCH SPD and the NPPF, by providing a range of uses appropriate to the new community. This includes the provision of community services and facilities and measures to assist the development of a new community.

16. ENVIRONMENTAL CONSIDERATIONS

Loss of Agricultural Land

- 16.1 The NPPF states that the economic and other benefits of the best and most versatile agricultural land should be taken into account by Local Planning Authorities. It further advises that where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be sought in preference to that of a higher quality. Policy NH/3 of the SCLP reinforces this position by seeking to prevent the irreversible loss of high quality agricultural land.
- 16.2 The Applications will result in the permanent loss of approximately 41 hectares of 'best and most versatile agricultural land' (Grades 1, 2 and 3a in the Agricultural Land Classification system). Officers agree with the ES assessment that the loss of this high-grade agricultural land is an adverse permanent effect of moderate significance.
- 16.3 Policy NH/3 recognises that there are certain circumstances when the loss of agricultural land is acceptable, including where land is allocated for development. Officers are therefore satisfied that the Applications do not cause conflict with policy NH/3: the level of growth planned for the Greater Cambridge area to 2031 and beyond means that some development on agricultural land will be inevitable, as part of the development of allocated sites.
- 16.4 The proposals include areas of POS, amounting to approximately 15 hectares, where, although the land would be removed from agricultural use, the soils would remain in a relatively unaffected condition. In order to safeguard soil resources and ensure soil quality as part of the overall sustainability of the development, details of the soil handling process can be secured as part of the requirement for a site wide Demolition and Construction Environmental Management Plan (DCEMP) and Materials Management Plan

(Condition 60: Site Wide DCEMP; Condition 75: Materials Management Plan).

Airport Safeguarding

- 16.5 Policy 37 of the CLP and TI/6 of the SCLP seek to ensure that the Cambridge Airport air safeguarding zone is taken into consideration when considering applications for new development. Airport safeguarding is specifically concerned with physical safeguarding (ensuring that buildings, structures or works do not infringe protected surfaces / airspace, obscure runway approach lights or contain lighting which has the potential to distract pilots); technical safeguarding (ensuring that developments do not have the potential to impair the performance of aircraft / airport navigation aids, radio aids or telecommunication systems); and bird strike (controlling developments such as water features which have the potential to increase the number of birds or the bird hazard risk).
- 16.6 Site specific policies 13 of the CLP and SS/3 of the SCLP, and the LNCH SPD, also recognise the relationship of the Site to Cambridge Airport. These advise that the development of the Site is supported subject to the continued operational use of Cambridge Airport not posing a safety risk. Airport safeguarding requirements have been taken into consideration in respect of airport operations as summarized below.

Fire Training Ground and Cross Wind Runway

- 16.7 The continued use of the current fire training ground (located immediately adjacent the Site) and cross wind runway at Cambridge Airport have the potential to create adverse noise and air quality impacts on the quality of life/amenity of prospective occupants of the proposed development.
- 16.8 The documentation supporting the Applications advises that the existing fire training ground will cease operation prior to first occupation of any residential unit. The buildings and infrastructure associated with the fire training ground would remain in-situ. It is proposed that the cross wind runway at Cambridge Airport will cease use for the taking off and landing of aircraft prior to occupation of any dwelling on the Site.
- 16.9 The principle of this approach is accepted by officers, subject to the inclusion of planning obligations within the Section 106 Agreement to secure the cessation of the fire training ground and cross wind runway. The timing of the cessation of these uses will be a matter for further Section 106 discussions between parties.

Primary Radar and Very High Frequency Direction Finder (VDF)

16.10 Cambridge Airport has a safeguarded area to protect against interference with its radar and VDF. Whilst the airport radar and VDF remains operational in its current location, the height of the development on the part of the Site falling within the safeguarded area will be restricted.

16.11 It is understood that Cambridge Airport is planning to replace the Primary Surveillance Radar with new radar to be positioned on the north side of the Airport, close to Hangar 17. Initial work will begin in Spring 2020, and it is anticipated that the new radar will be operational from early 2021. A Section 106 planning obligation is proposed to restrict development within the safeguarded area.

Ground Run Enclosure (GRE)

16.12 The ES has been prepared on the assumption that no dwelling would be occupied until the GRE is fully operational. On the basis that the GRE has been fully operational since 01 October 2019, officers do not consider it necessary to include a planning obligation within the Section 106 Agreement that restricts occupancy of any residential dwelling within the Site.

Wildlife Hazard Management Plan (WHMP)

- 16.13 A draft WHMP has been submitted with the application. This document has been prepared by an independent airport safeguarding consultant working on behalf of Cambridge Airport to ensure that the scheme proposals for the scheme do not create an undue risk to airport operations with regard to the proposed lighting, landscaping, SuDS and proposals for ecological enhancement. The WHMP has been reviewed by Landscape and Ecological Officers who accept the principle of this approach.
- 16.14 A relevant condition has been recommended which requires detailed reserved matters applications to be accompanied by a WHMP, in accordance with policy 37 of the CLP and TI/6 of the SCLP (Condition 31 Wildlife Hazard Management Plan).

Summary – Airport Safeguarding

16.15 With Section 106 planning obligations and planning conditions in place as discussed above, officers are satisfied that the proposed development will not give rise to unacceptable impacts arising from the operational use of Cambridge Airport. On this basis, the development will not give rise to airport safeguarding issues and is in accordance with policies 13, 37 of the CLP, policies SS/3 and TI/6 of the SCLP, the Cambridge East AAP and the LNCH SPD.

Air Quality, Odour and Dust

16.16 The NPPF states that planning policies and decisions should contribute to and enhance the natural and local environment. Development should prevent new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of air pollution. Wherever possible, development should help to improve local environmental conditions such as air quality. Planning decisions should sustain and contribute towards compliance with relevant limit values or national objectives

for pollutants, taking into account the presence of Air Quality Management Areas (AQMA) and Clean Air Zones (CAZ), and the cumulative impacts from individual sites in local areas. Planning decisions should also ensure that any new development in AQMAs and CAZs is consistent with the local air quality action plans, such as the Cambridge City Council Air Quality Action Plan 2018 – 2023.

16.17 The key pollutant in relation to local air quality management is nitrogen dioxide arising primarily as a result of exhaust emissions from road vehicles, but with contributions from domestic, commercial and industrial heating sources. Policy 36 of the CLP and policy SC/12 of the SCLP advise that new development will be permitted where it can be demonstrated that no significant adverse effects on health, the environment or amenity will arise from air quality, odour or dust emissions. The LNCH SPD recognises the need to consider air quality at the design stage, and the importance of mitigating emissions. Detailed advice on the types of air quality mitigation is offered in the Greater Cambridge Sustainable Design and Construction Supplementary Planning Document which was adopted in January 2020 (GC Sustainable Design and Construction SPD).

Air Quality

- 16.18 The Site is located outside of designated AQMAs. The proposed development represents an intensification of use in a currently undeveloped area and introduces new emission sources and receptors into the area.
- 16.19 The updated ES includes an Air Quality Assessment (AQA). This includes the results of modelling of nitrogen dioxide and particulate matter concentrations arising from changes in road traffic levels predicted by the TA, as well as a qualitative analysis of the likely effects arising from dust and finer particulate matter generated during the construction and operational phases. The methodology for this assessment was agreed at the pre-application stage by Environmental Health Officers.
 - Proposed Impact Construction Phase
- 16.20 The AQA demonstrates that the additional traffic generated during the construction phase will have a negligible impact on air quality. This is not considered significant.
 - Proposed Impact Operational Phase
- 16.21 The AQA considers the local air quality impacts of the development on receptors both inside and outside the Site (including within the AQMA). The assessment finds that levels of nitrogen dioxide, and particulate matters (PM10 and PM2.5) will be below the national air quality objective at all receptors when modelled both with and without the proposed development.
- 16.22 When modelled using the worst-case scenario, air quality exceedances are predicted at three receptor points located within the City Council's AQMA. The

Environmental Health Officer is satisfied that the proposed development will not lead to any new exceedances within the Site, surrounding area or AQMAs.

- 16.23 The AQA demonstrates that the proposed development will lead to a worsening of air quality within the Cambridge City Council AQMA. This is contrary to policy 36 of the CLP and policy SC/12 of the SCLP and thus will require appropriate mitigation. The AQA includes reference to measures to help minimise the air quality impacts of the development, including a low emission strategy and detailed TP setting out measures to encourage sustainable means of transport. The TP refers to the provision of active and passive electric bike charging facilities and the provision of a car club on site
- 16.24 In accordance with Policy 36 of the CLP and the adopted Air Quality Action Plan (2018), measures to mitigate air quality impacts, including electric vehicle (EV) charge points, car clubs and emissions limits on any combustion emissions to air will be required. These will be delivered to the standards outlined in the recently adopted GC Sustainable Design and Construction SPD (2020).
- 16.25 In accordance with the advice offered by the Environmental Health Officer, relevant conditions have been recommended (Condition 56: Combustion Appliances Low Emissions; Condition 57: Site Wide Electric Vehicle Charge Point Provision and Infrastructure Strategy; Condition 58: Site Wide Electric Vehicle Charge Point Provision and Infrastructure Scheme Strategy Delivery). In addition, the provision of a site wide car club will be secured as part of the Section 106 Agreement. With these measures in place, officers are satisfied that the impact of the development on air quality will not be significant.

Odour

- Impact on Prospective Amenity Existing Sources
- 16.26 Odour can have a potentially unacceptable adverse impact/effect on amenity, quality of life and living conditions. The Site is located adjacent to an operational airport, a number of emission sources from which have been identified as potentially odorous.
- 16.27 The principal sources of odour pollution are from aircraft emissions, from the main aircraft engines and auxiliary power units, and emissions from the engines used in ground support equipment (including airside vehicles and mobile ground power units) at Cambridge Airport. Odours are primarily from the incomplete combustion of aviation kerosene and diesel when aircraft are taxiing or idling. These sources have the potential to impact on the residential amenity of prospective occupants of the proposed development.
- 16.28 The ES includes an Odour Risk Assessment (ORA) which considers the potential odour impacts associated with Cambridge Airport on the proposed development. The ORA advises that odour emissions will occur at the runway

- (during take-off and landing), taxiways, aprons and the GRE adjacent Hangar 17 on the western side of the airport site. The majority of odour emissions (over 90%) are likely to be released during engine start up, taxiing and queuing of aircraft, when aircraft engines are at low (idle) thrust settings.
- 16.29 Officers note that the GRE is situated approximately 500m away from the Site and is operated in accordance with an Odour Management Plan (OMP) as required by a planning condition of that planning permission, to prevent potential odour nuisance.
- 16.30 In accordance with advice offered by the Environmental Health Officer, additional odour field survey work was undertaken by the Applicants ('sniff testing') to support the findings of the ORA. This was undertaken having regard to national and industry odour standards, guidance and criteria including the Institute of Air Quality Management (IAQM) 'Guidance on the assessment of odour for planning (IAQM, 2014)'. The results were submitted as part of the updated ES.
- 16.31 The additional field surveys demonstrate that odour emissions arising from Cambridge Airport are infrequently detectable outside of the Airport and are only detectable during engine testing or large aircraft operations both of which occur very infrequently and for short durations. When detected, the odours will be very faint and the overall odour effect throughout the application site is negligible.
- 16.32 The updated ES concludes that odour effects at the Site resulting from the operation of Cambridge Airport will be negligible and not significant. This judgement is based on the conclusions of the ORA and odour field surveys, which identify the potential for negligible odour effects. The Environmental Health Officer agrees with these conclusions.
- 16.33 On the basis of this evaluation, officers are of the view that odour arising from the operational use of Cambridge Airport is unlikely to have an adverse impact on the health and quality of life/amenity of the prospective occupants of the proposed development.
 - Impact on Prospective Amenity Operational Phase
- 16.34 The description of the development includes provision for a variety of uses to be potentially located within the local centre. This includes cafes and restaurants (Use Class A1 to A5/B1a/D1/D2). Such uses have the potential to generate cooking fumes, smoke and odours which may have an adverse impact on quality of life/amenity of future residents.
- 16.35 In accordance with the advice offered by the Environmental Health Officer, a condition has been recommended which requires details of the ventilation scheme for all non-residential uses at the detailed design stage (Condition 65: Odour Operational Details of Extraction Systems).

Dust

- 16.36 The amended ES identifies that Site clearance and construction phases have the potential to affect amenity if not controlled. The proposed development is considered a high risk site for dust soiling effects during earthworks and construction and a low risk site for human health effects
- 16.37 The documentation which supports the Applications includes a draft DCEMP which contains a package of measures to manage the potential risk of dust creation during the construction phase, including the provision of a Dust Management Plan. The Environmental Health Officer is satisfied that with these measures in place, the residual effects of dust will not be significant. A condition has been recommended to secure the implementation of site wide and site specific DCEMP's (Condition 60: Site Wide DCEMP; Condition 61: Site Specific DCEMP).

Summary - Air Quality, Odour and Dust

16.38 On the basis of the above evaluation, and subject to the recommendation of conditions as outlined above, officers are 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 development is therefore in accordance with policy 36 of the CLP, policy SC/12 of the SCLP, the Cambridge East AAP, the LNCH SPD, the Cambridge City Council Air Quality Action Plan (2018) and the GC Sustainable Design and Construction SPD and the NPPF.

Archaeology and Heritage

- 16.39 The application site is situated in an area of high archaeological potential for a number of periods, including Middle Iron Age, Roman and Saxo-Norman. The site itself has been subject to archaeological evaluation, which has identified evidence of activity from the early Neolithic to the modern period.
- 16.40 In terms of built heritage, a number of designated heritage assets are situated within 1km of the application site. These include the historic centres of Teversham and Cherry Hinton, and thirteen listed buildings. In addition, two Scheduled Ancient Monuments lie within 2km of the site: an Iron Age Settlement Site by Caudle Corner Farm, and a Moated Site at Manor Farm, Teversham.
- 16.41 The ES includes an Assessment for Archaeology and Cultural Heritage, which identifies the designated and non-designated heritage assets within the site and the surrounding area. During the course of the application, and following advice received from Historic England and the GCSPS Conservation Officer, the assessment was updated to clarify the methodology used.
- 16.42 Amendments to the ES were submitted in March 2019, including an additional chapter on the Built Environment. The additional documentation has been reviewed by Historic England and the Conservation Officer, who have confirmed the approach taken and the conclusions reached.

Impact on Below Ground Heritage Assets – Construction Phase

- 16.43 The groundworks required during the construction phase have the potential to cause significant impacts on below ground heritage assets. The updated ES proposes appropriate mitigation by way of excavation in advance of development. This will ensure the significance of archaeological assets is recorded.
- 16.44 The County Archaeologist has reviewed the updated ES and has confirmed agreement to this approach. In accordance with the advice offered, a site wide programme of archaeological investigation can be secured by planning condition (Condition 17: Archaeology). With this mitigation in place, the impact of the development on below ground archaeology is considered negligible.

Impact on Built Heritage - Operational Phase

- 16.45 The updated ES considers the potential impacts of the proposed development on the built heritage. The assessment includes a review of the effects of the construction process; the presence of new built form; the new road layout, access and patterns of circulation; and changes to the visual qualities of the site.
- 16.46 No physical works are proposed to any designated heritage assets, and the distance of the site from the assets means no effects are predicted through the presence of construction activity.
- 16.47 In terms of post construction effects on the settings of built heritage assets, the closest designated assets are in the Church End area of Cherry Hinton and Teversham Conservation Area. These heritage assets are some distance from the application site and are screened by existing development. Officers agree with the conclusions of the updated ES, that the characteristics and wider setting of heritage assets is unlikely to be significantly affected by the development proposals.

Summary – Archaeology and Heritage Assets

- 16.48 The updated ES has been reviewed by Historic England, the County Archaeological Officer and Conservation Officers, who have confirmed the acceptability of the application proposals with regard to archaeology and built heritage.
- 16.49 Based on the above assessment and recommended conditions, the development is considered acceptable and in accordance with heritage objectives set out in Local Plan policies and Paragraph 128 of the NPPF.

Contamination

- 16.50 Paragraph 178 of the NPPF requires planning policies and decisions to ensure that a site is suitable for its proposed use, taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation, including land remediation (as well as potential impacts on the natural environment arising from that remediation). The development should also be appropriate for its location. Paragraph 179 states that where a site is affected by contamination or land stability issues, responsibility for securing a safe development with the developer and/or landowner where a site is affected by contamination. Policy 33 of the CLP and policy SC/11 of the SCLP relate specifically to ground contamination, offering support for development where it is demonstrated that there will be no adverse impacts to future occupiers, controlled waters and the environment from suspected/identified ground contamination. The GC Sustainable Design and Construction SPD also offers detailed advice on contaminated land issues relevant to new development.
- 16.51 Current and previous uses of the Site and surrounding areas are potentially contaminative. These include the Airport site, and the associated use of land for fuel storage tanks and as a fire training ground for the retained airport fire crew. Historical landfilling activities located to the south and south-west of the Site are also potential off-site sources of contamination.
- 16.52 The ES includes a chapter on Ground Conditions. This is supported by the results of site investigation and a land contamination assessment. An updated ES was submitted following, and in response to, discussions between the Applicants, Environmental Health Officers and Planning Officers on behalf of the Councils' and the Environment Agency (EA). Further information in respect of ground contamination was also formally submitted in December 2019.
- 16.53 Discussions in respect of contamination have principally related to the need for further information on the full extent of groundwater contamination resulting from the former use of part of the Site as a fire training ground. Former fire training grounds have a significant and lasting legacy of contamination due to the complex chemistry of fire-fighting foam chemicals specifically perfluorooctanesulfonic acid (PFOS) and perfluorooctanonic acid (PFOA). These flourinated surfactants are a very mobile (especially in water), persistent, bioaccumulative and toxic form of pollutants.
- 16.54 PFOS and PFOA are classed as 'emerging' legacy contaminants that require a high level of qualitative site investigation data in order to quantity the risks and to inform the decision as to whether effective remediation is feasible. There are no known similar UK based precedents (ie PFOS and PFOA contamination of a chalk aguifer) at the current time.

Impact on Controlled Waters

16.55 Given its contaminative history and environmental setting, the EA considers the Site to be of high sensitivity which could present potential contaminant

- linkages to controlled waters. Chemicals which present a risk of pollution of controlled waters can be mobilized by surface water infiltration. Controlled waters are particularly sensitive in this location, because the Site is located on a principal aquifer.
- 16.56 Preliminary site investigations undertaken up until March 2018 demonstrated elevated concentrations of hydrocarbons in groundwater beneath the Site, in addition to an elevated presence of firefighting foam chemicals and heavy metals in controlled waters. Given the nature of the PFOS and PFOA contaminants, further technical information was requested by the EA.
- 16.57 Since March 2018, both the EA and the Councils' have engaged with the Applicants in order to address the PFOS and PFOA data gap and associated uncertainty. During this period, the Site was subject to further investigation and groundwater monitoring.
- 16.58 As a result of further site investigation, a Conceptual Site Model (CSM) has been gradually refined, and a site specific Detailed Qualitative Risk Assessment (DQRA) for controlled waters has been developed and accepted by the EA.
- 16.59 Given the inherent uncertainties associated with the current state of knowledge on PFOS and PFOA treatment in the long term, and uncertainties over the influence of Site specific factors upon such remedial treatment (such as localised hydrogeology and the presence of other organic contaminants), a highly precautionary approach to remediation is considered necessary.
- 16.60 Further technical information in support of the Applications, including details of the proposed groundwater remediation, was formally submitted in December 2019. This has been reviewed by the EA and the Environmental Health Officer on behalf of the Councils'. In principle, a site-specific groundwater remediation strategy for PFOS and PFOA will, in the EA's opinion, have a reasonable prospect of being deliverable.
- 16.61 Following a full review of the additional technical information submitted in December 2019, the EA's holding objection was withdrawn in February 2020. The Environmental Health Officer has also confirmed the acceptability of the proposals.
- 16.62 The acceptability of the impact on controlled waters is subject to securing Site specific conditions requiring a groundwater pilot trial to be undertaken prior to the commencement of development, with results to be reviewed by the LPA. Should the trial be found to be effective, then development may progress in accordance with planning obligations secured through the Section 106 Agreement which address the longer term issues associated with PFOS and PFOA treatment. This includes on-going groundwater monitoring post treatment, unexpected remediation results (and any associated monitoring), maintenance of capping systems, and the need for future remediation.

16.63 With the above safeguards in place, officers are satisfied that short term and long term uncertainties associated with PFOS and PFOA treatment can be This will ensure a robust strategy to ensure the effective remediation of the Site for the lifetime of the development and the protection of controlled waters and human health. Relevant conditions have been recommended (Condition 68: Contamination Ground Remediation Pilot Trial; Condition 69: Contamination - Implementation and Completion of Groundwater Remediation Pilot Trial; Condition 70: Contamination - Submission of Site Wide Investigation Report; Condition 71: Contamination - Submission of Remediation Strategy; Condition 72: Contamination - Site Wide Maintenance and Monitoring Scheme; Condition 73: Contamination - Completion/Verification Report; Condition 74: Unexpected Contamination; Condition 75: Materials Management Plan).

<u>Summary – Contamination</u>

- 16.64 Subject to securing appropriate remediation as part of the Section 106 Agreement and planning conditions as described above, officers are of the view that the contamination risk to controlled waters and human health can be suitably managed and mitigated.
- 16.65 On this basis, the proposed development is considered to accord with policy 33 of the CLP, policy SC/11 of the SCLP, the LNCH SPD and the NPPF with regard to contamination and pollution control.

Drainage and Flood Risk

- 16.66 Local Plan policies seek to ensure that new development incorporates sustainable drainage systems to manage surface water, in accordance with the practice guidance to the NPPF. In addition, local plan policies require appropriate provision is made for foul drainage and sewerage disposal, together with provision and management of sustainable surface water drainage measures to reduce the risk of flooding.
- 16.67 The LNCH SPD recognises the importance of the flood risk and drainage design for the site following best practice. This includes the Cambridge Flood and Water SPD (2016) which aims to guide the approach taken to manage flood risk and the water environment as part of new development proposals.
- 16.68 Guidance on the Site wide surface water drainage solution is offered in the LNCH SPD, which encourages a network of on-site planted and unplanted channels and urban rills, supported by other strategic attenuation features. The SPD recognises that the incorporation of large permanent open water features is unlikely to be supported, due to the proximity of Cambridge Airport and the risk of bird strike. It also notes that proposals for below ground attenuation should be considered as a last resort.
- 16.69 A Flood Risk Assessment (FRA) and Drainage Strategy was prepared in support of the Applications, and an assessment of the impacts of the

development in relation to flood risk and water resources is reported in the updated ES. During the course of the application these documents were updated following technical advice received from statutory consultees.

Proposed Impact on Flood risk

- 16.70 The Site is located within the lowest defined floor risk area (Flood Zone 1), which is defined as land having a less than 1 in 1000 annual probability of fluvial flooding. The FRA confirms that the Site has a low probability of flooding from fluvial sources.
- 16.71 The technical information which supports the updated ES identifies that parts of the site are at risk of surface water flooding caused by heavy rainfall running of land and ponding as it flows towards a land drain. Flood compensatory works are proposed to allow for areas within the surface water flood risk extent to be incorporated within the development areas as defined on the PPs and shown by the Illustrative Masterplan. It is also proposed to realign, widen and deepen the main drain within the Site to increase the surface water flood capacity.
- 16.72 The development will result in an increase in the impermeable area over the existing situation. The proposed surface water strategy has been designed to ensure that run off from the development is controlled close to source prior to being discharged into the existing network. In addition, the strategy proposes a reduction in run-off to existing water courses and drainage ditches, based on a mixture of above and below ground attenuation to mitigate the increased run off into the surrounding watercourse.
- 16.73 The proposals have been reviewed by the EA, and the County Council as Lead Local Flood Authority. The approach to flooding is supported, subject to planning conditions requiring site wide and detailed surface water drainage strategies (Condition 24: Drainage Strategic Surface Water Drainage Strategy; Condition 25: Drainage Surface Water Drainage Strategy). With the proposed construction and mitigation measures in place, officers are satisfied that the development will minimise the risk of flooding to the site and will not cause an increase in flood risk to the surrounding area

Proposed Impact on Surface Water Drainage

- 16.74 The Applications detail the proposed site drainage strategy for the sustainable management of surface and foul water, including mitigation measures. It is proposed that SuDS will be utilized throughout the Site, delivering long term mitigation by attenuating and treating the development surface water run-off, and where possible providing betterment.
- 16.75 The proposed SuDs design ensures that sufficient surface water storage is provided during the 1 in 100 (1%) Annual Probability plus 40% climate change events, with discharge rates limited to existing greenfield rates.

- 16.76 At the construction stage, impacts on the quality of surface water and groundwater can be avoided by measures in the DCEMP. A relevant condition has been recommended.
- 16.77 The proposed surface water management strategy for the Site when constructed takes into consideration Site constraints, long term storage mitigation requirements, landscaping proposals and water quality treatment stages in accordance with relevant guidance.
- 16.78 An acceptable SuDs solution is proposed by the surface water management strategy. This demonstrates that with the quantum and layout of development proposed, SuDs features such as strategic urban rills, linear detention areas and detention basins can be utilised. In addition, measures for on-site water treatment measures are identified, including the use of rainwater gardens, bio retention planters and porous paving. This approach is in accordance with the guidance offered in the LNCH SPD.
- 16.79 The proposed SuDS solution offers flexibility in the final design and will be subject to further refinement as part of the detailed planning stages. It is an expectation that the final SuDs solution will play an integral part of the green infrastructure for the site and be designed to maximise opportunities for habitat creation and wildlife.
- 16.80 The SuDS features will be designed to enable maintenance throughout the lifetime of the development. It is anticipated that these will be adopted by a body responsible for management and maintenance of these areas. A planning condition requiring details by way of a SuDS management plan has been recommended (Condition 26: Drainage Surface Water Drainage Details).

Foul Water Drainage

16.81 It is proposed that foul water flows from the site will be discharged to the existing Anglian Water foul sewer located to the south of the Site. A discharge rate has been agreed with Anglian Water, who has confirmed that the current system will require some enforcement works to accept the proposed discharge rates from the development. This will be the responsibility of the developer. A relevant condition has been recommended (Condition 27: Drainage: Foul Water Drainage Details).

Summary – Drainage and Flood Risk

16.82 The Applications demonstrate that a suitable surface water drainage scheme can be accommodated within the indicative masterplan layout. The FRA confirms that residual risks of flooding in more extreme events can be mitigated taking into account climate change. Officers are of the view that with appropriate mitigation measures in place, the proposed development will not have a significant adverse impact on drainage and flood risk.

16.83 The application proposals have been considered by the EA, the City Council's Sustainable Drainage Engineer, and the County Council as Flood Authority. No objection is raised to the development on drainage and flood risk grounds, subject to planning conditions as identified above. On this basis, the proposals are considered acceptable in terms of drainage and flood risk and in accordance with policies 31 and 32 of the CLP, policy CC/8 of the SCLP, the Cambridge East AAP, the LNCH SPD and the NPPF.

Ecology and Biodiversity

- 16.84 National planning policies seek to ensure that biodiversity is conserved and enhanced. At a local level, planning policies seek to ensure the provision of achievable mitigation and the enhancement of the nature conservation value of sites, through habitat creation, linkage and management (CLP policies 69 and 70, SCLP policies NH/4 and NH/5).
- 16.85 Given the time which has elapsed since ecological survey work was undertaken, an update to the Ecology Survey was submitted in November 2019. This presents information gained from a further desk study and Phase 1 habitat survey undertaken in October 2019. The purpose of this exercise was to establish the robustness of the ecological information submitted within the Ecology chapter (and associated appendices/figures) of the ES and update habitat and protected species data
- 16.86 The Ecology Survey update confirmed that the Site has not changed significantly between the preparation of the original ES (which was based on an ecological desk study in 2016 and species surveys in 2016 and 2017), and the new desk study and field survey carried out in October 2019. It concludes that the Ecology Chapter of the updated ES can still be relied on in the decision-making process. The City Council Ecologist has reviewed this information on behalf of both Councils', in addition to an Ecological Technical Note dated 19 December 2019. The approach to the ecological assessment as set out in the updated ES, and the conclusions of the Ecology Survey update, are supported.

Existing Site Biodiversity

- 16.87 The Site supports arable fields and semi-improved grassland. A combination of hedgerows, ditches and trees are present on field and site boundaries.
- 16.88 Three non-statutory designated sites are located partly within or on the boundaries of the Site:
 - Airport Way Road Side Verge (RSV) County Wildlife Site (CWS) along the eastern site boundary, including road verges and associated hedgerows/scrub on Airport Way.

- Teversham Protected Road Verge (PRW) along part of the eastern site boundary. This includes road verges and associated hedgerows/scrub on Airport Way and Cherry Hinton Road.
- Teversham Drift Hedgerow City Wildlife Site (CiWS) along part of the southern site boundary
- 16.89 A number of statutory designated nature conservation sites are located within 2km of the Site, including the nationally important Cherry Hinton Chalk Pits Site of Special Scientific Interest (SSSI) and six Local Nature Reserves (LNR) of regional/county level importance.
- 16.90 The ecological desk study identified records of the protected species (bats, water vole, badgers, farmland bird species, great created newt and reptiles) within the vicinity of the Site.
- 16.91 Field surveys conducted in 2016, 2017 and 2019 identified the following protected species within the Site:
 - Bats: At least seven bat species were identified as using the Site for foraging and commuting, with the majority of activity next to field boundary features within and on the periphery of the Site. Very little activity recorded in open arable fields or semi improved grassland areas.
 - Water Vole: Evidence of low/medium density water vole occupation of the drainage ditches recorded during the 2016 and 2017 surveys.
 - Birds: Over 40 bird species identified during the winter bird survey (including wintering waterbirds, gulls and game). Six species of bird listed as Species of Principal Importance recorded in the breeding bird season survey, five being listed on the Bird of Conservation Concern (BoCC) red list and one on the BoCC amber list.
- 16.92 The Ecological Assessment submitted as part of the ES presents the approach and findings of the potential effects of the development on ecology and biodiversity, with regard to the baseline conditions of the site. During the course of the application, the Ecological Assessment was updated following advice from the Council's Ecologist and consultation response received from the Cambridgeshire Wildlife Trust (the Wildlife Trust).

On-Site Ecological Impacts

16.93 The Applications will result in the net loss of arable and semi-improved grassland habitats. The updated ES identifies that the largest habitat types to be lost are of low conservation importance.

- 16.94 The Applications provide measures for enhancing biodiversity, including through the provision of new species rich habitats, including hedgerows, grassland and drainage ditch. It is also proposed to install nesting and roosting features for birds and bats.
- 16.95 In accordance with the advice offered by the Council's Ecologist, a Site wide Ecological Design Strategy (EDS) will be required to capture all on Site biodiversity requirements. This will include the provision of new wildlife features including bird nesting features, bat boxes and hedgehog highways within buildings and their curtilages. A relevant condition has been recommended (Condition 29: Biodiversity Ecological Design Strategy (EDS) and Landscape and Ecological Management Plan (LEMP).
- 16.96 Proposed access Junction 1 on the eastern side of the Site has the potential to directly impact on the non-statutory nature conservation sites (the CWS Airport Way RSV and CWS Teversham Drift Hedgerow) which are located partly within the Site. Ecological considerations have informed the junction design, and the junction has been located away from areas identified as supporting scarce vascular plant species. The City Council's Ecologist has confirmed that the ecological impacts of the access are acceptable and the proposed access road will not have an adverse impact on identified protected plant species.
- 16.97 The Applications will involve the loss of a number of trees and hedgerows. The City Council's Ecologist has raised no objection to the proposed losses from a biodiversity perspective, noting that some of the removals may lead to ecological enhancements if encroaching scrub is removed from designated areas. Relevant conditions have been recommended to secure replacement planting (Condition 38: Hard and Soft Landscaping Details).

Off-site Biodiversity Mitigation (Biodiversity Net Gain)

- 16.98 Biodiversity net gain is an approach which aims to leave the natural environment in a measurably better state post development. Paragraph 170 of the NPPF requires planning decisions to minimize impacts on and provide measurable net gains for biodiversity including the establishment of coherent ecological networks. These objectives are also reflected in Local Plan Policies.
- 16.99 The Applications as originally submitted did not include a measurable net gain in biodiversity, pre-dating relevant guidance on biodiversity net gain. On request further work on was undertaken by the Applicants, and biodiversity net gain was reassessed using a methodology agreed by officers and the Wildlife Trust.
- 16.100The change in the Site's biodiversity value has been assessed through the DEFRA Biodiversity Impact Assessment Calculator (version 2). The approach maps and assesses the condition of all habitats on a site pre-development. This provides a baseline score (in biodiversity units) for a site based on the extent and quality of habitats present. Following the mitigation hierarchy of

- avoid, protect, mitigate and compensate the development proposals can assess the loss and gains of a proposed site development. The DEFRA metric contains multipliers that encourage retention of good quality habitats and also recognizes the temporal loss whilst new habitats establish.
- 16.101Based on the indicative illustrative Masterplan and taking account of proposed habitat creation and enhancement within the Site, the calculator originally predicted a negative Habitat Biodiversity Impact Score of minus 4.18. The December 2019 technical note advises that a further 1.5 units will be lost due to the re-assessment of areas of existing grassland from 'improved grassland' to 'species-poor semi improved grassland' following the field re-surveys in 2019, reflecting the dominance of a mix of grasses, with a low number and frequency of herbs. This results in a predicted Habitat Biodiversity Impact Score of minus 5.68. The methodology for calculating the biodiversity impact score has been confirmed as acceptable by the City Council's Ecologist and the Wildlife Trust.
- 16.102Officers note that the shortfall of biodiversity is due to the locational constraints of the Site, primarily the proximity to an operational airport, which operates under a Wildlife Hazard Management Plan. Key risks are associated with potential for bird strikes and the requirement to design out any elements that have the potential to attract foraging, roosting or breeding species within the flight path of the airport. Larger, flock forming species pose the greatest risk, including gulls, wood pigeons, corvids and waterfowl. For example the WHMP precludes the creation of areas of open water or significant stands of wetland vegetation within SuDs provision. This prevents maximizing the biodiversity value of the drainage functions of the Site.
- 16.103Based on the government's agreed figures of biodiversity unit costs, the biodiversity assessment of the Applications equates to a requirement to offset 11-12 units. The off-setting of biodiversity and provision off-\site can be provided by way of a financial contribution to an appropriate off-set project or habitat creation, to be secured through a Section 106 planning obligation. The City Council's Ecologist and the Wildlife Trust have confirmed that this is a sound and reasonable approach, and discussions have taken place regarding the financial contribution and the project.
- 16.104A financial sum has been proposed for grassland habitat creation at Fulbourn Fen SSSI, extending and buffering grassland habitats, which is a strategic priority for local biodiversity. The landowner and land managers of Fulbourn Fen have been in discussions with the Applicants, the Wildlife Trust and Council's Ecologist. Officers are confident that this project can be delivered within appropriate timescales, to secure a meaningful biodiversity net gain post development. The details will be secured through the Section 106 Agreement.
- 16.105The uplift in grassland quality identified in the 2019 field survey provides a more accurate assessment of the baseline value of grassland habitats on the Site. The enhancement of baseline habitat quality affects the biodiversity net

- gain calculations. This will be reflected in the Section 106 Agreement for off Site habitat creation.
- 16.106The Applications also propose compensation measures to address the loss of semi improved grassland and arable farmland habitats. These provide existing habitat for breeding skylark which are unlikely to utilize the proposed new on-Site habitats. A skylark mitigation strategy has been submitted which sets out how the loss of habitat will be compensated through the provision of dedicated off-Site replacements. The City Council's Ecologist is satisfied with this approach, which can be secured as a Section 106 planning obligation.

Off-site ecological impacts

- Recreational Pressure
- 16.107The updated ES concludes that the Applications will not give rise to impacts on sites of national and regional/county level importance. It gives consideration to potential indirect effects arising from the increased population, and the resultant increases in recreational pressure on nearby designated recreation sites and designated further afield, including Fulbourn Fen and Wicken Fen. Taking into account factors including the distance from the Site, the updated ES concludes that it would be unlikely that nearby designated sites will be damaged by the level of additional visitors generated by the development.
- 16.108The Wildlife Trust has reviewed the updated ES and remains concerned regarding the levels of strategic greenspace provided on the Site. It is the view of the Wildlife Trust that the lack of strategic greenspace will increase demands for countryside recreation and dog walking on sensitive nature conservation sites nearby.
- 16.109Officers are of the view that the amount of green space (including publicly accessible open space) which will be provided by the Applications is acceptable. The Landscape and Green Infrastructure PP indicates a variety of open space types including informal public open space on the edge of the development. Over 10 hectares of green space is proposed, which will provide recreational areas for immediate and everyday recreation opportunities. Officers are satisfied that the quantum and type of open space as provided on the Landscape and Green Infrastructure PP is an acceptable level of provision which is in accordance with Local Plan policies.
- 16.110The concerns of the Wildlife Trust are noted regarding the provision of strategic natural greenspace within the Cambridge East Area. Whilst this remains part of the Cambridge East AAP Vision for the wider area, Local Plan policies and the LNCH SPD allow the Site to come forward for development without the need to deliver strategic green infrastructure. Due consideration to the wider issue of the impact of recreational pressure on green infrastructure, and the provision of strategic green infrastructure will be an issue for the forthcoming Local Plan review. The City Council's Ecologist

agrees with the assessment and the conclusion with regard to recreational pressure.

<u>Summary – Ecology and Biodiversity</u>

- 16.111The Applications will result in a net loss in habitat areas, but a net gain in habitat quality. A number of on-Site and off-Site mitigation measures are proposed to reduce the ecological significance of these impacts. Given the measures proposed, which will be secured by planning condition and Section 106 Agreement as described above, officers agree with the findings of the updated ES that the Applications will have no residual significant adverse ecological impacts.
- 16.112Based on the above assessment, the Applications accord with the ecological objectives set out in policies 69 and 70 of the CLP, policies NH/4 and NH/5 of the SCLP, the Cambridge East AAP, the LNCH SPD and the NPPF.

Landscape, Trees and Lighting

- 16.113Paragraph 127 of the NPPF requires developments to be sympathetic to local character and history, including the surrounding built environment and landscape setting, whilst not preventing or discouraging appropriate innovation or change (such as increased densities). It goes on to advise that development proposals should be visually attractive as a result of good architecture, layout and effective landscaping.
- 16.114Policy 56 of the CLP and policy HQ/1 of the SCLP seek to ensure that new development responds to its context and encourage the creation of well-designed open space and landscaped areas.
- 16.115Policy CE/7 of the Cambridge East AAP recognizes the sensitivities of the outer edges of Site. This policy requires development proposals for Land North of Cherry Hinton to carefully consider building heights in such locations, particularly where existing development is in close proximity.
- 16.116The LNCH SPD also offers guidance in respect of the general approach to landscape and open space, recognizing that the site provides a positive opportunity to create a landscape strategy which provides a green framework of public open spaces and wildlife habitats, and encourages sustainable lifestyles.

Landscape Strategy

16.117The Site lies within a transitional landscape, being situated between the urban areas of Cambridge city and Cambridge Airport, and the wider rural landscape of South Cambridgeshire. The immediate surroundings of the Site are characterized by a relatively flat agricultural landscape, with field boundary hedgerows containing a number of trees within.

- 16.118The Applications are supported by a detailed landscape strategy which seeks to retain and enhance the Site's existing landscape features and create new green infrastructure, in accordance with the principles identified in the LNCH SPD.
- 16.119The updated ES also includes a Landscape and Visual Impact Assessment (LVIA) which has been undertaken to assess the impact of the Applications on the existing landscape. This considers the sensitivity of the landscape and visual environment to change. The LVIA also describes the nature and significance of the effects of the likely landscape and visual effects likely to arise as a result of the Applications.
- 16.120The Landscape Officer has reviewed the LVIA on behalf of the Councils' and has confirmed the acceptability of the methodology. Further clarification has been provided regarding proposed ground levels upon which the development model was based, to the satisfaction of the Landscape Officer.
 - Impact on Landscape Character
- 16.121The LIVA identifies a Zone of Theoretical Visibility (ZTV) based on the maximum building heights proposed within the Site, as identified by the Building Heights PP (up to 10m, 12m, 15m and 16.5m).
- 16.122The LVIA concludes that the visual impacts of the Applications on landscape character would largely be confined to within the Site itself and its immediate context. The assessment summarises the scale of visual effects into three zones:
 - Large scale effects: confined to the immediate proximity of the Site boundaries up to 50m.
 - Medium scale effects: between 50m and 250m outside the immediate Site boundaries.
 - Negligible scale effects: beyond 250m outside the immediate Site boundaries.
- 16.123Within the Site, the visual effects of the development would be major and adverse. Outside the immediate boundaries of the Site, the effects would diminish considerably. Adverse visual effects would still be pronounced outside the Site and up to 50m away, although the effects would reduce to moderate-major.
- 16.124The LVIA identifies that permanent direct adverse significant effects would arise at the following receptors immediately adjacent the Site:
 - Public Right of Way between March Lane and Airport (major adverse effects).
 - Airport Way (southern section) (major/moderate adverse effects).

- Coldhams Lane (major/moderate adverse effects).
- 16.125Beyond 50m of the boundary of the Site, the LVIA identifies that these visual receptors would not experience effects greater than minimal/neutral owing to the existing context of built development in Cherry Hinton, Teversham and Cambridge city, and the combination of intervening built infrastructure, vegetation and landform which would limit views from the wider landscape.
- 16.126Effects on landscape character would further reduce with distance from the Site. Beyond approximately 200m the LVIA concludes that there would be no discernable change to the landscape character.
- 16.127The incorporation of 'mitigation by design' within the development of the design and landscape strategy will ensure new tree and hedgerow planting along the Site boundaries, to lessen the visual impact of the development. The Landscape and Green Infrastructure PP has been revised to ensure appropriate provision for mitigation measures on the southern side of the Site, at the request of the Landscape Officer.
- 16.128The approach to mitigation has been confirmed as acceptable by the Landscape Officer, who notes that these measures will help to assimilate the development with its surroundings.
- 16.129It is acknowledged that the proposed school building (identified as up to 3 storeys in height on the Building Height PP) will be quite prominent in immediate views into the Site from Airport Way. Whilst the precise detail of the mitigation along the Site boundaries will be a matter for the reserved matters, Landscape Officers consider that the most appropriate form of mitigation along this part of the Site will be a 2m noise attenuation fence mitigated on either side by native planting. The LVIA has assessed the visual impact of screening of this height. Officers agree with the findings of the LVIA that this will assist in mitigating the adverse view identified at this point.
- 16.130The Landscape Officer has reviewed the LVIA assessment and agrees with the conclusions reached. The proposed massing and building heights are considered acceptable subject to the recommendation of conditions relating to the landscaping details, including boundary treatment (Condition 38: Hard and Soft Landscaping Details). On this basis the proposals are considered acceptable with regard to landscape impact.
 - Visual Impact on Green Belt
- 16.131The Applications have the potential for minor adverse impacts on the openness of the Green Belt, due to features associated with the proposed recreational use of the secondary school playing fields.
- 16.132The recreational use of the Green Belt is accepted in both Local Plans, and has been discussed in the Principle of Development section of this report (Section 11). Officers are satisfied that with appropriate conditions in place relating to the restriction of flood lighting and built development in the Green

- Belt, potential adverse impacts on the Green Belt can be minimised (Condition 34: Use of Playing Fields; Condition 64: Artificial Lighting Design Scheme).
- 16.133The Applications will require noise mitigation measures along the eastern edge of the Site. The provision of acoustic attenuation is this location is recognised within the LNCH SPD and is considered by officers to be acceptable in principle. The precise detail of the attenuation will be required by planning condition and assessed as part of subsequent planning stages (Condition 62: Noise Impact Assessment Residential and Noise Sensitive Uses).
- 16.134With the controls in place as described above, officers are satisfied that the visual impact of the Applications on the Green Belt will not be significant.

Trees

- 16.135Trees are a material consideration in the determination of planning applications, as recognised by policy 71 of the CLP and policies NH/4 and NH/7 of the SCLP. Due consideration and protection of existing trees and hedges is therefore an expectation of the Applications.
- 16.136The Applications are accompanied by an Arboricultural Report and Arboricultural Impact Assessment (AIA). This was updated, and a revised AIA submitted in February 2020. The updated AIA includes an extended survey area which includes the areas of the proposed junction improvements.
- 16.137The revised AIA assesses the impact of the Applications in respect of individual trees, groups of trees and hedges that may have an impact on the proposed development and discusses potential mitigation measures.
- 16.138A total of 43 trees, 14 groups, 12 hedges and 10 areas are recorded in the assessment. The assessment categorises the trees according to their landscape and arboricultural value and assigns categories from A (highest quality and value) to C (low quality and life expectancy). The assessment also identifies a number of trees within category U (trees in poor condition which will be lost within 10 years, including a number of dead elms).
- 16.139None of the assessed trees are found to be of high quality or value. The revised AIA identifies the significance of the trees within the Site as low in arboricultural and landscape terms. The most noteworthy trees assessed are located towards the southern boundary of the Site, near Teversham Drift and the nearby Public Right of Way. In accordance with the updated AIA recommendations, due consideration will be given to retaining these trees. A condition has been recommended to ensure tree protection during construction (Condition 40: Tree Protection).
- 16.140The revised AIA assesses the Illustrative Masterplan proposals on the existing tree stock. It identifies that 2 category B trees, 1 category B group, 3

- category C trees, 1 category C group, 2 category C hedges and 6 category C areas will require removal as part of the Applications.
- 16.141Given the limited tree cover across the site, officers agree with the conclusions of the AIA that the arboricultural impact of the Applications on the existing tree stock will be low. The potential tree removals are not considered to have an adverse impact on the character and appearance of the Site or the wider landscape. A condition has been recommended to ensure appropriate tree planting mitigation (Condition 38: Hard and Soft Landscaping).
- 16.142Junction 3 proposes a new pedestrian and cycle path to be provided between the Site and Teversham. The exact alignment of the path will be a matter for the detailed design stage. The design will be based on no dig construction principles to ensure the minimisation of adverse impacts on the retained tree stock. Relevant conditions will be required, including the requirement for a Site specific arboricultural method statement in order to safeguard retained trees (Condition 39: Tree Survey and Arboriculture Implications Assessment).
- 16.143On the basis of the above assessment, officers are satisfied that the proposals are acceptable with regard to trees. Whilst the Applications will result in some tree losses, given the site context and quality of the trees, this is not considered to be significant in arboriculutrual and landscape terms. Compensatory mitigation can be secured through planning conditions as described above.

Lighting

- 16.144The NPPF seeks to limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation through good design. Further policy guidance is offered by policy 34 of the CLP and policy SC/9 of the SCLP, which support development proposals subject to the minimization of light pollution. The LNCH SDP recognizes that appropriate mitigation of environmental and health impacts may be required to ensure appropriate amenity for future residents.
- 16.145The Applications are accompanied by a lighting assessment which supports the LVIA provided in the updated ES. The lighting assessment provides an assessment of the potential effects from obtrusive light that may arise from the artificial lighting associated with the construction and operation of the proposed development.
- 16.146The lighting assessment was revised during the course of the Applications, and an updated lighting assessment submitted in response to comments made by the Environmental Health Officer.
- 16.147The Site has been categorised in lighting terms as environmental zone E2 (Rural), on the basis of the low levels of district brightness in the Site and that it is in rural surroundings. Given the scale and nature of the proposed uses, it

is anticipated that the area may change to environmental zone E3 (suburban), once the development is fully built out.

- Existing Lighting Baseline
- 16.148The baseline lighting survey recorded glare from existing flood lighting located on the aircraft apron and hangars which allows Cambridge Airport to operate safely. There is potential for glare from existing security lighting to adversely affect new residents located on the northern boundary of the Site. Due to the distance between the airport apron and residential land use, the glare is expected to be within obtrusive light limitations. The proposed strategic infrastructure on the northern boundary will provide additional visual screening which will further reduce potential impacts. The Environmental Health Officer agrees with this assessment.
 - Lighting Impacts Construction Phase
- 16.149Artificial lighting during the construction phase will be temporary in nature and unlikely to cause unacceptable adverse impacts on the local area. In accordance with the advice offered by the Environmental Health Officer, a conditions will require artificial lighting control and consideration of appropriate mitigation measures as part of the site wide Demolition and Construction Environmental Management Plan (DCEMP) and phase specific construction management strategies (Condition 60: Site Wide DCEMP; Condition 61: Site Specific DCEMP).
 - Lighting Impacts Operational Phase
- 16.150Once operational, the predominant light sources introduced at the Site will be residential street/security lighting, car park lighting for residential, educational and community uses, flood lighting for sports pitches and road lighting for access junctions onto the highway network.
- 16.151The updated lighting assessment finds that the potential effects of obtrusive light associated with the operational development may affect existing sensitive receptors outside of the Site, and future sensitive receptors within the Site. The Environmental Health Officer agrees with the conclusion of the updated ES, that potential impacts on residential amenity are unlikely to be significant, subject to appropriate mitigation through good lighting design.
- 16.152The central principle of operational lighting mitigation is to ensure that future lighting designs keep light levels as far as possible within the limitations set for the relevant environmental zone. It will therefore be important to ensure that, as part of future detailed lighting strategies, new artificial lighting for each phase is kept within the limits set out for the environmental zone E2 (Rural).
- 16.153In accordance with advice from the Environmental Health Officer, a condition has been recommended requiring details of lighting design for externally lit areas to be submitted for approval as part of subsequent reserved matters applications (Condition 64: Artificial Lighting Design Scheme). On this

basis, officers are satisfied that operational artificial lighting is unlikely to give rise to unacceptable adverse impacts on existing residential premises in the area and future occupiers of the Site.

<u>Summary – Landscape, Trees and Lighting</u>

- 16.154The impact of the proposed development upon landscape character, trees and lighting has been fully evaluated by officers. Officers accept that the Applications would be harmful to landscape character as a matter of principle, given that the proposals would ultimately change currently undeveloped agricultural land into a developed housing estate. However, the visual impact of the Applications upon landscape character will be most pronounced only in the immediate proximity of the Site.
- 16.155Given the localized nature of the impacts, officers are of the view that the Applications would not conflict with development plan policies relating to landscape character to such an extent as to justify a refusal of the Applications on these grounds alone.
- 16.156The effects of the development would be capable of mitigation via the introduction of new landscaping, including tree and hedgerow planting, the precise details of which can be secured at reserved matters stage. Appropriate conditions have been recommended as described above.
- 16.157Officers are also satisfied that any artificial light sources introduced into the area can be suitably controlled to avoid significant impact on residential amenity or landscape character.
- 16.158On the basis of the above evaluation, officers consider that the application proposals are acceptable with regard to landscape, trees and lighting. The application proposals are therefore in accordance with policies 4, 13, 34, 56 and 71 of the CLP, policies SS/3, HP/1, NH/4, NH/7, NH/8, NH/10 and SC/9 of the SCLP, the Cambridge East AAP, the LNCH SPD and the NPPF.

Noise and Vibration

- 16.159The NPPF deals specifically with the issue of noise in Paragraph 180, requiring the planning system to ensure that new development is appropriate for its location, taking into account likely noise effects on health, living conditions and the natural environment. In doing so, planning decisions should mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development, and avoid noise giving rise to significant adverse impacts on health and quality of life. These objectives are linked to policies and objectives set out in the Noise Policy Statement for England.
- 16.160Policy 35 of the CLP and Policy SC/10 of the SCLP which relate to noise pollution are also of relevance. These policies state that development will only be permitted which does not lead to significant adverse effects on health, the environment and amenity arising from noise pollution or which minimizes adverse effects through the use of appropriate mitigation

- measures. The GC Sustainable Design and Construction SPD offers detailed advice on the principles of good acoustic design, and noise mitigation and management measures to reduce to a minimum the potential adverse impacts resulting from noise from new development.
- 16.161CLP policy 13 and SCLP policy S/3 which relate specifically to land at Cambridge East advise that proposals for residential development will be supported if acceptable mitigation of environmental and health impact (including noise) from Cambridge Airport can be provided. The LNCH SPD also recognizes that the environmental constraints of the Site include noise intrusion from Cambridge Airport and Cherry Hinton, which will need to be considered to ensure no unacceptable noise impacts/effects on new noise sensitive development.
- 16.162In considering the Applications, and in accordance with the planning policy context, officers recognize the importance of ensuring that existing environmental noise sources do not give rise to unacceptable advise noise impacts/effects on any new noise sensitive development (and in particular the proposed residential premises and primary and secondary school).
- 16.163The updated ES includes a noise and vibration chapter, which assesses existing and proposed noise levels associated with the construction and operation phases of the proposed development. Additional information has been submitted to address comments made by the Environmental Health Officer. The additional information documents the post submission engagement, additional assessments undertaken, and evidence gathered since the Applications were originally submitted.
- 16.164The updated ES presents the results of the noise assessment. The suitability of the Site for noise sensitive (residential type) uses is also considered. Mitigation measures are presented to avoid significant adverse noise impacts arising, and to reduce and minimise to an acceptable level the effects of noise and vibration during both the construction and operational phases of the proposed development.
- 16.165The Environmental Health Officer has confirmed that the noise assessment is comprehensive and has been undertaken having regard to (and in accordance with) relevant planning policy and national/industry impact assessment methodologies, noise standards, codes of practice and best practice technical guidance.

Noise Impacts – Construction Phase

- 16.166Construction noise will be generated both within the Site and on local roads as additional vehicles will be travelling to and from the Site. An indicative construction noise assessment has been carried out using typical plant, fixed distances and worst-case assumptions.
- 16.167The updated ES concludes that the Applications would have a negligible adverse impact in terms of noise generated during construction. The

- Environmental Health Officer agrees that these findings are of minor significance and no unacceptable health impacts are envisaged.
- 16.168A condition has been recommended to secure appropriate noise and vibration mitigation as part of the Site wide DCEMP. Subsequent reserved matters applications will also be required to provide a Site specific Construction and Environmental Management Plan demonstrating compliance with the approved site wide DCEMP.

Noise Impacts - Operational Phase

- 16.169Operational noise generated by the Applications will come from a number of sources, including long term local traffic noise associated with the development, and operational noise arising from the proposed uses (including commercial and mixed uses, and recreational areas). The proposed operational noise impacts have been assessed as part of the updated ES. This concludes that noise arising from the proposed development will have a negligible impact and is of minor significance requiring no mitigation. The Environmental Health Officer agrees with these findings, although notes that a noise insulation scheme for residential uses in certain locations will be required. These matters are detailed design issues which will be controlled by planning condition (Condition 62: Noise Impact Assessment Residential and Noise Sensitive Uses; Condition 63: Noise Impact Assessment Non Residential Uses).
- 16.170Operational noise may also be associated with the proposed non-residential uses, including the community, retail, commercial and recreational uses. The reserved matters stage will ensure that mitigation measures (for example the provision of appropriate separation distances) are carefully designed into the scheme detail, to ensure such uses do not give rise to significant adverse noise effects. In this respect, it is an expectation that appropriate buffer zones will also be provided between local activity areas (LEAPs and NEAPs) and residential properties. Appropriate conditions have been recommended as described above, to ensure appropriate control.

Noise Impacts - Existing Noise Environment

- 16.171The existing environmental noise climate experienced at and within the Site is comprised of various noise sources dominated mainly by airport/aircraft noise from Cambridge Airport, and traffic noise from Coldhams Lane, Cherry Hinton Road and Airport Way. Distant A14 traffic noise can also be heard to varying degrees but at lower levels.
- 16.172The main operational activities at Cambridge Airport comprise of:
 - Aircraft maintenance, repair and overhaul operations, including aircraft Engine Ground Running (EGR).

- Aircraft operations (fixed wing and helicopters), including general and business aviation, East Anglian Air Ambulance and occasional commercial and charter passenger flights; and
- Flying clubs (fixed wing and helicopters).

Noise levels vary spatially throughout the site in volume, intensity, character and duration throughout the day, evening and night time periods.

- 16.173The updated ES assesses the individual contribution from each noise source, along with the overall combined noise for the suitability of the proposed development. Projected aircraft movements identified in the updated ES account for the immediate future plans of the Airport and have been confirmed as accurate by Cambridge Airport and Marshall Aerospace and Defence Group as the main tenant on the site. Confirmation has been received that this position has not changed since the Applications were originally submitted.
- 16.174The assessment for suitability of use has been considered against Lowest Observed Significant Effect Levels (LOAELs) and Significant Observed Adverse Effect Levels (SOAELs) for noise. Although the word 'level' is referred to, this does not mean that the effects can only be defined in terms of a single value of noise exposure. In some circumstances, adverse effects are defined in terms of a combination of more than one factor such as noise exposure, the number of occurrences of the noise in a given time period, the duration of the noise and the time of day the noise occurs.
- 16.175In addition, there is no definitive absolute methodology/approach or defined thresholds/numerical criteria to determine significance of noise impacts/effects for every noise source. The subjective nature of noise means that there is not a simple relationship between noise levels and the impact on those affected. This will depend on how various factors combine in any particular situation.
 - Assessment of Existing Noise Climate
- 16.176The updated ES demonstrates that noise levels vary across the public outdoor amenity spaces within the Site. Some parts of the site would experience noise levels of between 50dB LA eq 16 hour and 55 dB LA eq 16 hours. Officers consider this to be an appropriate level of noise for such spaces, given the location. Other public amenity spaces are exposed to noise levels up to 57 dB LA eq 16 hour, which is considered reasonable, given that the slightly higher noise levels are contained to only part of Site.
- 16.177Due to the proximity with Airport Way, noise levels at the proposed location of the secondary school as shown on the Illustrative Masterplan are currently at the upper end of acceptable. The Environmental Health Officer notes that for some periods of the day the noise levels will exceed this limit. The updated ES assesses the impact of acoustic mitigation on noise levels, including the provision of an acoustic screen/bund of different heights along part of the eastern site boundary with Airport Way. At 2m, the screening from such a barrier and other buildings within the site will assist in mitigating noise levels

- at the proposed secondary school to within acceptable levels. Internal noise levels can also be reduced through good building design and construction.
- 16.178The updated ES finds that noise levels at the location of the proposed primary school are within an acceptable range. Once screening from the buildings within the application site is considered, noise levels are reduced further.
- 16.179The Environmental Health Officer agrees with the approach to assessment and the findings of the submitted noise assessment. The noise assessment has identified the need to specify minimum acoustic criterion for building fabric, glazing and ventilation for dwellings and school buildings to protect against suitable internal noise levels being exceeded. With these measures in place, officers are satisfied that the noise climate across the site is appropriate for the proposed development. Relevant conditions have been recommended to require detailed noise assessments and details of the noise mitigation measures as part of the reserved matters stages. (Condition 62: Noise Impact Assessment Residential and Noise Sensitive Uses; Condition 63: Noise Impact Assessment Non Residential Use).
 - Short term periods of aircraft noise
- 16.180The LOAEL and SOAEL threshold values derived for road traffic and aircraft noise correlate to the noise exposure average over/during the whole day period, over 16 hours (07 00 to 23 00 hour), aircraft engine testing/running over 11 hours. It would not be appropriate to assess short term exposure noise descriptors using LOAEL and SOAEL. This is because there are no acceptable standards for such short periods during the daytime, and such occurrences happen infrequently.
- 16.181Due to the context of the Site, from time to time short periods of aircraft noise will be clearly audible (for example airplane and helicopter take off and landings). When the GRE is in use, engine noise will also be audible, notably during periods of high powered running which are typically for 30 minutes at a time. These instances are relatively infrequent and for the majority of time occur during daytime hours. The level of activity at the Airport reduces considerably during the evening 19 00 to 23 00 hours). Apart from exceptional circumstances (such as the East of England air ambulance movements) there is little or no activity during the night time hours (23 00 to 07 00 hours).

Summary - Noise and Vibration

16.182The ES demonstrates that the noise climate across the Site for the majority of time lies between the LOAELs and SOAELs. The periphery of the Site will experience the highest noise levels, due to a direct line of sight to various external noise sources. This is considered an observed adverse effect level for noise, which will require mitigation in accordance with national and local planning policy guidance.

- 16.183Having regard to the noise character of the existing area, the noise climate is considered appropriate for the proposed development. This is subject to good acoustic design and noise mitigation measures to reduce and minimize potential noise impacts/effects. Relevant conditions have been recommended as described above.
- 16.184On the basis of the above evaluation, the proposals are considered to accord with policies 13 and 35 of the CLP, policies SS/3, HQ/1 and SC/10 of the SCLP, policies CE/10 and CE/26 of the Cambridge East AAP, the LNCH SPD and the NPPF with regard to noise and vibration.

Sustainable Construction and Design

- 16.185The adopted Local Plans contain a suite of policies which will help to ensure that new development reduces its environmental impact through sustainable construction and design – by minimising carbon emissions, flood risk, pollution and pressure on resources such as water and helping to protect and enhance biodiversity.
- 16.186Policies CE/25, CE/27 and CE/28 of the Cambridge East AAP set out exemplar sustainability aspirations for the Cambridge East Area. The LNCH SPD further acknowledges that creating a sustainable development should be a priority underpinning the development of the site and recognizes the need to adopt recommended design considerations where appropriate.
- 16.187In order to ensure that relevant development plan policies are implemented as effectively as possible, the recently adopted GC Sustainable Design and Construction SPD has been prepared to provide additional technical guidance on the implementation of these policies.
- 16.188The Applications have been designed with regard to the guidance offered in the Sustainable Design and Construction SPD, to ensure that minimum policy requirements are met, and where possible exceeded.
- 16.189The Applications are supported by a Sustainability Statement which proposes strategies for addressing the relevant sustainability criteria, including water conservation, urban design, biodiversity, pollution and sustainable drainage. This includes a review of best practice in the Cambridge area, a summary of objectives for the Site, and a set of targets and objectives for the development.
- 16.190Following consultation advice received from the GCSPS Sustainability Officer, an Addendum to the Sustainability Statement was submitted in March 2019. This clarifies the targeted BREEAM sustainability rating system, which is used to assess the performance of the scheme in areas of health, energy, transport, water, materials, waste, land-use, ecology and pollution.

Responding to Climate Change

- 16.191Policy CE/25 of the Cambridge East AAP requires the use of sustainable building methods and verifiably sustainable, locally sourced materials, including recycled materials, where possible. The Design and Access Statement places significant emphasis on the role of the design of the development in enhancing the health and wellbeing of residents. Reference is also made to measures such as the role of building orientation to enhance natural light and internal solar gain.
- 16.192Whilst this approach is welcomed, it needs to be balanced with the need to design out excessive solar gain in the summer and shoulder months, which leads to overheating. This issue was also raised by Quality Panel, at the meeting on 8 January 2018. In this respect, the Sustainability Statement notes that further consideration will need to be given to the orientation and shading requirements of buildings at the detailed design stage.
- 16.193In accordance with the advice offered by the Sustainability Officer, a condition requiring the submission of overheating analysis for all future reserved matters planning applications has been recommended. This places an emphasis on following a hierarchical approach to design out the risk of overheating, with priority given to passive design and the role of passive/natural ventilation (Condition 21 Overheating). This approach is supported by the LNCH SPD and accords with objective D13/b of the Cambridge East AAP (to address climate change mitigation and adaptation issues including the need that all development is climate proofed).
- 16.194The Applications also commit to the provision of electric vehicle charge points. Officers welcome this approach, and relevant conditions have been recommended (Condition 57 Site Wide Electric Vehicle Charge Point Provision and Infrastructure Strategy; Condition 58 Site Wide Electric Vehicle Charge Point Provision and Infrastructure Scheme Strategy Delivery).
- 16.195The Addendum to the Sustainability Statement provides clarification in respect of the BREEAM standards that will be utilized for the non-residential aspects of the proposal. It is proposed that all non-residential buildings will seek to achieve a BREEAM excellent standard, in accordance with Policy 28 of the CLP (2018). This excludes the primary and secondary schools, which will target a very good standard.
- 16.196Whilst officers would wish to see a higher BREEAM standard aspiration for educational buildings, the County Education Officer has advised that it is not always possible to achieve this target due to the additional costs involved. The BREEAM aspiration of very good is therefore accepted, with an additional requirement for the achievement of at least two credits for water efficiency measures. A relevant condition has been recommended (Condition 22 BREEAM).

Exemplar of Sustainable Development

- 16.197Policy CE/28 of the Cambridge East AAP requires proposals to include exemplar projects in sustainable development, including energy efficiency measures. The Addendum to the Sustainability Statement confirms the commitment set out in the Energy Statement to delivering a portion of residential units to Passivhaus standard. The approach to delivering an exemplar in sustainability is welcomed by officers.
- 16.198The Site is considered to be an opportunity to consider other approaches to the delivery of exemplar projects for example through the consideration of water consumption, smart energy grids and active building technology (currently being trialed on the Marleigh/Wing development on Land North of Newmarket Road). A condition has been recommended which requires all future reserved matters applications to be accompanied by a Sustainability Statement which sets out how the requirement for the development to be an exemplar in sustainability will be achieved (Condition 18 Sustainability Statement).

Energy and Carbon Reduction

- 16.199Policy CE/24 of the Cambridge East AAP requires developers to reduce the amount of carbon dioxide emitted each year, by 10% compared to the minimum building regulations requirement, and include technology for renewable energy to provide at least 10% of the developments predicted energy requirements.
- 16.200An Energy Statement has been submitted as part of the Applications. This identifies high level carbon emissions associated with the scheme, along with potential technologies to be utilised namely photovoltaic panels, solar thermal or air source heat pumps. The statement sets out the hierarchical approach to reducing building related carbon emissions (taking the Be Lean, Be Clean, Be Green approach), and also recognises the role that PP design principles have to play in reducing energy demand.
- 16.201The overall approach outlined in the submitted Energy Statement is supported. A more detailed Energy Statement will be required at the reserved matters stage, when further detail becomes available in relation to carbon calculations. A relevant condition has been recommended (Condition 20: Sustainability Energy Statement).

Combustion Emissions

- 16.202The submitted Energy Statement outlines the energy strategy for the development and reviews opportunities for improving energy efficiency and reducing energy use. The statement dismisses the use of district heating (gas and biomass) and Combined Heat and Power (CHP) at the Site. This is supported by the AQA which excludes emissions from combustion sources, given that no CHP or large emissions are predicted.
- 16.203There is an expectation that all gas and combustion appliances/boilers (domestic and commercial) producing emissions to air installed within the

application site will be low NOx (meeting an emission limit of 40mg/kWh). This will be secured by condition with details of individual boilers provided at the reserved matters stage (Condition 56: Combustion Appliances, Low Emissions).

Water Management

- 16.204Policy CE/22 of the Cambridge East AAP includes an aim for between a 33% and 50% reduction on mains water use within the Cambridge East allocation, compared to conventional housing. In light of changes to national policy (and in line with City and District policy), the Water Conservation Strategy submitted in support of the Applications commits to achieving a water efficiency target for all new homes of no more than 110 litres per person a day. This approach is supported by officers
- 16.205With regard to non-residential development, the Sustainability Addendum notes that there is a difference between the water efficiency standards for this type of development between Cambridge and South Cambridgeshire. A compromise has therefore been sought to reflect the difference and that Cambridge is an area of water stress. A non-residential development target of 3 BREEAM credits under Wat01 as a minimum has been agreed with the Applicants.
- 16.206The agreed non-residential development target would equate to a 40% improvement on baseline water use as the standard level of water efficiency being achieved across non-residential developments in Cambridge. A condition has been recommended to ensure the proposed water efficiency targets are followed at detailed design stage as part of all reserved matters applications (Condition 19: Sustainability Water Efficiency).

Sustainable Show Home

16.207Sustainable show homes can demonstrate sustainable alternatives for finishes, materials, fixtures and technologies as options that can be purchased when a dwelling is bought off-plan. In accordance with policy CC/5 of the SCLP, a condition has been recommended which requires the provision of a sustainable show home where provided (Condition 59: Sustainable Show Home).

Summary – Sustainable Construction and Design

16.208The Applications include outline strategies and targets for adaptation to climate change, carbon reduction and water reduction. These demonstrate and embed the principles of climate change mitigation and adaptation into the development. Conditions as described above will ensure commitment to the sustainable strategies and targets set out in the Applications, with opportunities to enhance sustainability targets over time to reflect new technologies and best practice.

16.209On the basis of the above, officers are satisfied that the Applications are acceptable with regard to sustainable design and construction. The Applications are therefore in accordance with policies 28, 29, 30 and 31 of the CLP, policies CC/1, CC/2, CC/3, CC/4 and CC/5 of the SCLP, policies CE/22, CE/24, CE/25, CE/27 and CE/28 of the Cambridge East AAP, the LNCH SPD and guidance contained in the GC Sustainable Design and Construction SPD.

Utilities

- 16.210Policy 85 of the CLP and policy TI/8 of the SCLP state that planning permission will only be granted if it can be demonstrated that there is or will be sufficient infrastructure capacity to support and meet all the requirements arising from new development.
- 16.211The Applications are supported by a Utilities Strategy (March 2018) which identifies the existing utility infrastructure that may constrain development within the Site and identifies a strategy for delivering the necessary utility infrastructure to the Site. The report also identifies the provisional points of connection for the electricity, gas, telecommunications, potable water supply and foul water drainage to serve the Site.

Electricity

- 16.212The existing electricity network is owned and operated by UK Power Network. The electricity network within the area is supplied from a distribution substation which is located 100m to the east of Cherry Hinton Road.
- 16.213The Utilities Strategy identifies that there are no electricity cables or overhead lines within the Site. High and low voltage and low cables are located on the northern side of Coldhams Lane and the east side of Cherry Hinton Road to the south of the roundabout. These may require lowering/protection or diversion to accommodate the new Site accesses.
- 16.214UK Power Networks has advised that there is currently insufficient capacity to supply the Site. Reinforcement works will be required for the new connection which would involve the laying of a new high voltage cable link to create sufficient capacity. The proposed development will also need five substations to be provided. This will be the responsibility of the developer and will need to be agreed with UKPN as part of the detailed design stage.

Gas

- 16.215The existing gas network is owned and operated by Cadent. An existing 12-inch diameter intermediate pressure gas main enters the Site towards the west from Coldhams Lane and exits the Site to the north of the roundabout on Cherry Hinton Road/Airport Way.
- 16.216The gas easement is approximately 6.1m wide and has a 3m access strip either side. This makes an overall sterilised width of around 12m and a 3m building proximity zone either side of the gas main. The gas main will need to

be accommodated during the detailed design process, which will be the responsibility of the developer. The Utilities Statement advises that the realignment of the gas main through the Site has been agreed in principle by Cadent Gas.

- 16.217In addition, 6-inch diameter medium and low-pressure gas mains are situated on the north side of Coldhams Lane. These may require lowering, protection or diversion to accommodate the new development.
- 16.218No objection is raised by Cadent Gas in their consultation response. Cadent indicate within the Utilities Statement that the Site can be supplied from the existing intermediate gas main, via a gas pressure reducing station which will need to be accommodated as part of the detailed design stage.

Potable Water

- 16.219Potable water is provided by Cambridge Water Company (owned by South Staffs Water). The Utilities Statement identifies that there are no water mains within the Site. An existing 450mm diameter water main is in the west side of Cherry Hinton Road running north from Gazelle Way and an 8in diameter water main in the east side of Cherry Hinton Road to the south from Gazelle Way. There is also a 200mm diameter water main in the north side of Coldhams Lane. These water mains may require lowering/protection and /or diversion to accommodate the Site accesses.
- 16.220The Utility Statement states that Cambridge Water has advised the Applicant that there is insufficient capacity in the current infrastructure network to supply the Site. Reinforcement of 500m of water main in Fulbourn Road and 700m of water main in Yarrow Road will be required. In addition, reinforcement to the local strategic water main will be required. It is understood that the Site will require two connections for the security of supply. The connection point for the site will be from the existing water main in the 450mm diameter water main in Cherry Hinton Road/Airport Way and to the 200mm diameter water main in Coldhams Lane. The reinforcement of the water main will be the responsibility of the developer.
- 16.221Officers note that a new Water Resources Management Plan (WRMP) was published by Cambridge Water in November 2019. The document sets out Cambridge Water's draft long-term WRMP for the 25 years between 2020 and 2045 and describes how Cambridge Water will continue to meet the demand for water in the Cambridge region.
- 16.222The growth in new properties and water demand as set out in the WRMP is based on the CLP and SCLP. Cambridge Water has confirmed that the WRMP includes the future demand which will be generated by the Site. Officers are therefore satisfied that sufficient available water resources will be available in the longer term to serve the Site, and that the availability of water is not a constraint for development.
 - Foul and Surface Water Anglian Water Services (AWS)

- 16.223The Utilities Statement confirms that there are no foul water sewers within the Site. AWS advised the Applicants in 2017 that the foul drainage from the proposed development is in the catchment of Cambridge Water Recycling Centre, which currently does not have capacity to treat the flows from the Site.
- 16.224AWS is obligated to accept the foul flows form development with the benefit of planning consent and would need to take appropriate steps to ensure there is sufficient treatment capacity. Hydraulic assessment of the local network identifies that the Applications will have an impact on the sewer system. Mitigation will be required by AWS, which will be the responsibility of the developer.

Digital Infrastructure

- 16.225The NPPF encourages planning decisions to support the expansion of electronic communications networks, including next generation mobile technology and full fibre broadband connections. CLP policy 42 and SCLP TI/10 require provision for high capacity broadband (such as ducting for cables) to be designed and installed as an integral part of development.
- 16.226The Utilities Statement states that Openreach will deploy Fibre to the Premises (FTTP) free of charge, to all new housing developments of 30 or more homes. This will provide estimated speed of up to 300mb.
- 16.227Implementation of broadband infrastructure and next generation mobile technology for both dwellings and commercial premises can be secured within sustainability strategies and associated reserved matters applications to ensure the objectives of Local Plan policies 42 and T/10 and the NPPF are met. A planning condition has been recommended (Condition 32: Broadband Provision).

Summary – Utilities

16.228On the basis of the above evaluation, and subject to the provision of the recommended conditions, the Applications are considered in accordance with policies 42 and 85 of the CLP, policies T/8 and T/10 of the SCLP, the Cambridge East AAP, the LNCH SPD and the NPPF with regard to utilities.

Environmental Considerations – Conclusion

16.229The environmental implications of the Applications have been comprehensively assessed through the updated ES and other supporting documentation and considered fully by officers. Subject to the recommended planning conditions and planning obligations secured as part of the Section 106 Agreement as described above, the proposed development is found to accord with the environmental objectives of the CLP, SCLP, the Cambridge East AAP, the LNCH SPD and the NPPF.

17. IMPACT ON RESIDENTIAL AMENITY

17.1 Policy 13 of the CLP and policy SS/3 of the SCLP support the development of LNCH, subject to acceptable mitigation of environmental and health impacts (including noise) from Cambridge Airport. These policies recognize that careful consideration of how ongoing airport activities will interact with any new residential use needs to be undertaken as part of the planning application process, to ensure that the new residences have an acceptable level of amenity, and that they do not impede on the ongoing use of the airport.

Existing Noise Environment

- 17.2 The impact of the existing noise environment associated with the operational use of Cambridge Airport has been fully assessed and reported in the updated ES. An evaluation of noise impacts on residential amenity is provided in the Noise/Vibration section of this report (Paras 16.171 16.184).
- 17.3Having regard to the noise character of the existing area, the noise climate is considered appropriate for the proposed development. This is subject to good acoustic design and noise mitigation measures to reduce and minimize potential noise impacts/effects. Relevant conditions have been recommended (Condition 62: Noise Impact Assessment Residential and Noise Sensitive Uses; Condition 63: Noise Impact Assessment Non Residential Use).

Impact on Prospective Residential Amenity

- 17.4 The impacts of the proposed development on prospective residential amenity associated with impacts from lighting, noise and disturbance associated with the use of the site has been assessed as part of the updated ES. This is reported in Sections 13 (Access and Transport) and Section 16 (Environmental Considerations) above.
- 17.5 Officers are satisfied that the Applications will not cause harm to the residential amenity of prospective occupants, subject to the recommendation of conditions relating to lighting, noise assessments and mitigation measures (Condition 62: Noise Impact Assessment Residential and Noise Sensitive Uses; Condition 63: Noise Impact Assessment Non Residential Use, Condition 64: Artificial Lighting Design Scheme).

Impact on Existing Residential Amenity

17.6 The impact of the Applications on existing residential amenity in terms of traffic impacts and noise from construction vehicles has been assessed as part of the updated ES. Officers are satisfied that there will be no significant adverse impacts on existing residential amenity arising from the proposed development. Conditions have been recommended to ensure appropriate controls on construction vehicles, in the interests of protecting existing residential amenity (Condition 55: Highways – Construction and Demolition: Traffic Management Plan).

17.7 The third party comments regarding the impact of the Applications on existing amenity in terms of overshadowing, privacy and overlooking are noted. It is an expectation that these matters will be evaluated as part of the reserved matters planning process, when the precise details of the development are known.

Impact on Residential Amenity - Conclusion

17.8 On the basis of the above evaluation, and subject to the recommendation of appropriate conditions as described, the Applications are considered acceptable with regard to impacts on residential amenity. The proposals are therefore in accordance with policy 13 of the CLP, policy SS/3 of the SCLP, the Cambridge East AAP, the LNCH SPD and the NPPF.

18. CUMULATIVE IMPACTS

- 18.1 The cumulative effects of the development in combination with other planned major development in proximity to the application site has been considered, using a methodology which was agreed in advance with officers. The results are reported in Chapter 16 of the updated ES.
- 18.2 The cumulative assessment considers major developments, which have a reasonable prospect of coming forward before or at the same time as the development proposals. In total, 18 developments were identified in the cumulative site search.
- 18.3 The assessment finds that the major developments within the study area are unlikely to result in significant adverse cumulative effects when assessed in combination with these proposals.
- 18.4 Officers have considered the cumulative impact assessment and are in agreement with the conclusions reported in the updated ES, that no significant cumulative impacts will arise.

19. THIRD PARTY ISSUES

19.1 The third party representations received during consultation of the Applications raised a number of issues, as reported in Section 9 of this report. These have been addressed within this report, as summarized in the table below.

Issue	Officer Response/Report Section			
Principle of Development	Section 11 deals with the principle of the proposed development.			
Design Issues	Section 12 deals with design issues			

	associated with the proposed land uses and Parameter Plans, including building heights and urban form.
	Paras. 16.121 – 16.130 considers the impact of the proposals on landscape character.
Impact on Residential Amenity	Paras. 13.9 – 13.17 considers the traffic impact on existing residential amenity.
	Paras. 16.159 – 16.184 considers the noise impact of existing noise from the operation of Cambridge Airport on existing and proposed residential amenity.
	Section 17 deals with impacts on residential amenity.
Housing Issues	Section 14 deals with housing issues, including the proposed housing mix.
Transport Issues	Section 12 considers the Movement and Access Parameter Plan, including at Paras 12.6 – 12.19 the approach to movement and circulation within the site.
	The alignment of the spine road (primary street of the development site) is specifically dealt with in Paras. 12.9 – 12.14.
	Section 13 deals with access and transport issues.
	Paras 13.9 – 13.17 considers the proposed traffic impacts during the construction and operational phases of the development.
	Paras 13.22 – 13.30 sets out the proposed transport mitigation, including strategic infrastructure and connectivity improvement
	Paras. 13.31 and 13.32 considers proposed improvements for cyclists and pedestrians.
	Paras. 13.38 – 13.48 considers the three proposed accesses to the site.
	Paras. 13.33 – 13.37 considers the public transport strategy for the site, including the proposed bus strategy.

	Section 18 deals with the cumulative impacts of the proposed development.
Impact on Ecology and Biodiversity	Paras. 16.84 – 16.112 considers the impact of the proposals on ecology and biodiversity.
	Paras. 16.1 – 16.3 considers the loss of agricultural land.
Impact on Green Belt	Paras. 11.20 – 11.25 considers the principle of development in the Green Belt for the purposes of open space and recreation.
	Paras 16.131 – 16.134 considers the visual impact of the proposed development on the Green Belt, with reference to the proposed use, lighting and noise mitigation measures.
Education Issues	Paras. 15.6 – 15.22 considers the proposed primary and secondary schools, including the County Council's approach to pre-school provision.
Healthcare/Community Issues	Paras 15.23 – 15.32 considers the proposed community facility.
	Paras 15.36 – 15.46 considers healthcare provision.
	Paras 15.47 – 15.64 considers community development and support.
	Paras. 15.80 – 15.83 considers community use and access arrangement.
Utilities and Servicing Issues	Paras. 15.89 – 15.91 considers the provision for waste and recycling.
	Paras. 16.210 – 16.228 considers utilities and services, including the provision of water resources.
Sustainability Issues	Paras 16.185 – 16.209 considers sustainability issues.

Table: Summary of Third-Party Issues

20. SECTION 106 PLANNING OBLIGATIONS

- 20.1 The NPPF states that LPAs should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations. It repeats the tests of lawfulness for planning obligations which are derived from Regulation 122 of the Community Infrastructure Levy Regulations 2010 ie necessary to make the development acceptable in planning terms, directly related to the development and fairly, and reasonably related in scale and kind to the development. The NPPF and National Planning Policy Guidance also advises with respect to the approach to be taken in relation to development viability.
- 20.2 Policy 85 of the CLP and policy TI/8 of the SCLP state that planning permission for new developments will only be supported where there are suitable arrangements for the improvement or provision and phasing of infrastructure, services and facilities necessary to make the scheme acceptable in planning terms. The policies recognise that financial contributions may also be required towards the future maintenance and upkeep of facilities in the form of initial support or in perpetuity.
- 20.3 Draft Heads of Terms (HoTs) of the Agreement under Section 106 of the Town and Country Planning Act 1990 (as amended) have been agreed in principle between the parties. The planning obligations to be secured from the proposed development includes a 'policy compliant' package of affordable housing provisions. These obligations are viable insofar as they would not render the development undeliverable in financial terms.
- 20.4 The planning obligations (taken from the draft HoTs) to be secured within the Section 106 Agreement are summarised by category in the tables below, together with a short commentary in respect of compliance with the CIL Regulation tests.
- 20.5 Where contributions are required by Local Plan policies and/or have been sought by consultees, these are summarised below. Where there is a difference between the policy/consultee requirement and the Applicants offer, this is accompanied by further explanation.
- 20.6 All sums are provisional and will be finalised in the S106 Agreement. Contributions will be cost indexed from the date of the consultee request.
- 20.7 Management, adoption and maintenance of the facilities listed below will also be sought through the Section 106 Agreement. Other relevant matters will be addressed via specific planning conditions.
- 20.8 COMMUNITY DEVELOPMENT/INFRASTUCTURE

COMMUNITY	INFRA	STRII	CTURE
COMMONT		13 I R D	GIURE

Infrastructure Item/s	Agreed financial contribution.	Triggers	CIL Reg 122 comments
Permanent Community Facility (no smaller than 250 square metres in size)	On-site provision as part of development costs.	Prior to occupation of 500 th dwelling.	Community meeting space necessary to meet the needs of the new population generated by the
Details in accordance with permanent community facility delivery plan and management strategy.		Permanent community facility delivery plan and management strategy to be submitted.	development. On-site provision. Scale determined with reference to CLP policies 13 and 73 and SCLP
Community Facility Start Up Costs	£38,850	On occupation of 100 th dwelling.	policies SS/3 and SC/4.
Temporary Community Meeting Space	On-site provision as part of development costs.	Prior to occupation of 100 th dwelling.	
Details in accordance with temporary community facility delivery plan and management strategy.	COSIS.	Trigger for submission of temporary community facility delivery plan TBA.	
Library provision	£116,251.20	50% on occupancy of first dwelling. 50% on 50% occupancy of dwellings.	Library facilities necessary to meet the needs of the new population generated by the development. Off-site provision. Scale determined with reference to County Council guidance and local
EARLY COMMUNITY	SUPPORT MEASUR	ES	plan policies 85 and SC/4.

Community Chest	£3,500	50% on occupation of	Provision of
Fund (Kick Starting community activities)		occupation of 100 th dwelling.	community development support to mitigate
		50% 24 months after occupation	financial pressure on the County
		of 100 th dwelling.	Council and other public sector authorities arising
Project Worker (children and young	£90,000	50% prior to occupation of	from the development.
peoples' activities)		100 th dwelling;	
		50% 24 months after occupation of 100 th	Measures and support projects to be related to the
		dwelling.	community on the site.
Specialist Community	£80,000	50% on occupation of	Scale determined
Development Worker (CDW)		100 th dwelling.	with reference to County Council
Worker (ODW)		50% 24 months	guidance and Local Plan
		after occupation of 100 th	policies.
		dwelling.	
Kickstart and Activity funding	£3,500	TBA	
(multi agency team)			
Mental Health Training	£8,160	£4,100 prior to first occupation	
Training		of dwelling.	
		£4,060 on 100 th	
		occupation of dwelling.	
Mental Health Counselling Services	£1,920	Subject to need.	
Children Centre Staff	£33,146	£16,146 on	
Stati		occupation of 100 th dwelling.	
		£17,000 24	

		Γ	
		months after occupation of 100 th dwelling.	
Children Centre equipment/activities	£15,000	TBA	
IDAA Kick Start Funding	£2160	Subject to need.	
Multi-Agency co- ordination	£23,750	£10,000 prior to first occupation of dwelling.	
		£13,750 on occupation of 100 th dwelling.	
Health Visiting	£8,250	£4,124 on occupation of 100 th dwelling.	
		£4,126 24 months after occupation of 100 th dwelling.	
Locality staff (family workers)	£90,000	£45,000 on occupation of 100 th dwelling.	
		£45,000 24 months after occupation of 100 th dwelling.	
Healthy New Towns Initiative/Active Lifestyle Project Workers	£15,000	£5,000 on occupation of 100 th dwelling. £10,000 after occupation of	Provision of community development support to mitigate financial pressure on the County
Healthy New Towns Initiative	£6,720	£33,350 on occupation of	Council and other public sector authorities arising from the

Legacy/Active	100 th dwelling.	development.		
Lifestyle (Kickstart				
Funding)	£3,350 24	Measures and		
	months after	support projects to		
	occupation of	be related to the		
	100 th dwelling.	community on the		
		site.		
		Scale determined		
		with reference to		
		County Council		
		guidance and		
		Local Plan		
		policies.		

20.9 ECOLOGY AND BIODIVERSITY

ECOLOGY AND BIO	DIVERSITY		
Infrastructure Item/s	Agreed financial contribution.	Triggers	CIL Reg 122 comments
Off-site mitigation for ground nesting farmland birds (skylarks) for a period of 25 years.	Developer cost	From commencement of development.	Biodiversity mitigation necessary to off- set the impact of the development. Off-site provision. Scale determined with reference to local plan policy
Off-site biodiversity improvements to Fulbourn Fen	£121,500	Prior to occupation of first dwelling.	Biodiversity mitigation necessary to off- set the impact of the development. Off-site provision. Scale determined with reference to local plan policy

20.10 EDUCATION

20.10.1Primary and secondary school provision on the site is broadly agreed between the Applicants and Cambridgeshire County Council as follows:

Infrastructure Item/s	Agreed financial contribution.	Triggers (no. of dwellings)	CIL Reg 122 comments
EDUCATION		l	
Early years	£892,800	To be aligned with primary school.	Education provision necessary to meet the needs of the new population generated by the development.
			On-site provision as part of primary school delivery, with potential for provision off-site subject to need and timing of delivery of primary school.
			Scale determined with reference to County Council guidance and multipliers and Local Plan policies 74 and SC/4.
Primary school 1.5 FE primary school (2.3ha) serviced site.	£6,547,200 Contribution represents proportionate financial contribution of the total capital costs	First payment of 10% site contribution for transfer of the school site. Second payment of	Education provision necessary to meet the needs of the new population generated by the development.
Transfer of primary school site and requirement to provide services to	of building a 1.5 FE primary school (ie 75% of total capital cost)	65% site contribution, payable 12 months after first payment	On-site provision. Scale determined with reference to

the primary school site Review to determine required year of opening, to occur between 300 and 500 dwellings.		Third payment of 25% site contribution payable 24 months after first payment.	County Council guidance and multipliers and Local Plan policies 74 and SC/4.
Primary School start-up costs	£50,000	TBA with County Council.	
Financial contribution for 1 FE portion of 6FE secondary school. Transfer of secondary school site and requirement to provide services to the secondary school site.	£3,776,550 Contribution represents proportionate financial contribution of the total capital costs of building a 6FE secondary school. Contribution to be subject to land value payment deduction (value TBA).	40% payable by no later than 500 th dwelling. 30% payable by no later than 800 th dwelling. 30% payable by no later than 1,000 th dwelling.	Education provision necessary to meet the needs of the new population generated by the development. On-site provision. Scale determined with reference to County Council guidance and multipliers and Local Plan policies 74 and SC/4.

20.11 HEALTHCARE PROVISION

20.11.1NHS England has confirmed that there is insufficient capacity in the existing health infrastructure to cater for the additional demand for local services arising from this development. Accordingly, a health contribution has been requested to provide additional capacity, as follows:

HEALTHCARE						
Infrastructure Item/s	Agreed financial contribution.	Triggers of dwelling	(no. gs)	CIL	Reg nents	122

Provision of additional primary healthcare provision	£435,291	Prior occupation first dwelling.	to of	Provision of primary health facilities to meet
within the vicinity of the development.		g		the needs of the new population generated by the development.
				Off-site provision, with flexibility provided for a scheme for the provision of an onsite health facility.
				Flexibility provided for monies to be used for a scheme/project at any practice within the Primary Care Network (PCN), including on-site.
				Scale determined with reference to NHS England advice.

20.12 AFFORDABLE HOUSING

20.12.1As the planning application is in outline form, it is appropriate to secure the percentage of units for affordable housing as required by Local Plan policy (40% of 'a minimum' of 1200 dwellings = a minimum of 400 affordable dwellings. It is also appropriate to secure an indicative tenure mix.

AFFORDABLE HOU	JSING			
Infrastructure Item/s	Agreed financial contribution.	Triggers (no. of dwellings)	CIL Reg comments	122

Minimum provision of 40% affordable housing. Tenure mix to be 73% rented (social rent and affordable rent) and 27% intermediate (shared ownership).	On-site provision as part of development costs.	Phasing in accordance with affordable housing scheme.	Housing provision necessary to meet the needs of the new population generated by the development. On-site provision. Policy 45 of the CLP requires a minimum of 40% affordable homes to be provided on development sites of 15 or more dwellings. Policy H/10 of the SCLP requires a minimum of 40% affordable homes on sites of 11 dwellings or more.
Self-Build and Custom Build Housing Minimum of 36 dwellings (or if lower 5% of the private market units as self-build and custom build plots).	On site provision as part of development costs.	Self and Custom Build Plot Plan to be submitted prior to first occupation TBA. Phased provision and marketing in accordance with Self and Custom Build Schemes.	Housing provision necessary to meet the needs of the new population generated by the development. On-site provision. SCLP policy H/9 requires the provision of dwelling plots for sale to self and custom builders.

20.13 PUBLIC ART

20.13.1The Applicants have proposed a financial contribution of £480,000 for the provision of public art across the development (equating to a contribution of £400 per unit based on 1200 units). The scale of the contribution proposed is below the £800,000 requested by the Public Art Officer. Officers note that the

- offered contribution is similar in scale to that secured on other strategic sites on the southern fringe of Cambridge (approx. £350-£375 per unit).
- 20.13.2Mindful of the Regulation 122 CIL test requirement and given the need to balance the Section 106 package, officers consider that the scale of the contribution offered for public art is appropriate and within Regulation 122.

PUBLIC ART			
Infrastructure Item/s	Agreed financial contribution.	Triggers	CIL Reg 122 comments
Site wide public art strategy and delivery of public art.	£480,000 (£400 per unit)	Payment trigger to be agreed. Provision in accordance with public art delivery plan to be submitted for reserved matters areas containing public art.	seek to secure public art as an integral part of development. On-site provision.

20.14 SPORT AND RECREATION

- 20.14.1Local plan policies seek the provision of open space, sport and recreation as key infrastructure requirements. These are expanded upon in the City Council's Open Space and Recreation Strategy (2011) which is a material consideration. This sets out a formulaic approach to on-site and off-site open space provision, based on the number of people arising from new development.
- 20.14.2Given this is an outline planning application, the precise numbers of dwellings and the mix (number of bedrooms) is yet only indicative. The formula for calculating policy compliant provision of POS can therefore be secured through the Section 106 process.
- 20.14.3The Applicants will be provided with an option in the S106 Agreement to transfer areas of POS to the Councils' (with a commuted payment for maintenance). Otherwise the land would need to be managed and maintained by a management company formed by the developer.

SPORT AND RECREATION	

Infrastructure Item/s	Agreed financial contribution	Triggers (no. of dwellings)	CIL Reg 122 comments
Formal outdoor sports provision.	On-site provision as part of development costs.	ТВА	Outdoor sports facilities are necessary to meet the needs of the
Physical improvements to proposed sports pitch (upgraded drainage) to allow for greater capacity of use and enable year-round use.	£160,559.50	ТВА	new population generated by the development. On-site provision to include sports, children's play space, allotments.
Informal open space.	On-site provision as part of development costs.		Quantum in accordance with City Council Open Space and Recreation
Children and teenagers play space.	On-site provision as part of development costs.	ТВА	Strategy SPD.
Allotments Lay out and completion of allotments in accordance with Allotments Specification Management of allotments in accordance with the relevant detailed open space landscape management plan.	On-site provision as part of development costs.	ТВА	
Indoor Sports Provision: Swimming Pool Provision	£157,320	Prior to occupation of 400 th dwelling TBA.	Indoor sports facilities are necessary to meet the needs of the new population generated by the development.

			Off-site provision.
			Scale determined in accordance with relevant Local Plan policy.
Indoor Sports Provision: Sports Hall	£151,008	ТВА	Indoor sports facilities are necessary to meet the needs of the new population
Upgrading of indoor sports hall included as part of secondary			generated by the development.
school education provision from			On-site provision.
community use 3 court to 4 court size			Scale determined in accordance with relevant Local Plan policy.
Community use	N/A	No occupation	
and access agreements Completed community use agreement in relation to the community use of the school playing fields and sports hall, on terms to be agreed.	Onen Space	of the secondary school prior to Community Use Agreement being in place	Public open space
Delivery and timing of public open space Lay out and complete public open spaces in accordance with	Open Space Programme to include: Delivery of open space within a reserved matters area	TBA	Public open space provision is necessary to meet the needs of the new population generated by the development.
agreed public open space programme.	4.04		On-site provision.
Open Space management and	Submission and then	ТВА	Quantum in

maintenance plan	implementation of	accordance	with
	a strategic and	City Council	Open
	then phase	Space	and
	specific management and	Recreation	
	maintenance	Strategy SPD).
	plans.		

20.15 <u>AIRPORT SAFEGUARDING</u>

Infrastructure Item/s	Agreed financial contribution	Triggers (no. of dwellings)	CIL Reg 122 comments
Cross Wind Runway	Cessation of use of runway for taking off and landing.	Prior to occupation of first dwelling.	Local Plan policies 37 and Tl/6 seek to ensure that the Cambridge Airport
Fire Training Ground	Cessation of fire training activity at current fire training ground.	Prior to occupation of first dwelling TBA.	air safeguarding zone is taken into consideration when considering applications for
Primary radar	Restriction of development above an agreed height in the safeguarding area.	Prior to occupation of first dwelling TBA.	new development.
Very High Frequency Direction Finder (VDF)	Restriction of development above an agreed height in safeguarded area.	Prior to occupation of first dwelling TBA.	

20.16 <u>WASTE</u>

WASTE				
Infrastructure Item/s	Agreed financial contribution	Triggers (no. of dwellings)	CIL Reg comments	122

of refuse collection vehicles any dwelling within each reserved the needs of matters phase.	les	of refuse collection vehicles	any dwelling within each	contributions have been identified as necessary to meet
vehicles within each reserved the needs of matters phase. necessary to matter phase.		vehicles v	within each	
reserved the needs of matters phase. new populate		ı		necessary to meet
matters phase. new populate			recerved	,
			reserved	the needs of the
		r	matters phase.	new population
generated throu				generated through
Household Waste Standard house: 3 Prior to first the development	ehold Waste	Standard house: 3	Prior to first	the development,
Receptacles bins at £75 per unit occupation of in accordant	otacles	bins at £75 per unit	occupation of	in accordance
			any dwelling	with Local Plan
Flat (based on 2 within each policies 85 a		` 1	within each	policies 85 and
bed): £160 per unit reserved SC/4.		bed): £160 per unit	reserved	SC/4.
matters phase.		r	matters phase.	
The money wo				The money would
be spent				be spent on
Cardboard Skips Cardboard waste Prior to first infrastructure	poard Skins	Cardboard wasto I	Prior to firet	infrastructure
skips to be occupation of	Maid Skips			related directly to
installed on site. any dwelling the site and		•	•	the site and the
within each development.			•	development.
£360 per skip. £17 reserved				
per empty/ matters phase.		•		
collection.			andio pridoor	
Bring Banks Provision of one Prior to first	Banks		Prior to first	
hard standing area occupation of				
for ground banks in any dwelling			•	
a public realm area within each		•	, ,	
reserved		•		
matters phase.				
			,	

20.17 <u>OTHER</u>

OTHER				
Infrastructure It	em/s	Agreed financial contribution	Triggers (no. of dwellings)	CIL Reg 122 comments
Site-wide car	club	Developer cost.	Prior to	Provision in
parking	and		commencement	accordance with
membership str	ategy.		of development	Local Plan
			TBA.	policies and the
Provision of	two			GC Sustainable
dedicated car	club			Design and
spaces.				Construction
				SPD.
Provision of	two			
				On -site provision.

vehicles			
vehicles. Award drain	Financial	Prior to	Infrastructure would be related directly to the site and the development. Contribution in
maintenance	contribution of £30 000 towards additional cost of maintenance works to the section of the Awarded Drain within the site.	commencement of development TBA.	accordance with Local Plan policies 31, 32 and CC/8. The money would be spent on improving drainage infrastructure which is directly to the site and the development
Contamination Submission of ground water remediation works management and maintenance scheme. Provision of management body and long-term funding mechanism. Monitoring and maintenance plan to be submitted with each Reserved Matter application.	Developer cost.	Prior to commencement of development.	Long term management of ground water remediation in accordance with Local Plan policies 33 and SC/11. On-site monitoring and remediation.
Contamination report review	£75,000 TBA Towards cost of appointing an independent consultant to undertake a third party review of the PFAS	Prior to commencement of development.	Long term management of ground water remediation in accordance with Local Plan policies 33 and SC/11.

	contamination soil and groundwater pilot trial/remediation.		On-site monitoring and remediation.
Section 106	£50,000 TBA.	Phased	Contribution
monitoring		payments TBA.	directly related to
	Towards the		achieving the
	costs of		implementation of
	monitoring the		the planning
	planning		obligations.
	obligations.		

20.18. TRANSPORT

- 20.18.1The transport mitigation package includes the provision of strategic solutions in collaboration with Cambridgeshire County Council and the Greater Cambridge Partnership. The mechanisms and timing of these off-site improvements and financial contributions will be secured by way of Section 106 Agreement and appropriate planning conditions, with all triggers to be agreed by the County Council.
- 20.18.2County highways officers have confirmed that the agreed transport mitigation package accords with the relevant tests of the NPPF and the CIL Regulations. Specifically, the tests are necessary to make the development acceptable in planning terms, directly related to the development and fairly and reasonably related in scale and kind to the development.

PROPOSED TRANSPORT MITIGATION MEASURE	AGREED FINANCIAL CONTRIBUTION	TRIGGER
Strategic Infrastructure Improvements:		
Remodelling Coldhams Lane roundabout.	£200,000	TBA.
Footpath and Cycle Path Improvements:		1
Pedestrian and cycle improvements at Rosemary Lane, Norman Way and The Tins (including to Tins Bridge).	£500,000	Prior to first occupation of dwelling.
Footpath improvements across Coldhams Common.	£270,000	Prior to first occupation of dwelling.
Strategic Connectivity Improvements:		
Shared foot/cycleway (3m) along Coldhams Lane.	Delivery by Applicants.	Prior to first occupation of dwelling.

	1	
Upgrade to existing Barnwell Road pedestrian and cycle crossing.	Delivery by Applicants.	Prior to first occupation of dwelling.
Delivery of small-scale walking and cycling measures in the locality.	£85,000	TBA.
Public Transport Improvements:		
Direct bus service to the City Centre via	£1,007,824	Phased contribution.
Coldhams Lane.		Details TBA.
Improvements to existing bus stops on Cherry Hinton High Street.	£20 000	Prior to first occupation of dwelling.
Access Improvements:		, g
Widening of existing footpath between site access / Gazelle Way roundabout and Tesco roundabout.	£257, 650	Prior to first occupation of dwelling.
Signalised junction with Coldhams Lane.	Delivery by Applicants	At occupation of 600 th dwelling
Signalised junction at Airport Way.	Delivery by Applicants	At occupation of 500 th dwelling or prior to the opening of the secondary school, whichever is earlier
Additional arm to Gazelle Way Roundabout and new toucan crossing on southern arm	Delivery by Applicants.	Prior to first occupation of dwelling.
Widening of existing cycleway/footway (3m) Airport Way / Church Road junction.	Delivery by Applicants.	Prior to first occupation of dwelling.
Footway widening between new signalised site access and Marshalls Close.	Delivery by Applicants.	Prior to first occupation of dwelling.
Other Improvements:	ı	
Environmental enhancement measures in Church End.	£50,000	TBA.
Traffic calming and cycle bypass on Cherry Hinton High Street close to Teversham Drift.	Delivery by Applicants.	Prior to first occupation of dwelling.

20.19 SUMMARY

- 20.19.10fficers are satisfied that all the above planning obligations meet the statutory tests of CIL Regulation 122. The Applicants have confirmed the acceptability of committing to this complete mitigation package, by way of planning obligations, which will be secured through a Section 106 Agreement.
- 20.19.2With the planning obligations identified in Section 20 of this report in place, the proposed development would be acceptable. The proposals will therefore comply with Local Plan policies.

21. PLANNING BALANCE

- 21.1 Planning decisions must be taken in accordance with the development plan, unless material considerations indicate otherwise (Section 38 (6) of the Planning and Compulsory Purchase Act 2004). The NPPF represents current government planning policy and is a material planning consideration that must be taken into account where it is relevant to a planning application. This includes the presumption in favour of sustainable development found at Paragraph 11, which requires approving development proposals that accord with an up to date development plan without delay.
- 21.2 The NPPF lists the three dimensions to sustainable development: economic, social and environmental. These dimensions are interdependent and need to be pursued in mutually supportive ways to achieve sustainable development. The benefits and dis-benefits of the development proposals have been evaluated against the objectives of the NPPF and the presumption in favour of sustainable development, as summarised below.

Economic Role

- 21.3 The NPPF places a clear emphasis on the importance of economic growth and delivering economic benefits as a key component of sustainable development. Whilst the proposed development will necessitate the loss of two existing farming businesses, adverse economic impacts would be minor. A number of direct and indirect economic benefits will be generated from the construction and operational phases. The supporting documentation which accompanies the application includes an estimate of the economic benefits arising during these phases.
 - Construction Phase Benefits

- 21.4 The number of direct construction jobs supported by the construction phase, is based on estimated construction costs of the proposed development. It is estimated that the development will:
 - Create the equivalent to over 150 permanent construction jobs.
 - Support over 500 net additional temporary jobs locally and over 200 net additional temporary jobs nationally over the construction period.
 - Contribute over £40 million net additional gross value added to the local economy through construction phase economic activities, and over £17 million net additional gross value added to the national economy.
 - Operational Phase Benefits
- 21.5 The development will also create economic benefits during the operational phase. The Applications estimate that the economic benefits during the operational phase will include the following:
 - Creation of permanent jobs within the primary and secondary school as well as the local centre.
 - Increased annual retail spend by over £16 million.
 - Increased annual leisure spend by over £9 million.
 - Generation of an additional £1.8 million in annual council tax contributions.
- 21.6 Officers consider that the temporary direct and indirect positive economic impacts of the construction and operational phases are of major significance. Whilst the proposals would cause economic harm arising from the loss of high-grade agricultural land (and the two businesses it supports), any harm to the economy is considered to be outweighed by the other economic benefits generated by the development.

Social Role

- 21.7 In terms of the social role of sustainability, the development will provide up to 1200 market and affordable houses to meet the needs of present and future generations. The development will deliver an important quantum of housing to meet Greater Cambridge's housing needs during the Local Plan period. This includes a policy compliant minimum affordable housing provision of 40% (400 homes) on site. Officers consider that the social benefits of the scheme arising from the provision of new housing is of major significance.
- 21.8 In addition, residential space standards and opportunities for self/custom build sites are secured as part of the Applications, which will provide social benefits. The development will also result in a good quality built environment, based on principles which embrace sustainability and seek to provide a high quality of life and healthy lifestyle for residents through good design principles.
- 21.9 Wider social benefits will also be generated through the provision of new community facilities, on-site open space and recreational facilities, and measures to assist the development of the new community.

21.10 Officers consider that the social benefits arising from the development proposals are of major significance.

Environmental Role

- 21.11 In relation to the environmental role of sustainability, the proposed parameters of the development demonstrate that the site can appropriately accommodate the quantum of development proposed.
- 21.12 The proposed development will contribute to improvements in habitat quality and a net gain in biodiversity. Provision is made within the recommended conditions to ensure prudent use of natural resources at the site, and measures to minimise waste and pollution. The proposals will also improve ground conditions which will have a potential for a permanent long-term positive effect.
- 21.13 Mitigation and adaptation to climate change will be facilitated through the proposed site wide sustainability strategy. The agreed transport mitigation package will also bring environmental benefits, through prioritising sustainable travel modes. On this basis, the environmental benefits generated by the development are considered to be significant.
- 21.14 The impact of the development on landscape character has been identified as significant immediately adjacent the application site with regard to visual impact. This will create a negative environmental impact. Subject to appropriate planning conditions, officers consider there are sufficient safeguards to ensure mitigation of impacts on landscape and local character are followed through to the detailed design. The development proposals will also cause the loss of agricultural land. This would be the case for any development on an allocated green field site.
- 21.15 Some weight can be attached to the harm of the development to the existing landscape and local character, and loss of agricultural land. Officers are of the view that the environmental benefits outweigh the dis-benefits, given the provision of net gain in biodiversity and measures to mitigate and adapt to climate change. As such moderate weight can be attached to the environmental benefits of the scheme.

Summary

21.16 Overall, the proposed development will bring significant measurable economic, social and environmental public benefits that accord with the three dimensions of sustainable development set out in the NPPF. The balance of these benefits in the circumstances of the Applications are considered to weigh in favour of granting planning permissions, outweighing any harm in terms of visual impact and loss of agricultural land that the proposed development will cause.

22.0 CONCLUSION

- 22.1 The Applications are consistent with the policies of the development plan for the area. This is principally owing to the Site being allocated for development as LNCH, part of Cambridge East, in the adopted CLP and SCLP.
- 22.2 This report also finds the Applications consistent with the requirements of site allocation policy 13 of the CLP and policy SS/3 of the SCLP. It has been demonstrated that acceptable mitigation of environmental and health impacts (including noise) from Cambridge Airport can be provided and secured by planning conditions and Section 106 Agreement.
- 22.3 The Applications are accompanied by an Illustrative Masterplan for the development of the Site. This takes into account the context of the surrounding areas (including development proposals on adjacent land) and the vehicular accesses to the Site by means of Junction 1, Junction 2 and Junction 3. This demonstrates that the future development of LNCH will not prejudice the potential delivery of development on the safeguarded land at some point in the future if it becomes available.
- 22.4 Careful consideration has also been given to how the ongoing activities at Cambridge Airport will interact with any new residential use. Officers are satisfied that with appropriate mitigation secured through planning conditions and planning obligations, any proposed new residential use will have an acceptable level of amenity and will not impede on the ongoing use of the airport. On this basis, the continued authorised use of Cambridge Airport is not considered to pose a safety risk.
- 22.5 Having examined the proposals against other material planning considerations, none are identified that would on their own, or in combination, lead officers to consider recommending refusal of planning permission for the Applications.
- 22.6 Officers analysis, as set out in this report, triggers the 'presumption in favour of sustainable development' set out in Paragraph 11 of the NPPF, which means approving development proposals that accord with an up to date development plan without delay. Furthermore, the direction at Section 38 (6) of the 2004 Planning Act that the proposed development 'must be made in accordance with the development plan unless material considerations indicate otherwise' points firmly towards the granting of planning permission in this case.
- 22.7 Officers have carefully considered all of the issues raised by the Applications, including the evidence and opinions submitted on behalf of the Applicants, the contributions of key consultees and the views of members of the public. Officers recommend that planning permission is granted, following prior completion of a Section 106 Agreement to secure necessary developer contributions and subject to a number of controlling and safeguarding conditions.

23. RECOMMENDATION

- 23.1 Outline planning permission for the Applications, namely 18/0481/OUT and S/1231/18/OL be GRANTED subject to:
 - 1. The prior completion of a Section 106 Agreement under the Town and Country Planning Act 1990 on the terms broadly referenced in Section 20 of this report, with delegated authority granted to officers to negotiate, secure and complete such Agreement on terms as are otherwise considered appropriate and necessary; and
 - The planning conditions specified in this report and detailed in Appendix E with authority delegated to officers to amend those conditions (and include others considered appropriate and necessary) in consultation with the Chair, Vice Chair and Spokes of JDCC prior to the issuing of the planning permissions; and
 - 3. The relevant informatives to be included at the discretion of the report author.

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APPENDIX A

GLOSSARY OF TERMS USED IN REPORT

AHP – Affordable Housing Provider

AIA – Arboricultural Impact Assessment

ALC - Agricultural Land Classification

Applications – outline planning applications 18/0481/OUT and S/1231/18/OL

APU's – Auxiliary Power Units

AQA – Air Quality Assessment

AQMA – Air Quality Management Area

AWS – Anglian Water Services

BoCC – Bird of Conservation Concern

BREEAM - Building Research Establishment Environmental Assessment Method

BS - British Standard

Cambridge East AAP – Cambridge East Area Action Plan (2009)

CAZ – Clean Air Zone

CCC – Cambridge City Council

CCG – Clinical Commissioning Group

CHP – Combined Heat and Power

CIL - Community Infrastructure Levy

CIL Regulations – the Community Infrastructure Levy Regulations 2010

CLP – Cambridge Local Plan 2018

CMS – Construction Method Statement

Councils' - Cambridge City Council and South Cambridgeshire District Council

CPCA – Cambridgeshire and Peterborough Combined Authority

CSM – Conceptual Site Model

CWS – County Wildlife Site

dB - Decibel

DCEMP – Demolition and Construction Environmental Management Plan

DEFRA – Department of Environment, Food and Rural Affairs

DPH – Dwellings Per Hectare

DQRA - Detailed Qualitative Risk Assessment

DWMP – Detailed Waste Management Plan

EA – Environment Agency

EDS – Ecological Design Strategy

EGR – Engine Ground Running

EIA – Environmental Impact Assessment

EIA Regulations – the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (as amended)

ES – Environmental Statement

EV – Electrovoltaic

FE – Form of Entry

FRA - Flood Risk Assessment

FTP - Framework Travel Plan

GCP – Greater Cambridge Partnership

GC Sustainable Design and Construction SPD – Greater Cambridge Sustainable Design and Construction Supplementary Planning Document (2020)

GCSPS – Greater Cambridge Shared Planning Service

Greater Cambridge – land within the local authority administrative areas of Cambridge City and South Cambridgeshire

GRE – Ground Run Enclosure

HIA – Health Impact Assessment

Highway Authority – the body responsible for the administration of public roads in Cambridgeshire.

HoTs – Heads of Terms

HQI – Housing Quality Indicators

IAQM – Institute of Air Quality Management

IDAA – Independent Domestic Abuse Advisor

JDCC – Joint Development Control Committee

LAeq – Equivalent continuous sound level (in decibels) equivalent to a total sound energy measured over a stated period of time

LAP – Local Area of Play

LEAP – Locally Equipped Area of Play

LEMP – Landscape and Ecological Management Plan

LES – Low Emission Strategy

LNCH – Land North of Cherry Hinton

LNR – Local Nature Reserve

Local Plans – Cambridge Local Plan (2018) and South Cambridgeshire Local Plan (2018)

Local Planning Authorities – the planning departments of Cambridge City Council and South Cambridgeshire District Council.

LNCH SPD – Land North of Cherry Hinton Supplementary Planning Document (2018)

LOAEL - Lowest Observed Significant Effect Levels

LPA – Local Planning Authority

LVIA - Landscape and Visual Impact Assessment

Main Drain – the awarded watercourse which crosses the Application Site

MoU – Memorandum of Understanding

MMP – Materials Management Plan

MUGA – Multi Use Games Area

NEAP - Neighbourhood Equipped Area of Play

NHS – National Health Service

NPPF – National Planning Policy Framework 2019

NPPG – National Planning Practice Guidance

NPSE – Noise Policy Statement for England

OMP – Odour Management Plan

ORA – Odour Risk Assessment

PPs – Parameter Plans

PCN – Primary Care Network

PCU's Passenger Car Units

PFOA - Perfluorooctanonic Acid

PFOS - Perfluorooctanesulfonic Acid

PM – Particulate Matters

POS – Public Open Space

PP's - Parameter Plans

PV - Photovoltaic

PXA – Post Excavation Assessment

RSV – Road Side Verge

SCDC – South Cambridgeshire District Council

SCLP - South Cambridgeshire Local Plan 2018

Site – land within the red line application site boundaries of outline planning applications 18/0481/OUT and S/1231/18/OL

SCDW – Specialist Community Development Worker

SOAEL - Significant Observed Adverse Effect Levels

SPD – Supplementary Planning Document

SPG – Supplementary Planning Guidance

SS-DCEMP – Site Specific Construction and Environmental Management Plan

SSSI – Site of Special Scientific Interest

SuDS – Sustainable Urban Drainage Systems

SW-DCEMP – Site Wide Demolition and Construction Environmental Management Plan

TA – Transport Assessment

TBA – To Be Agreed

TMP – Traffic Management Plan

UPD – Updated Project Design

UKPN – UK Power Network

VDF – Very High Frequency Direction Finder

WRMP – Water Resources Management Plan

WHMP – Wildlife Hazard Management Plan

Wildlife Trust – the Cambridgeshire Wildlife Trust

WSI – Written Scheme of Investigation

ZTV – Zone of Theoretical Visibility

APPENDIX B

National Planning Policy Advice and Guidance

National Planning Policy Framework (February 2019)

The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these should be applied. The document was updated on 19 February 2019 and is a material consideration for planning applications. It replaces PPGs and PPSs, and other guidance. The document encourages positive, balanced decisions, emphasizes the primacy of the development plan and local decision making.

The NPPF states that achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways. These objectives are economic, social and environmental.

Paragraph 2 states:

'Planning law requires that applications for planning permission be determined in accordance with the development plan, unless material considerations indicate otherwise. The National Planning Policy Framework must be taken into account in preparing the development plan and is a material consideration in planning decisions. Planning policies and decisions must also reflect relevant international obligations and statutory requirements.'

Paragraph 11 states that decision making should apply a presumption in favour of sustainable development. This means:

- approving development proposals that accord with an up-to-date development plan without delay; or
- where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-dater, granting permission unless:
 - i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposeds; or
 - ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.

Paragraph 12 states:

'The presumption in favour of sustainable development does not change the statutory status of the development plan as the starting point for decision making. Where a planning application conflicts with an up-to-date development plan

(including any neighbourhood plans that form part of the development plan), permission should not usually be granted. Local planning authorities may take decisions that depart from an up-to-date development plan, but only if material considerations in a particular case indicate that the plan should not be followed'

Paragraphs 49 and 50 in relation to 'Determining applications' provide advice on potential refusal of permission on the grounds of prematurity.

Paragraph 50 states:

'Refusal of planning permission on grounds of prematurity will seldom be justified where a draft plan has yet to be submitted for examination;...'

Paragraphs 61-64 provide advice in relation to housing needs and affordable housing.

Paragraph 73 requires Local Planning Authorities to identify and update annually a supply of specific deliverable sites sufficient to provide a minimum of five years' worth of housing against their housing requirement set out in adopted strategic policies.

Paragraph 109, in relation to 'Promoting sustainable transport', states:

'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.'

National Planning Practice Guidance

Planning Practice Guidance (NPPG) (2019) is published by Government to provide further detailed guidance on the application of policies set out in the NPPF.

PPPG on Noise (2014)

The Noise PPPG provides guidance on the interpretation and application of the NPPF and the NPSE. It gives particular advice on the interpretation of LOAELs and SOAELs, and introduces a new category of Unacceptable Adverse Effects, which should be avoided. The document advises on how planning can manage potential noise impacts in new development.

Noise Policy Context

Noise Policy Statement for England (NPSE) (2012):

The NPSE sets out the long-term vision for the government's noise policy, that is:

'to promote good health, and a good quality of life, through the effective management of noise – within the context of government policy on sustainable development'.

The NPSE is underpinned by three aims:

- i. To avoid significant adverse impacts on health and quality of life.
- ii. To mitigate and minimize adverse impacts on health and quality of life.
- iii. To where possible, contribute to the improvement of health and quality of life.

The Explanatory Note to the NPSE acknowledges that noise contributing to annoyance and/or sleep disturbance in human populations can have long term consequences for health and well-being. It introduces three concepts that can be used to interpret the policy aims, these being:

No Observed Effect Level (NOEL) – This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.

Lowest Observed Adverse Effect level (LOAEL) – This is the level above which adverse effects on health and quality of life can be detected.

Significant Observed Adverse Effect Level (SOAEL) – this is the level above which significant adverse effects on health and quality of life occur.

The NPSE seeks to avoid all noise occurring at or above the SOAEL level, and to minimize, as far as possible, all noise occurring between LOAEL and SOAEL.

The NPSE recognises that it is not possible to have a single, numerical definition of SOAEL that is applicable to all noise sources in all situations, since the SOAEL is likely to be different for different noise sources, different receptors and at different times.



APPENDIX C

DEVELOPMENT PLAN DOCUMENTS

Section 38(6) of the Planning Compulsory Purchase Act 2004 and Section 70(2) of the Town and Country Planning Act 1990 require that applications for planning permission must be determined in accordance with the Development Plan, unless material considerations indicate otherwise.

For the purposes of these planning applications, the statutory Development Plan for Cambridge and South Cambridgeshire comprises the following relevant documents:

- Cambridge Local Plan (2018).
- South Cambridgeshire Local Plan (2018).
- Cambridgeshire and Peterborough Minerals and Waste Core Strategy (2011).
- Cambridgeshire and Peterborough Minerals and Waste Site Specific Proposals Plan (2012).
- Cambridge East Area Action Plan (AAP) (2008) (excluding policies CE/3 and C/35 which are replaced by Policy 13: Cambridge East of the Cambridge Local Plan.
- Land North of Cherry Hinton SPD (2018).

Cambridge East Area Action Plan (AAP) (2008)

The Cambridge East AAP sets out the aspirations and objectives for the Cambridge East area. It was prepared jointly by the City and District Councils and provides for the phased development of a new urban quarter which encompasses Cambridge Airport. Whilst the AAP assumes the relocation of the airport, it also proposes that parts of the new quarter could be brought forward in advance of any airport relocation.

The Cambridge East AAP establishes a vision and development principles for the new urban quarter. The acceptability of any such development is subject to the noise and other impacts from airport operations not being incompatible with new development.

Land North of Cherry Hinton Supplementary Planning Document (SPD) (2018)

The Land North of Cherry Hinton Supplementary Planning Document was adopted in October 2018. It provides guidance for the site through the evolution of the associated framework masterplan and is material to the consideration of the application proposals.

Relevant Development Plan Policies:

PLAN	POLICY NUMBER
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Camb	ridge
Local	Plan
2018	

Policy 1: The Presumption in Favour of Sustainable Development.

Policy 3: Spatial Strategy for the Location of Residential Development.

Policy 4: The Cambridge Green Belt.

Policy 5: Strategic Transport Infrastructure.

Policy 8: Setting of the City.

Policy 13: Cambridge East.

Policy 14: Areas of major change and opportunity areas – general principles.

Policy 28: Carbon reduction, community energy networks, sustainable design and construction and 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 from noise and vibration.

Policy 36: Air quality, odour and dust.

Policy 37: Cambridge Airport Public Safety Zone and Safequarding Zones.

Policy 45: Affordable housing and dwelling mix.

Policy 47: Specialist housing.

Policy 50: Residential space standards.

Policy 51: Accessible homes.

Policy 55: Responding to context.

Policy 56: Creating successful places.

Policy 57: Designing new buildings.

Policy 59: Designing Landscape and the Public Realm.

Policy 62: Local heritage assets.

Policy 64: Shopfronts, signage and shop security measures.

Policy 67: Protection of Open Space.

Policy 68: Open space and recreation provision through new development.

Policy 69: Protection of sites of Local Nature Conservation Importance.

Policy 70: Protection of Priority Species and Habitats.

Policy 71: Trees.

Policy 72: Development and change of use in district, local and neighbourhood centres.

Policy 73: Community, sports and leisure facilities.

Policy 74: Education facilities.

Policy 75: Healthcare facilities.

Policy 80: Supporting sustainable access to development.

Policy 81: Mitigating the transport impact of development

Policy 82: Parking management.

Policy 84: Telecommunications.

Policy 85: Infrastructure delivery, planning obligations and the

Community Infrastructure Levy

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Cambridge CE/1: Vision for East Cambridge East Area CE/2 Development principles Action Plan CE/3 The Site for Cambridge East (CEAPP) 2008 CE/4 The Setting of Cambridge East CE/6 Local Centres CE/7 Cambridge East housing CE/9 Community Services CE/10 Road infrastructure CE/11 Alternative Modes and Parking CE/12 Transport for North of Newmarket Road CE/13 Landscape Principles CE/14 Landscaping within Cambridge East CE/15 Linking Cambridge East to its Surroundings CE/16 Biodiversity CE/17 Existing Biodiversity Features CE/18 Archaeology CE/19 Built Heritage CE/20 Public Open Space and Sports Provision CE/21 Countryside Recreation CE/22 Land Drainage, Water Conservation, Foul Drainage and Sewage Disposal CE/23 Telecommunications Infrastructure CE/24 Energy CE/25 Sustainable Building Methods and Materials CE/26 Noise CE/27 Air Quality CE/28 An Exemplar in Sustainability CE/29 Construction Strategy CE/30 Early Delivery of Strategic Landscaping CE/31 Management of Services, Facilities, Landscape and Infrastructure CE/32 Cambridge Airport Safety Zones

CE/33 Infrastructure Provision

CE/34 Timing/Order of Service Provision

APPENDIX D

SUPPLEMENTARY PLANNING GUIDANCE AND OTHER RELEVANT MATERIAL CONSIDERATIONS

SPDs have been adopted by the Councils' to provide guidance to support previously adopted Development Plan Documents that have now been superseded by the Cambridge Local Plan 2018 and South Cambridgeshire Local Plan 2018.

These documents are still material considerations when making planning decisions, with the weight in decision making to be determined on a case by case basis having regard to consistency with national planning guidance and the adopted Local Plan.

Supplementary	/
Planning	
Guidance	

Greater Cambridge Shared Planning Sustainable Design and Construction SPD (2020).

Cambridgeshire Flood and Water SPD (2016).

Cambridgeshire and Peterborough Waste Partnership (RECAP): Waste Management Design Guide Supplementary Planning Document (2012).

Cambridge City Planning Obligations SPD (2010).

South Cambridgeshire Affordable Housing SPD (2010).

South Cambridgeshire Landscape in New Developments SPD (2010).

South Cambridgeshire District Open Space in New Developments SPD (2009).

South Cambridgeshire District Trees and Development Sites SPD (2009).

South Cambridgeshire District Biodiversity SPD (2009).

Cambridge City Affordable Housing SPD (2008).

Cambridge Landscape and Character Assessment (2003).

Planning Obligations Strategy SPD (March 2010)

Cycle Parking Guide for New Residential Developments (2010)

Cambridge City Public Art SPD (2010).

Other Material Considerations:

Cambridge City Air Quality Action Plan (2018)

Cambridgeshire Quality Charter for Growth (2008)

<u>APPENDIX E</u>

PROPOSED PLANNING CONDITIONS

Definitions

Enabling Works means preparation works to make the Site ready for construction. Such works include (but are not exclusively limited to); site or ground clearance and preparation, surveying, environmental and hazardous substance testing and sampling, soil tests, remediation works, pegging out, tree protection, ecological survey and mitigation works, archaeological investigation, site clearance, ground improvement works, construction of boundary fencing or hoardings including for site security, demolition and removal of buildings and other structures, creation of temporary haul roads and enabling works accesses or other works or operations to enable any of these works to take place including site and ground works.

Strategic Engineering or Landscaping Elements include principal foul and surface water drainage infrastructure works, other utilities provision, accesses from Coldham's Lane and Airport Way, flood risk infrastructure works, primary roads, attenuation feature, land re-profiling, strategic open space and landscape works and planting (including allotments), and similar related works.

Development Parcel means a phase or part of the development excluding Enabling Works and Strategic Engineering and Landscape Elements. For instance, this would include a phase or part of the development comprising housing, employment, a local centre, a primary school site and/or playing fields.

1. DETAILS OF RESERVED MATTERS

No development on any individual Development Parcel or Strategic Engineering and Landscape Element shall commence until approval of the details of the appearance, landscaping, layout and scale (hereinafter called the Reserved Matters) within that Development Parcel has been obtained from the Local Planning Authority in writing. The development shall be carried out as approved.

Reason: To ensure that all necessary details are acceptable in accordance with the requirements of section 51 of the Planning and Compulsory Purchase Act 2004.

2. TIME

The first application for approval of Reserved Matters shall be made to the Local Planning Authority no later than three years from the date of this permission.

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

3. **TIME**

The commencement of each reserved matters area pursuant to this outline consent shall begin no later than the expiration of two years from the date of the last Reserved Matter of that reserved matters area to be approved.

Reason: To prevent the accumulation of unimplemented planning permissions and in accordance with the requirements of section 51 of the Planning and Compulsory Purchase Act 2004.

4. TIME

Application(s) for approval of all the Reserved Matters shall be made to the Local Planning Authority no later than the expiration of 8 years from the date of this permission.

Reason: To prevent the accumulation of unimplemented planning permissions and in accordance with the requirements of section 51 of the Planning and Compulsory Purchase Act 2004 and provide a consistent approach to the development of the site alongside adjoining developments.

5. COMPLIANCE WITH PLANS

The development, hereby permitted, shall be carried out in accordance with the following approved plans, save for only minor variations where such variations do not deviate from this permission nor have any additional or materially different likely significant effects to those assessed in the Environmental Statement accompanying the application:

Drawing Title	Reference	Revision
	Number	Number
Site Plan Application Boundary	234603 PP001	-
Les III - Berry Control Bloom	00 1000 PR000	
Land Use Parameter Plan	234603 PP002	-
Movement and Access Parameter Plan	234603 PP003	
Wovernerit and 7 toocss i arameter i lan	20400011000	
Building Height Parameter Plan	234603 PP004	Rev A
Landscape and Green Infrastructure	234603 PP006	-
Parameter Plan		
Urban Form Parameter Plan	234603 PP007	-

Junction 1 Airport Way/Cherry Hinton	37305_5501_001	Rev K
Road		
Junction 2 Cherry Hinton Road/Gazelle Way	37305_5501_002	Rev K
Junction 3 Coldhams Lane/Site Access	37305_5501_003	Rev J

Reason: To ensure that the details of the development are acceptable and to facilitate any future application to the Local Planning Authority under Section 73 of the Town and Country Planning Act 1990.

6. COMPLIANCE WITH ENVIRONMENTAL STATEMENT

The development shall be carried out in accordance with the mitigation measures set out in Table 17.2 of the Environmental Statement (updated March 2019).

Reason: To ensure that the development takes place in accordance with the principles and parameters contained within the Environmental Statement.

7. QUANTUM OF USES

The proposed maximum floorspace of land uses and maximum number of homes as set out in the table below shall not be exceeded pursuant to this planning permission:

USE	AMOUNT
Residential (Use Class C3) including retirement living facility (Use Class C2/C3)	Up to 1200 residential dwellings including any delivered through a retirement living facility (up to 90 bed spaces).
Education (Use Class D1)	Primary school – 2.3 ha site Secondary school – 6.9ha site
Flexible mixed-use units - Classes A1/ A2/ A3/ A4/ A5/ B1a/ D1/ D2 within Local Centre	Local Centre up to 1,850 sq.m gross internal floorspace Including food store (A1) up to 500 sq.m gross internal floorspace

Non-residential institutions, and community and leisure, including education (Use Class D1/D2)	Community hall (D2) up to 250 sq.m gross internal floorspace within Local Centre total above

Reason: To ensure that the development is implemented within the scope of the approved parameters upon which the application has been assessed, in accordance with the requirements of section 51 of the Planning and Compulsory Purchase Act 2004.

8. PHASING

Prior to, or concurrently with the submission of the first of the Reserved Matters application(s) for a Development Parcel, a Site Wide Phasing Plan which accords with the Section 106 triggers shall be submitted to the Local Planning Authority for approval. The Phasing Plan shall include the broad sequence of providing the following elements and a mechanism for the Plan's review and amendment:

- a) Development Parcels
- b) Major infrastructure including all accesses, primary roads/routes within the site, primary footpaths and cycleways, including timing of provision and opening of access points into the site
- c) the local centre including community facility
- d) Surface water drainage features, SuDS and foul water drainage network
- e) Formal and informal public open space, provision for children and teenagers, playing fields and allotments
- f) strategic electricity, telecommunications, potable water mains provisions and gas networks
- g) environmental mitigation measures, actions or activities (including phasing) intended to remedy, reduce or offset known negative adverse impacts as a result of existing pollution in the area and the development itself, as identified in the submitted Environmental Statement.
- h) primary and secondary schools

No development shall commence apart from Enabling Works 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 phasing contained within the approved Phasing Plan.

Reason: To clarify how the site is to be phased to assist with the determination of subsequent Reserved Matters applications and in order to ensure that major infrastructure provision and environmental mitigation is provided in time to cater for the needs and impacts arising out of the development, in accordance with policy 13 of the Cambridge Local Plan 2018, policy SC/3 of the South Cambridgeshire Local Plan 2018, policies CE1 and CE2 of the Cambridge East AAP 2008 and the LNCH SPD 2018.

9. SITE WIDE DESIGN CODE

Prior to, or concurrently with the submission of the first of the Reserved Matters applications for a Development Parcel, a Site Wide Design Code, shall be submitted to the Local Planning Authority for Approval. The Site Wide Design Code shall be prepared in accordance with the principles and parameters established by this outline approval and shall include both strategic and detailed elements. The Site Wide Design Code shall include:

- a) The overall vision for the development;
- b) The character, mix of uses and heights established through the approved parameter plans and include the block principles and the structure of public spaces, making reference to the phasing of land parcels;
- c) The street hierarchy, including the principles and extent of adopted highways and traffic calming measures.
- d) Typical street cross-sections which will include details of tree planting, tree species, underground utility/service trenches, and on street parking;
- e) How the design of the streets and spaces takes into account mobility and visually impaired users;
- f) Block principles to establish use, density and building typologies. In addition, design principles including primary frontages, pedestrian access points, fronts and backs and threshold definition shall be provided;
- g) Key groupings and other key buildings including information about height, scale, form, level of enclosure, building materials and design features;
- h) Approach to incorporation of ancillary infrastructure/buildings such as substations, pumping stations, pipes, flues, vents, meter boxes, external letterboxes, electric vehicle charging infrastructure, fibres, wires and cables required by statutory undertakers as part of building design;
- Design principles for the approach to monitoring vehicular parking (residents and visitors) for different building types including setting out principles to govern the location and layout of parking for people with disabilities and for each building type including parking spaces with electric vehicle charge point provision;
- Clear design principles for the approach to cycle parking for all uses and for different building types, (residential and commercial) including resident visitor parking, type of rack, spacing and any secure or non-secure structures associated with the storage of cycles including non-standard bicycle and trailer storage;
- k) The approach to the character and treatment of the structural planting (including site wide tree strategy statements guiding the diversity of planting and planting resilience to climate change, and the approach to SuDS design integration);
- The approach to the treatment of any hedge or footpath corridors and retained trees and woodlands;
- m) The conceptual design and approach to the public realm (making reference to the Public Art Strategy, materials, signage, utilities and any other street furniture):
- n) The conceptual design and approach to the artificial lighting strategy and how this will be applied to different areas of the development with different lighting needs, so as to maximise energy efficiency, minimise light pollution and avoid street clutter;
- o) Details of waste and recycling provision for all building types and recycling points;
- p) Utility routes, type and specification;

- q) Measures to demonstrate how the design can maximise resource efficiency and climate change adaptation through external, passive means, such as landscaping, orientation, massing, and external building features;
- r) Details of measures to minimise opportunities for crime;
- s) Measures to show how the principles of good design (including acoustic design) will address and minimise the impact of existing traffic/aircraft noise, traffic noise from the internal roads of the development itself, noise from Cambridge International Airport etc on future noise sensitive users eg residents and schools:
- t) Details of good urban design principles and design of urban infrastructure to reduce air pollution including street dimensions, use of Green Infrastructure (GI) such as trees, parks and green walls;
- u) Details of the design review procedure and of circumstances where a review shall be implemented.

The Site Wide Design Code shall explain its purpose, structure and status and set out the mandatory and discretionary elements where the Design Code will apply, who should use the Design Code, and how to use the Design Code. No development apart from Enabling Works shall commence until the Site Wide Design Code for the entire site has been approved in writing by the Local Planning Authority.

Reason: To ensure high quality design and coordinated development in accordance with policy 13 of the Cambridge Local Plan 2018, policy SS/3 of the South Cambridgeshire Local Plan 2018, policies CE/1, CE/2, CE/13/ and CE/14 of the Cambridge East AAP 2010 and the Land North of Cherry Hinton SPD 2018.

10. DESIGN CODE STATEMENT

Applications for Reserved Matters for a Development Parcel shall include a Design Code Compliance Statement that demonstrates how the application accords with the approved site wide Design Code.

Reason: To ensure there is a mixed and balanced distribution of dwelling sizes and tenure types across the development in accordance with policy 45 of the Cambridge Local Plan (2018), policies H/9 and H/10 of the South Cambridgeshire Local Plan 2018, Policy CE/7 of the Cambridge East Area Action Plan and the Land North of Cherry Hinton SPD 2018.

11. HOUSING MIX

Applications for Reserved Matters for a Development Parcel shall include the following details of housing mix:

- A plan showing the location and distribution of market and affordable units (including tenure type). The plan should also identify the proximity of the site with adjacent land parcels and the tenure types within both, in respect of any Development Parcel where Reserved Matters have already been approved.

- A schedule of dwelling sizes (by number of bedrooms).
- A statement which demonstrates how the proposals for the relevant Development Parcel relate to the agreed indicative housing mix.

Reason: To ensure there is a mixed and balanced distribution of dwelling sizes and tenure types across the development in accordance with policies H/9 and H/10 of the South Cambridgeshire Local Plan 2018, Policy 45 of the Cambridge Local Plan (2018), policy CE/7 of the Cambridge East Area Action Plan and the Land North of Cherry Hinton SPD 2018.

12.INTERNAL RESIDENTIAL SPACE STANDARDS

The residential dwellings hereby approved shall, as a minimum, accord with the Technical Housing Standards – Nationally Described Space Standards (2015) or any successor document applicable at the time of submission of the relevant Reserved Matters. This shall be demonstrated on the floor plans, elevations and sections submitted for each dwelling in respect of the Reserved Matters of layout and scale.

Reason: To ensure new residential units meet or exceed the government's residential space standards, in accordance with policy 50 of the Cambridge Local Plan 2018 and policy H/12 of the South Cambridgeshire Local Plan 2018.

13. ACCESSIBLE AND ADAPTABLE DWELLINGS

All residential dwellings within each Reserved Matters phase shall be designed to meet the accessible and adaptable dwellings M4 (2) standard of the Building Regulations 2010. In the event that such standards are replaced by a comparable national measure for building design *applicable at the time of submission of such Reserved Matters*, the equivalent measures shall be applicable to the *relevant part of* the *proposed* development.

Reason: In order to create accessible and adaptable homes, in accordance with policy 51 of the Cambridge Local Plan 2018.

14. WHEELCHAIR USER DWELLINGS

Not less than 5% of residential dwellings within each Reserved Matters phase containing residential development shall be designed to meet the wheelchair user dwellings M4 (3) standard of the Building Regulations 2010. This provision shall be split evenly between the affordable and market residential units in each Development Parcel rounding to the nearest whole number. In the event that such standards are replaced by a comparable national measure for building design *applicable at the time*

of submission of such Reserved Matters, the equivalent measure shall be applicable to the relevant part of the proposed development.

Reason: In order to create accessible and adaptable homes, in accordance with policy 51 of the Cambridge Local Plan 2018.

15. SPECIALIST HOUSING

Any Reserved Matters application for specialist housing (including housing designed and designated for occupation by older people with specific housing needs) shall be accompanied by a Specialist Housing Statement which sets the evidence and demonstrable need for this type of development.

Reason: In order to ensure the provision of specialist housing in accordance with Policy 47 of the Cambridge Local Plan 2018.

16. SELF BUILD AND CUSTOM BUILD SCHEME

Prior to the commencement of any development on any Development Parcel containing residential development (other than Enabling Works) a site wide scheme for the provision of serviced self-build and custom build plots shall be submitted to and approved by the Local Planning Authority in writing. All subsequent Reserved Matters applications for Development Parcels containing residential development shall be in accordance with the approved site wide scheme and shall include a statement demonstrating compliance with the approved scheme.

Reason: To ensure the provision of self-build and custom-built developments in accordance with Policy H/9 of the South Cambridgeshire Local Plan.

17. ARCHAEOLOGY

No development shall take place until the applicant has secured the implementation of a programme of archaeological work for the entirety of the application site, in accordance with a Written Scheme of Investigation (WSI). The WSI will include the following components, the implementation of which will trigger the phased discharging of the condition:

- 1) Approval of the Written Scheme of Investigation that should include:
 - (a) the statement of significance and research objectives;
 - (b) the programme and methodology of site investigation and post-excavation assessment and archiving;
 - (c) the nomination of a competent person or organisation to undertake the agreed works.

- 2) Fieldwork in accordance with the agreed Written Scheme of Investigation to include an appropriate outreach element.
- 3) Completion of a Post-Excavation Assessment report (PXA) and delivery of an approved Updated Project Design (UPD): to be submitted within six months of the completion of fieldwork, unless otherwise agreed in advance with the Local Planning Authority.
- 4) Completion of an archive report within 18 months of approval of the UPD unless otherwise agreed in advance with the Local Planning Authority; the preparation of the archaeological archive for deposition at the Cambridgeshire Archive facility, or another appropriate store approved by the Local Planning Authority.
- 5) Provision to be secured for the publication of the results to achieve the preservation by record of the heritage assets affected by development.

Reason: To ensure the implementation of an appropriate archaeological investigation, recording, reporting and publication, and the protection and preservation of archaeological features of significance, in accordance with Local Plan policies and the NPPF 2018.

18. SUSTAINABILTY STATEMENT

All Reserved Matters applications shall be accompanied by a Sustainability Statement setting out how the proposals meet the commitments set out in the site-wide Sustainability Statement (PBA, March 2018) and Addendum (PBA, March 2019), updated Design and Access Statement (March 2019) and Outline Energy Statement (PBA, March 2018) . The statement will also set out how each Reserved Matters application will address the requirement for the development to be an exemplar in sustainability having regard to the commitment in the Energy Statement to deliver a proportion of homes to Passivhaus certification and other approaches to deliver an exemplar community.

Reason: In the interests of reducing carbon dioxide emissions and promoting principles of sustainable construction and efficient use of buildings, in accordance with Cambridge East Area Action Plan policy CE/22, CE/24 and CE/28, and the Greater Cambridge Sustainable Design and Construction SPD 2020.

19. SUSTAINABILITY - WATER EFFICIENCY

Any Reserved Matters applications including dwellings shall be accompanied by a Water Conservation Strategy. This shall include a water efficiency specification for each dwelling type within that Reserved Matters application, based on the Water Efficiency Calculator Methodology or the Fitting Approach set out in Part G of the Building Regulations 2010 (2015 edition). This shall demonstrate that all dwellings within that Reserved Matters application are able to achieve a design standard of water use of no more than 110 litres/person/day.

Reason: To ensure that the development makes efficient use of water and promotes the principles of sustainable construction in accordance with Cambridge East Area Action Plan Policy CE22 and the Greater Cambridge Sustainable Design and Construction SPD 2020.

20. SUSTAINABILITY – ENERGY STATEMENT

Any Reserved Matters applications for a Development Parcel shall be accompanied by an Energy Statement, setting out how the proposals within that Development Parcel meet the following requirements:

- 1. A reduction in the amount of CO₂ m3/year emitted by 10% compared to the minimum Building Regulations requirement, where viable; and
- 2. To provide at least 10% of that phase's predicted energy requirements following occupation through the use of on-site renewable energy technology, measured in Kg/CO₂/annum,

In respect of criterion 2, the statement shall include the following details:

- a) The total predicted energy requirements of the Development Parcel, set out in Kg/CO₂/annum; and
- b) A schedule of proposed on-site renewable energy technologies, their respective carbon reduction contributions, location, design and a maintenance programme.

The proposed renewable energy technologies for a Development Parcel shall be fully installed and operational prior to the occupation of any approved buildings within that Development Parcel or in accordance with a programme for delivery contained within the approved Energy Statement for that Development Parcel.

No review of the requirements of criterion 2 on the basis of grid capacity issues can take place unless written evidence from the District Network Operator confirming the detail of grid capacity and its implications has been submitted to and approved in writing by the local planning authority.

Reason: In the interests of reducing carbon dioxide emissions in accordance with Cambridge East Area Action Plan policy CE/24 and the Greater Cambridge Sustainable Design and Construction SPD 2020.

21. OVERHEATING

Any Reserved Matters application for a Development Parcel shall be accompanied by an Overheating Analysis, which demonstrates that all buildings within that Development Parcel have been designed and will be constructed to meet CIBSE's latest overheating standards and guidance applicable at the time of submission of such Overheating Analysis, giving consideration to the impact of future climate scenarios. The approach to overheating shall follow a hierarchical approach with priority being given to passive design and passive/natural ventilation before

consideration is given to mechanical ventilation and cooling. Analysis should be undertaken across a representative sample of house and building types for that Development Parcel, with an emphasis on units that may be more vulnerable to overheating.

Reason: In the interests of reducing carbon emissions and ensuring that new development is adaptable to our changing climate, in accordance with Cambridge East Area Action Plan policies CE/24 and CE/28, Land North of Cherry Hinton SPD (2018), and the Greater Cambridge Sustainable Design and Construction SPD 2020.

22. BREEAM

Any Reserved Matters application for a Development Parcel containing a non-residential building which is not exempt from BREEAM standards shall be accompanied by a pre-assessment setting out how the standard will be met.

Prior to the occupation of any non-residential building which is not exempt from BREEAM standards, or within 6 months of occupation of that building (which is not exempt), a certificate following a postconstruction review, shall be issued by an approved BREEAM Assessor and submitted to the Local Planning Authority for approval. The postconstruction review certificate shall indicate that the relevant BREEAM rating specified below has been met in respect of that building. Where the certificate shows a shortfall in credits for the required BREEAM rating, a statement shall be submitted identifying how the shortfall will be addressed.

All non-residential buildings, except for those exempt from BREEAM standards and the primary and secondary schools, shall achieve BREEAM 'Excellent' with maximum credits for water efficiency. The primary and secondary schools shall achieve a minimum of BREEAM 'Very Good' with at least two credits for water efficiency. In the event that such a rating is replaced by a comparable national measure of sustainability for building design applicable at the time of submission of such Reserved Matters, the equivalent level of measure shall be applicable to the relevant part of the proposed development. Upon receipt of the final certificate(s) for that building/Development Parcel a copy shall be submitted to the local planning authority for their records.

Reason: In the interests of reducing carbon dioxide emissions and promoting principles of sustainable construction and efficient use of buildings, in accordance with Local Plan policies and the Greater Cambridge Sustainable Design and Construction SPD 2020.

23. FIRE HYDRANTS

No building within any Development Parcel shall be occupied 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.

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

24. DRAINAGE: STRATEGIC SURFACE WATER DRAINAGE STRATEGY

Prior to or concurrently with the submission of the first Reserved Matters application involving buildings, roads or other impermeable surfaces, a strategic surface water drainage strategy for the site shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall be based on the parameters set out in the Land North of Cherry Hinton Flood Risk Assessment prepared by Peter Brett Associates (ref: 37305) dated March 2018 and Addendum (March 2019) or any subsequent, revised version that has first been approved in writing by the Local Planning Authority.

The scheme shall include phasing arrangements, details of primary infrastructure for each phase and plans for drainage asset operation, maintenance and contingency. Infiltration systems shall only be used where it can be demonstrated that they will not pose a risk to groundwater quality. The scheme shall set out what information, design parameters and design details will need to be submitted at the Reserved Matters stage for each phase of the development.

The development shall subsequently be implemented in accordance with the approved scheme.

Reason: To ensure a satisfactory method of surface water drainage, to prevent an increased risk of flooding on or off site and to protect and prevent the pollution of controlled waters from potential pollutants associated with the current and proposed land use in line with the NPPF and the Environment Agency's Groundwater Protection Position Statements, policies 31 and 32 of the Cambridge Local Plan 2018, policy CC/8 of the South Cambridgeshire Local Plan 2018 and the LNCH SPD 2018.

25. DRAINAGE: SURFACE WATER STRATEGY

Any Reserved Matters application for a Development Parcel shall include a detailed surface water strategy and updated hydraulic modelling report (accompanied by model files), where development affects the watercourse. The strategy shall demonstrate how the management of water within the Development Parcel for which approval is sought accords with the approved details of the strategic site wide surface water strategy. The strategy shall be based upon a SUDS hierarchy and shall maximise the use of measures to control water at source as far as practicable to limit the rate and quantity of run-off and improve the quality of any run-off before it leaves the site or joins any water body.

The strategy shall include for that Development Parcel details of all flow control system and the design, location and capacity of all strategic SuDS features and shall include ownership, long-term adoption, management and maintenance schemes and monitoring arrangements/responsibilities. The strategy should also demonstrate that the exceedance of the designed system has been considered through the provision of overland flow routes.

The development of each Development Parcel shall be carried out in full accordance with the approved details. No building pursuant to that particular Development Parcel for which approval is being sought shall be occupied or used until such time as the approved detailed surface water measures for that building have been fully completed.

Reason: In order to safeguard against the risk of flooding, to ensure adequate flood control, maintenance and efficient use and management of water within the site, to ensure the quality of the water entering receiving water courses is appropriate and monitored and to promote the use of sustainable urban drainage systems to limit the volume and rate of water leaving the site in accordance with policies 31 and 32 of the Cambridge Local Plan 2018, policy CC/8 of the South Cambridgeshire Local Plan 2018 and the LNCH SPD 2018.

26. DRAINAGE: SURFACE WATER DRAINAGE DETAILS

Details for the long term maintenance arrangements for the surface water drainage system on a Development Parcel or Strategic Engineering and Landscape Element (including all SuDS features) shall be submitted to and approved in writing by the Local Planning Authority prior to the first occupation of any building on that Development Parcel or the commencement of the use of that Strategic Engineering and Landscape Element (as appropriate). The submitted details should identify runoff sub-catchments, SuDS components, control structures, flow routes and outfalls. In addition, the plan must clarify the access that is required to each surface water management component for maintenance purposes. The maintenance plan for each Development Parcel or Strategic Engineering and Landscape Element shall be carried out in full thereafter.

Reason: To ensure the satisfactory maintenance of unadopted drainage systems in accordance with the requirements of paragraphs 103 and 109 of the National Planning Policy Framework.

27. DRAINAGE: FOUL WATER DRAINAGE DETAILS

Prior to the commencement of any development on a Development Parcel or Strategic Engineering and Landscape Element, apart from Enabling Works, a detailed Foul Water Drainage Strategy shall be submitted and agreed in writing with the local planning authority for that Development Parcel or Strategic Engineering and Landscape Element. The strategy should include the phasing of such works. The strategy shall include details of any necessary improvement of the existing sewerage system to ensure that sufficient capacity exists to cater for the needs of that Development Parcel or Strategic Engineering and Landscape Element. The works/scheme for a Development Parcel or Strategic Engineering and Landscape Element shall be constructed and completed in accordance with the approved plans/specification and such programme as may be specified in the approved scheme.

Reason: To prevent environmental and amenity problems arising from flooding and ensure that sufficient capacity exists within the sewerage network to meet the needs of the development in accordance with policies 31 and 32 of the Cambridge Local Plan 2018, policy CC/8 of the South Cambridgeshire Local Plan 2018 and the LNCH SPD 2018.

28. ADVISORY - PILING

Piling or any other foundation designs using penetrative methods shall not be permitted other than with the express written consent of the Local Planning Authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to groundwater. The development shall be carried out in accordance with the approved details.

Reason: To protect and prevent the pollution of controlled waters from potential pollutants associated with the current and proposed land use in line with the NPPF and the Environment Agency's Groundwater Protection Position Statements.

29. BIODIVERSITY: ECOLOGICAL DESIGN STRATEGY (EDS) AND LANDSCAPE AND ECOLOGICAL MANAGEMENT PLAN (LEMP)

Prior to the commencement of development, a site wide combined Ecological Design Strategy and Landscape and Ecological Management Plan (EDS & LEMP) which addresses ecological protection, mitigation, compensation, enhancement, restoration and management shall be submitted to and approved in writing by the Local Planning Authority.

The EDS & LEMP shall include the following:

- a) Description and evaluation of features to be managed, and purpose and conservation objectives for the proposed works;
- b) Review of site potential and constraints that might influence management;
- c) Extent and location/area of proposed works on appropriate scale maps and plans, including details of how individual lots contribute to the site wide EDS and biodiversity net gain provision;
- d) Type and source of materials to be used where appropriate, e.g. native species of local provenance:
- e) Indicative timetable and appropriate triggers for implementation, demonstrating that works are aligned with the proposed phasing of development;
- f) Persons responsible for scheduling implementation of the works;
- g) Details of initial aftercare and long-term maintenance (in accordance with site wide Landscape Management plan).

The EDS and LEMP shall be implemented in accordance with the approved details and all features shall be retained in that manner thereafter.

The following list is not exhaustive but is illustrative of the measures that may be incorporated into an ecological design strategy.

- a) Retention and protection of existing habitats during construction.
- b) Habitat removal and reinstatement.
- c) Provision for wildlife corridors, linear features and habitat connectivity.
- d) Woodland, tree, hedgerow, shrub, wetland and wildflower planting and establishment.
- e) Proposed new landforms associated with habitat creation, e.g. water bodies and watercourses.
- f) Soil handling, movement and management.
- g) Creation, restoration and enhancement of semi-natural habitats.
- h) Lighting strategies for potentially sensitive receptors e.g. bats foraging along boundary hedgerows

- i) Creation of new wildlife features, e.g. bird nesting features, bat boxes and hedgehog highways within buildings and their curtilages.
- Specification and proposed planting.

Reason: To ensure that biodiversity is conserved and enhanced and secure the management of ecological habitats across the site in accordance with Policies 69 and 70 of the Cambridge Local Plan 2018 and Policies NH/4 and NH/5 of the South Cambridgeshire Local Plan 2018, the LNCH SPD 2018 and the NPPF 2019.

30. BIODIVERSITY: BIODIVERSITY SURVEY AND ASSESSMENT

Any Reserved Matters application for a Development Parcel shall include a Biodiversity Survey and Assessment for that Development Parcel that demonstrates how it accords with the aims and objectives of the approved Site Wide Biodiversity Strategy. The Biodiversity Survey and Assessment shall include:

- a) Detailed design(s) and/or working method(s) and management actions to achieve stated objectives.
- b) Details of which specific ecological enhancement and/or mitigation measures are proposed.
- c) A detailed timetable for their delivery.
- d) Details of the persons, body or organisation responsible for implementing the works.
- e) Details of initial aftercare and long-term maintenance.
- f) Details for monitoring and remedial measures.
- g) Details for disposal of any wastes arising from works.

No development shall commence within a Development Parcel apart from Enabling Works until such time as the Biodiversity Survey and Assessment for that Development Parcel has been approved in writing by the Local Planning Authority.

The Biodiversity Survey and Assessment shall be implemented in accordance with the approved details and all features shall be retained in that manner thereafter.

Reason: To ensure that biodiversity is conserved and enhanced and secure the management of ecological habitats across the site in accordance with Policies 69 and 70 of the Cambridge Local Plan 2018 and Policies NH/4 and NH/5 of the South Cambridgeshire Local Plan 2018, the LNCH SPD 2018 and the NPPF 2019.

31. WILDLIFE HAZARD MANGEMENT PLAN

Prior to the commencement of any development on a Development Parcel, apart from Enabling Works, a Wildlife Hazard Management Plan (WHMP) shall be submitted to and approved in writing by the Local Planning. The WHMP shall include details of:

- a. Monitoring of any temporary or permanent standing water within the Development Parcel.
- b. Sustainable urban drainage schemes (SUDS) within the Development Parcel such schemes shall comply with AOA Advice Note 3.
- c. The management of any flat/shallow pitched/green roofs on buildings within the Development Parcel which may be attractive to nesting, roosting and "loafing" birds. The management plan shall comply with Advice Note 8 'Potential Bird Hazards from Building Design' (available at www.aoa.org.uk/policy-campaigns/operations-safety/). the reinstatement of grass areas.
- d. Maintenance of planted and landscaped areas, particularly in terms of height and species of plants that are allowed to grow.
- e. Which waste materials can be brought on to the Development Parcel.
- f. Monitoring of waste imports. physical arrangements for the collection (including litter bins) and storage of putrescible waste, arrangements for and frequency of the removal of putrescible waste.
- g. Signs deterring people from feeding the birds.

The WHMP for a Development Parcel shall be implemented as approved from the commencement of development on that Development Parcel and shall remain in force for the life of the development on that Development Parcel

Reason: To safeguard the operations of Cambridge Airport and ensure that the implementation, management and maintenance of the planting strategy addresses the wildlife safeguarding issues whilst also providing for long-term monitoring and appropriate management, in accordance with Local Plan policies 37 and Tl/6..

32. BROADBAND PROVISION

No dwelling shall be occupied until the necessary infrastructure to enable that dwelling to directly connect to fibre optic broadband has been delivered and is capable of being fully operative.

Reason: To ensure the provision of high capacity broadband as part of the development, in accordance with policy 42 of the Cambridge Local Plan 2018 and policy TI/10 of the South Cambridgeshire Local Plan 2018 and the NPPF 2018.

33. PLAYING FIELDS - GROUND CONDITIONS DETAILS

No development apart from Enabling Works on the proposed secondary school playing fields shall commence until the following documents have been submitted to and approved in writing by the Local Planning Authority after consultation with Sport England:

- (i) A detailed assessment of ground conditions (including drainage and topography) of the land proposed for the playing field which identifies constraints which could adversely affect playing field quality; and
- (ii) Where the results of the assessment to be carried out pursuant to (i) above identify constraints which could adversely affect playing field quality, a detailed scheme to address any such constraints. The scheme shall include a written specification of the proposed soils structure, proposed drainage, cultivation and other operations associated with grass and sports turf establishment and a programme of implementation

The approved scheme shall be carried out in full and in accordance with the approved programme of implementation. The land shall thereafter be maintained in accordance with the approved scheme and made available for playing field use in accordance with the approved scheme.

Reason: To ensure that the playing field is prepared to an adequate standard and is fit for purpose, in the interests of the provision of sports facilities in accordance with Local Plan policies 13 and SC/3, Policy CE/20 of the Cambridge East Area Action Plan 2008, and the LNCH SPD 2018.

34. USE OF PLAYING FIELDS

The playing fields hereby approved shall be used for outdoor sport and for no other purpose (including without limitation any other purpose in Class D2 of the Town and Country Planning (Use Classes) Order 1987 (as amended), or in any provision equivalent to that Class in any statutory instrument revoking and re-enacting that Order with or without modification.

Reason: To project the playing facilities from loss and/or damage, to maintain the quality of and secure the safe use of sports facilities in accordance with Local Plan policies 13 and SC/3, Policy CE/20 of the Cambridge East Area Action Plan 2008, and the LNCH SPD 2018.

35. ALLOTMENT DETAILS

Any Reserved Matters application for a Development Parcel which incorporate allotment provision shall where appropriate include the following details:

- a) A plan of the allotments, principles of plot layout and design providing for a range of plot sizes designed to allow flexibility to meet the needs of future plot holders including accessible plots; areas for communal storage of materials, for example, manure and compost; communal storage of tools and supplies (eg lockers and bins) and communal areas.
- b) Proposed management arrangements and draft allotment tenancy agreements/rules. This shall include consideration of general and individual plot holder Rules, Conditions and Code of Conduct, with compliance thereafter;
- c) Access, vehicle and cycle parking arrangements to allow easy and safe access to the allotments which prioritises sustainable modes of transport and allows for the occasional delivery of bulky goods;
- d) Details of the allotment clubhouse / store, including composting toilet
- e) Boundary treatment, including security arrangements for the allotments;
- f) Water supply, including use of stored rainwater and SuDS for watering crops.
- g) Provision of good quality soil to British Standards 3882:2015 or equivalent, with structure and texture to allow free drainage and cropping.

The provision of allotments shall be carried out in accordance with the approved details and in accordance with the approved phasing programme.

Reason: To ensure that appropriate allotments are provided in relation to the development of the site in accordance with Local Plan policies 13 and SS/3 and policy CE/2 of the Cambridge East Area Action Plan 2008.

36. SITE WIDE STRATEGY FOR YOUTH FACILITIES AND CHILDREN'S PLAY

Prior to or concurrently with the submission of the first of the Reserved Matters application (s) for residential development, a Strategy for Youth Facilities and Children's Play Provision, in accordance with the principles set out in the Design and Access Statement and Planning Statement, shall be submitted to the Local Planning Authority for approval. The strategy shall include sufficient details to demonstrate the implementation of that strategy including specifications, location and phasing. Development shall take place in accordance with the approved strategy.

Reason: To ensure that appropriate facilities for youth facilities and children's play provision are provided in relation to the development of the site in accordance with Local Plan policies and policy CE/20 of the Cambridge East Area Action Plan 2008.

37. OPEN SPACE DETAILS

Any Reserved Matters application for a Development Parcel containing residential development shall include details of the Local Areas of Play (LAPs), formal and informal open spaces to be provided within that Development Parcel, together with the details of the dwellings served by each type of open space, and the timetable for laying

out the open space for approval. The open space shall be laid out in accordance with the details and timetable approved by the Local Planning Authority.

Reason: To ensure that the details of the development are acceptable and appropriate open space provision is made in accordance with Local Plan Policies, the Open Space SPD and the NPPF.

38. HARD AND SOFT LANDSCAPING DETAILS

Within any Reserved Matters application for landscaping details pursuant to this approval the details required by condition 1 shall include detailed landscape and where relevant play provision designs and specifications for the Development Parcel or Strategic Engineering and Landscape Element to which the reserved matters application relates. The details shall be accompanied by a design statement that demonstrates how the landscaping scheme accords with any emerging or approved details sought as part of the design code for the site and shall include the following in so far as they are relevant to the submission for that Development Parcel or Strategic Engineering and Landscape Element:

Soft Landscaping

- a) Full details of planting plans and written specifications, including cultivation proposals for maintenance and management associated with plant and grass establishment, details of the mix, size, distribution, density and levels of all trees/hedges/shrubs to be planted and the proposed time of planting. The planting plan shall use botanic names to avoid misinterpretation. The plans should include a full schedule of plants.
- b) 1: 200 plans (or at a scale otherwise agreed) with cross-sections of mounding, ponds, ditches and swales and proposed treatment of the edges and perimeters of the site.
- c) The landscape treatment of roads (primary, secondary, tertiary and green) through the development.
- d) A specification for the establishment of trees within hard landscaped areas including details of space standards (distances from buildings etc.) and tree pit details.
- e) The planting and establishment of structural landscaping to be provided in advance of all or specified parts of the site as appropriate.
- f) Full details of any proposed alterations to existing watercourses/drainage channels.
- g) Details and specification of proposed earth modelling, mounding, re-grading and/or embankment areas or changes of level across the site to be carried out including soil quantities, topsoil storage to BS 3882: 2007 and the Defra Code of Practice for the sustainable use of soils on construction sites, haul routes, proposed levels and contours to be formed, sections through construction to show make-up, and timing of works.
- h) Details of any play equipment

Hard Landscaping

i) Full details, including cross-sections, of all bridges and culverts.

- j) The location and specification of minor artefacts and structures, including furniture, refuse or other storage units, signs and lighting columns/brackets and underground utility routes.
- k) 1:200 plans (or at a scale otherwise agreed) including cross sections, of roads, paths and cycleways.
- I) Details of all hard surfacing materials (size, type and colour). Details of any play equipment.
- m) Full details of all proposed methods of boundary treatment including details for all gates, fences, walls and other means of enclosure both within and around the edge of the site.

The landscaping within each Development Parcel or Strategic Engineering and Landscape Element areas shall be implemented in accordance with the approved details for that Development Parcel or Strategic Engineering and Landscape Element.

Reason: To ensure the development is satisfactorily assimilated into the area and enhances biodiversity in accordance with Local Plan policies and the NPPF.

39. TREE SURVEY AND ARBORICULTURE IMPLICATIONS ASSESSMENT

Within any Reserved Matters application for landscaping details pursuant to this approval for a Development Parcel or Strategic Engineering and Landscape Element, the details required by condition X above shall be accompanied by a Land Survey, Tree and Hedge Survey and Arboriculture Implications Assessment, for that Development Parcel or Strategic Engineering and Landscape Element, in accordance with the relevant British Standard(s): The surveys shall include in respect of that Development Parcel or Strategic Engineering and Landscape Element:

- a) Plans showing the location of all trees, shrub masses and hedges, categorizing the trees or groups of trees for their quality and value in accordance with the British Standard(s).
- b) Plans showing trees to be removed identified by number.
- c) Plans showing trees to be retained identified by number, with canopies accurately plotted
- d) A tree constraints plan that identifies root protection areas of retained trees within, adjacent to, or which overhang the Development Parcel or Strategic Engineering and Landscape Element.
- e) The precise location and design details for the erection of protective tree barriers and any other physical protection measures.
- f) The location of streams, buildings and other structures, boundary features and services.
- g) Spot heights of ground level throughout the Development Parcel or Strategic Engineering and Landscape Element.
- h) A method statement in relation to construction operations in accordance with paragraph 7.2 of the British Standard.

Reason: In the interests of accurately establishing the quality and value of trees and hedges on or adjacent to the site and the implications for development.

40. TREE PROTECTION DETAILS

No development within a Development Parcel or Strategic Engineering and Landscape Element for which reserved matters approval has been granted shall take place apart from Enabling Works approved in writing by the local planning authority until such time as fencing for the protection of any retained tree within, adjacent to, or which overhangs the Development Parcel or Strategic Engineering and Landscape Element, has been fully erected in accordance with the approved plans and particulars. The fencing shall be retained intact for the full duration of the adjacent development until all equipment, materials and surplus materials have been removed from the Development Parcel or Strategic Engineering and Landscape Element. 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.

41. INSTALLATION OF SERVICES: DETAILS OF EXCAVATION TRENCHES

No development within a Development Parcel or Strategic Engineering and Landscape Element for which reserved matters approval has been granted, and which require the installation of services, apart from Enabling Works approved in writing by the local planning authority, shall take place until such time as full details of the position and proposed depth of excavation trenches for all services (including cables, pipes, surface water drains, foul water drains and public utilities) and their means of installation which pass underneath the canopy of any retained tree within, adjacent to, or which overhangs the Development Parcel or Strategic Engineering and Landscape Element , have been submitted to and approved in writing by the local planning authority. Development of the Development Parcel or Strategic Engineering and Landscape Element shall be carried out in accordance with the approved details.

Reason: In the interests of visual amenity and safeguarding trees that are worthy of retention.

42.REPLACEMENT OF DEAD OR DYING TREES

Any trees or plants provided as any part of any landscaping scheme which, within a period of 5 years from the planting date, die, are removed or become seriously damaged or diseased, shall be replaced in the next planting season with others of a similar size and species as those originally planted.

Reason: In the interests of visual amenity and safeguarding trees that are worthy of retention.

43. SITE WIDE PUBLIC ART STRATEGY

Prior to the commencement of construction of any dwelling above ground level, a Site-Wide Public Art Strategy shall be submitted to and approved in writing by the Local Planning Authority. The Strategy shall be implemented in general accordance with the approved details.

Reason: To ensure that the site provides public art in a satisfactory way that relates to the agreed Public Art Strategy and that accords with Local Plan Policies 56 and CE/2 and the NPPF.

44. PUBLIC ART DELIVERY PLAN

Applications for Reserved Matters for any Development Parcel which is identified in the approved Site-Wide Public Art Strategy as being a location for public art shall include a Public Art Delivery Plan which demonstrates how the relevant application accords with the Site-Wide Public Art Strategy.

Reason: To ensure that the site provides public art in a satisfactory way that relates to the agreed Public Art Strategy and that accords with Local Plan Policies 56 and CE/2 and the NPPF.

45. HIGHWAYS - CONSTRUCTION OF ROAD/FOOTWAY TO BASECOURSE LEVEL

No dwelling shall be occupied until any road and/or footway linking that building to a public highway network has been completed to binder course level; and main services have been installed and made available for connection to said building.

Reason: To ensure a safe means of access to residential properties and other buildings.

46. **HIGHWAYS – DETAILS OF BUS STOPS**

No development, apart from Enabling Works, shall commence until such a time as details relating to the location, design, specification, management and maintenance and phasing of bus stops within the development (to include a programme for their phased delivery) have been submitted to and approved in writing by the Local Planning Authority. The implementation of the bus stops shall then be carried out in accordance with the approved details and agreed programme for their delivery.

Reason: To ensure that adequate public transport is provided for future residents of the site.

47. HIGHWAYS - CYCLE PARKING

Any Reserved Matters application for a residential unit, non-residential building or public open space shall include details of facilities for the covered, secure parking of cycles for use in connection with the approved development and demonstrate that the provision is in accordance with the approach to cycle parking approved as part of the Design Code for the site. No such residential unit or non-residential building shall be occupied nor shall such public open space be used until the relevant facilities for that residential unit, non-residential building or public open space (as applicable) have been provided in accordance with the approved details. Thereafter the cycle parking facilities shall be retained and shall not be used for any other purpose.

Reason: To ensure appropriate provision for the secure storage of bicycles.

48. HIGHWAYS - CAR PARKING

Each Reserved Matters application for a Development Parcel shall include details of car parking for that Development Parcel. No building shall be occupied or activity brought into use within the relevant Development Parcel until the approved parking provision relating to that building or activity (as appropriate) has been laid out.

Reason: To ensure an appropriate level of car parking provision, and to ensure that highway safety and amenity is not compromised by unsightly on street parking in accordance with Appendix L of the Cambridge City Local Plan (2018), policy Ti/3 of the South Cambridgeshire District Council Local Plan (2018), and CE/11 of the Cambridge East Area Action Plan (2008).

49. HIGHWAYS - DETAILS OF ACCESS JUNCTION 1

No building shall be occupied or activity brought into use, until details of the proposed improvements to the junction of Airport Way/Cherry Hinton Road together with a programme for its delivery have been submitted to and approved in writing by the Local Planning Authority. The junction improvement shall be constructed in accordance with the approved details and the approved delivery programme.

Reason: To ensure suitable junction design and connectivity in accordance with Policy CE/10 of the Cambridge East Area Action Plan 2008.

50. HIGHWAYS - DETAILS OF ACCESS JUNCTION 2

No building shall be occupied or activity brought into use, until details of the proposed improvements to the junction of Cherry Hinton Road/Gazelle Way Roundabout together with a programme for its delivery have been submitted to and approved in writing by the Local Planning Authority. The junction improvement shall be constructed by the Applicant in accordance with the approved details and the approved delivery programme.

Reason: To ensure suitable junction design and connectivity in accordance with Policy CE/10 of the Cambridge East Area Action Plan 2008.

51. HIGHWAYS - DETAILS OF ACCESS JUNCTION 3

No building shall be occupied or activity brought into use, until details of the proposed improvements to the junction of Coldham's Lane together with a programme for its delivery have been submitted to and approved in writing by the Local Planning Authority. The junction improvement shall be constructed by the Applicant in accordance with the approved details and the approved delivery programme.

Reason: To ensure suitable junction design and connectivity in accordance with Policy CE/10 of the Cambridge East Area Action Plan 2008.

52. **DETAILS OF AIRPORT WAY AND CHERRY HINTON ROAD, TEVERSHAM, PEDESTRIAN AND CYCLE IMPROVEMENTS**

No building shall be occupied or activity brought into use until the proposed pedestrian and cycleway facilities along Airport Way and Cherry Hinton Road have been implemented in accordance with details and a programme for their delivery, to be submitted and approved in writing by the Local Planning Authority.

Reason: To ensure that sufficient measures are in place to mitigate the impact from vehicular traffic from the development in accordance with Policy CE/10 of the Cambridge East Area Action Plan 2008.

53. HIGHWAYS - DETAILS OF COLDHAMS LANE CYCLEWAY AND BARNWELL ROAD CROSSING IMPROVEMENTS

No building shall be occupied or activity brought into use until the proposed pedestrian and cycleway facilities along Coldham's Lane and Barnwell Road have been implemented in accordance with details and a programme for their delivery, to be submitted and approved in writing by the Local Planning Authority.

Reason: To ensure that sufficient measures are in place to mitigate the impact from vehicular traffic from the development in accordance with Policy CE/10 of the Cambridge East Area Action Plan 2008.

54. HIGHWAYS - DETAILS OF CHERRY HINTON HIGH STREET CYCLE BYPASS IMPROVEMENTS

No building shall be occupied or activity brought into use until the proposed improved cycle bypass facility on Cherry Hinton High street has been implemented in accordance with details and a programme for its delivery, to be submitted and approved in writing by the Local Planning Authority.

Reason: To ensure that sufficient measures are in place to mitigate the impact from vehicular traffic from the development in accordance with Policy CE/10 of the Cambridge East Area Action Plan 2008.

55. HIGHWAYS - CONSTRUCTION AND DEMOLITION (TRAFFIC MANAGEMENT PLAN)

No demolition or construction works (any Enabling Works) shall commence on site until aTraffic Management Plan (TMP) has been agreed in writing with the Local Planning Authority. The TMP shall be a stand-alone document separate from the Construction Environmental Management Plan. The principle areas of concern that should be addressed within the TMP are:

- i. Movements and control of muck away lorries.
- ii. Contractor parking; including details and quantum of the proposed car parking and methods of preventing on street car parking.
- iii. Movements and control of all deliveries.

- iv. Control of dust, mud and debris, in relationship to the operation of the adopted public highway.
- v. Routing arrangements for all vehicles over 7.5 tonnes (gross weight) that will service the site.

No demolition or construction works hereby permitted shall be carried out other than in accordance with the approved TMP.

Reason: To ensure that the interface between site traffic and other users of the adopted public highway is appropriately managed in the interests of highway safety, and that any increase in large vehicular traffic that the site will generate during the construction period is appropriately managed.

56. **COMBUSTION APPLICANCES – LOW EMISSIONS**

Prior to the installation of any gas fired combustion appliances for any development, technical details and information demonstrating the use of low Nitrogen Oxide (NOx) combustion, i.e. individual gas fired boilers that meet a dry NOx emission rating of ≤40mg/kWh, to minimise emissions from the development that may impact on air quality, shall be submitted to and approved in writing by the Local Planning Authority.

If the proposals include any gas fired Combined Heat and Power (CHP) System, technical details and information demonstrating that the system meets the following emissions standards for various engines types shall be submitted for approval in writing by the Local Planning Authority:

- Spark ignition engine: less than or equal to 150 mg NOx/Nm3
- Compression ignition engine: less than 400 mg NOx/Nm3
- Gas turbine: less than 50 mg NOx/Nm3

The scheme details as approved shall be fully installed and operational before first occupation/use and shall be maintained thereafter for the life of that gas fired combustion appliance. Any replacement gas fired combustion appliances shall meet the same or better emissions standards.

Reason: To protect local air quality and human health by ensuring that the production of air pollutants such as nitrogen dioxide and particulate matter are kept to a minimum during the lifetime of the development, to contribute toward National Air Quality Objectives in accordance with the requirements of the National Planning Policy Framework (NPPF, 2019) paragraphs 170 and 181, policy CE/27 Air Quality of the Cambridge East Area Action Plan 2008, policy SC/12: Air Quality of the South Cambridgeshire Local Plan, September 2018, policy 36- Air Quality, Odour and Dust

of the Cambridge Local Plan, October 2018 and Cambridge City Councils adopted Air Quality Action Plan (2018).

57. SITE WIDE ELECTRIC VEHICLE (EV) CHARGE POINT PROVISION AND INFRASTRUCTURE STRATEGY

Prior to the commencement of development, a 'Site Wide Electric Vehicle Charging Point Provision and Infrastructure Strategy' including an implementation plan shall be submitted to and approved in writing by the Local Planning Authority.

The strategy shall be appropriate for the proposed end use(s) of the development and shall provide full details of the provision of allocated parking spaces for dedicated electric vehicle charging in line with the principles set out in the National Planning Policy Framework (2019), the Cambridge Local Plan and Cambridge City Council's Air Quality Action Plan. The strategy shall include consideration of both active (slow, fast and rapid) and passive electric vehicle charge point provision and design to enable the charging of electric vehicles in safe, accessible and convenient locations.

The Strategy shall include the following principles which are to be applied to the detailed design of the Development Parcels as they come forward:

- 100% provision of a dedicated active slow electric vehicle charge point with a minimum power rating output of 7kW for each residential dwelling with allocated / dedicated on-plot parking;
- Minimum 50% provision of dedicated active slow electric vehicle charge points with a minimum power rating output of 7kW for residential dwellings with communal and courtyard parking;
- Dedicated slow electric vehicle charge points with a minimum power rating output of 7kW for at least 50% of non-residential parking spaces and
- Either at least one Rapid electric vehicle charge point for each 1,000m² non-residential floorspace, or at least one Fast electric vehicle charge point for each 1,000m² non-residential floorspace, should a Rapid charge point not be technically feasible.
- The rapid and/or fast electric vehicle charge point parking spaces shall be exclusively reserved for electric vehicle charging.
- Additional passive electric vehicle charge provision of the necessary infrastructure including capacity in the connection to the local electricity distribution network and electricity distribution board, as well as the provision of cabling to parking spaces for all remaining car parking spaces to facilitate and enable the future installation and activation of additional active electric vehicle charge points as required.

 Electric vehicle charge points shall be compliant with BS7671 and BS EN IEC 61851-1:2019or as superseded/replaced as applicable at the time of submission of such strategy.

Reason: In the interests of encouraging more sustainable modes and forms of transport and to reduce the impact of development on local air quality, in accordance with the National Planning Policy Framework (NPPF, 2019) paragraphs 105, 110, 170 and 181, policy CE/27 Air Quality of the Cambridge East Area Action Plan 2008, policy SC/12: Air Quality of the South Cambridgeshire Local Plan, September 2018, policy 36 - Air Quality, Odour and Dust of the Cambridge Local Plan (October, 2018) and Cambridge City Council's adopted Air Quality Action Plan (2018).

58. SITE WIDE ELECTRIC VEHICLE (EV) CHARGE POINT PROVISION AND INFRASTRUCTURE SCHEME STRATEGY DELIVERY

With each Reserved Matters application for any Development Parcel, an Electric Vehicle Charge Point Provision and Infrastructure Scheme that demonstrates compliance with the over-arching 'Site Wide Electric Vehicle Charging Point Provision and Infrastructure Strategy' approved under condition X above shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall include full details of the number, location, unit design, charge time (slow, fast and rapid), installation, compliance with relevant BS7671 and BS61851 or other relevant standards at that time, management and maintenance of the electric vehicle charge points (active and passive) and how the uptake of electric vehicle charge points will be monitored in order to determine the activation of passive spaces in the future.

The electric vehicle charge point provision and infrastructure scheme for each Reserved Matters application for any Development Parcel shall be fully implemented in accordance with the approved scheme details prior to occupation and maintained and retained thereafter.

Reason: In the interests of encouraging more sustainable modes and forms of transport and to reduce the impact of development on local air quality, in accordance with the National Planning Policy Framework (NPPF, 2019) paragraphs 105, 110, 170 and 181, policy CE/27 Air Quality of the Cambridge East Area Action Plan 2008, policy SC/12: Air Quality of the South Cambridgeshire Local Plan, September 2018, policy 36 - Air Quality, Odour and Dust of the Cambridge Local Plan (October, 2018) and Cambridge City Council's adopted Air Quality Action Plan (2018).

59. SUSTAINABLE SHOW HOME

No construction of a building herby permitted above ground level shall commence until a strategy for the delivery of the proposed sustainable show home(s) has been submitted to and approved in writing by the Local Planning Authority. This strategy shall include the following:

- i) a plan showing the location of the sustainable show home(s)
- ii) an indicative timetable for delivery of the sustainable show home(s)
- iii) sustainability targets to be achieved in the construction/design of the show home(s)
- iv) sustainable alternatives available for purchase by prospective house buyers (to include measures such as energy efficiency, renewable technologies, water conservation, waste and recycling and overheating)
- v) a marketing scheme to demonstrate how the sustainable alternatives in (iv) above can be purchased by prospective house buyers

The strategy for the show home(s) shall be implemented in full accordance with the approved details.

Reason: In the interests of reducing carbon dioxide emissions and promoting principles of sustainable construction and efficient use of buildings (Cambridge Local Plan 2018 Policy 28) and in accordance with the sustainability objectives of Policy CC/5 of the South Cambridgeshire Local Plan 2018).

60. SITE WIDE DEMOLITION AND CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (SW-DCEMP)

Prior to the commencement of development, a Site Side Demolition and Construction Environmental Management Plan (SW-DCEMP) shall be submitted to and approved in writing by the Local Planning Authority. The SW- DCEMP shall include the consideration of the following aspects of demolition and construction:

- a) Demolition, construction and phasing programme.
- b) Contractors' access arrangements for vehicles, plant and personnel including the location of construction traffic routes to, from and within the site, details of their signing, monitoring and enforcement measures.
- c) Construction/Demolition hours which shall only be carried out between 0800 hours to 1800 hours Monday to Friday, and 0800 hours to 1300 hours on Saturday and at no time on Sundays, Bank or Public Holidays, unless in accordance with agreed emergency procedures for deviation. Prior notice and agreement procedures for works outside agreed limits and hours.
- d) Delivery and collection times for construction/demolition purposes shall only be carried out between 0800 to 1800 hours Monday to Friday, 0800 to 1300 hours on Saturdays and at no time on Sundays, bank or public holidays, unless otherwise agreed in writing by the Local Planning Authority in advance.

- e) Soil/Materials Management Strategy having particular regard to potential contaminated land and the re-use and recycling of soil on site, the importation and storage of soil and materials including audit trails.
- f) Noise impact assessment methodology, mitigation measures, noise monitoring and recording statements in accordance with the provisions of BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites. Noise (or as superseded).
- g) Vibration impact assessment methodology, mitigation measures, vibration monitoring and recording statements in accordance with the provisions of BS 5228-2: 2009+A1:2014 Code of practice for noise and vibration control on construction and open sites. Vibration (or as superseded).
- h) Dust management / monitoring plan and wheel washing measures. Non-Road Mobile Machinery (NRMM) demolition or construction works or similar, vehicle emissions standards. Confirmation of use of concrete crushers.
- i) Prohibition of the burning of waste on site during demolition/construction.
- j) Site artificial lighting. Site artificial lighting during construction and demolition including hours of operation, position and impact on neighbouring properties.
- k) Drainage control measures including the use of settling tanks, oil interceptors and bunds.
- I) Screening and hoarding details.
- m) Access and protection arrangements around the site for pedestrians, cyclists and other road users.
- n) Procedures for interference with public highways, including permanent and temporary realignment, diversions and road closures.
- o) External safety and information signing and notices.
- p) Consideration of sensitive receptors.
- q) Prior notice and agreement procedures for works outside agreed limits.
- r) Implementation of a Stakeholder Engagement/Residents Communication Plan-CEMP Monitoring, Review and Complaints procedures, including complaints response.
- s) Membership of the City Council's and/or National Considerate Contractors Scheme.

Thereafter all phases of the development shall be undertaken in accordance with the approved site wide DCEMP.

Reason: To ensure the environmental impact of the construction of the development is adequately mitigated and in the interests of the amenity of nearby residents/occupiers in accordance with policy CE/2 of the Cambridge East Area Action Plan 2008, policy CC/6 of the South Cambridgeshire Local Plan and policies 28, 35 and 36 of the Cambridge Local Plan 2018.

61. SITE SPECIFIC CONSTRUCTION AND ENVIRONMENTAL MANAGEMENT PLAN (SS-DCEMP)

Prior to the commencement of development on any Strategic Engineering / Landscaping Element and Development Parcel (apart from Enabling Works), a Strategic Engineering / Landscaping Element Development Parcel Site Specific Construction and Environmental Management Plan (SS-DCEMP) shall be submitted to and approved in writing by the local planning authority for that element or Development Parcel.

The SS-DCEMP shall demonstrate how the demolition / construction of the relevant element or Development Parcel pursuant to the relevant Reserved Matters application accords with the construction criteria a) to s) of the approved site wide Demolition and Construction Environmental Management Plan (SW-DCEMP). In addition to criteria a) to s), the SS-CMS / SS-DCEMP shall also provide a specific construction programme and plan identifying: the contractor site storage area/compound; screening and hoarding locations; access arrangements for vehicles, plant and personnel; building material, plant and equipment storage areas; contractor parking arrangements for construction and personnel vehicles; and the location of the contractor offices.

Thereafter the development of the Strategic Engineering / Landscaping Element and Development Parcel shall be undertaken in accordance with the relevant approved SS-DCEMP.

Reason: To ensure the environmental impact of the construction of the development is adequately mitigated and in the interests of the amenity of nearby residents/occupiers in accordance with policy CE/2 of the Cambridge East Area Action Plan 2008, policy CC/6: Construction Methods of the South Cambridgeshire Local Plan, September 2018 and policies 28, 35, 36 of the Cambridge Local Plan, October 2018.

62. NOISE IMPACT ASSESSMENT – RESIDENTIAL AND NOISE SENSITIVE USES

Within any Reserved Matters application for a Development Parcel which includes residential type or other noise-sensitive uses including schools or other educational establishments and public open spaces, a Noise Impact Assessment with Acoustic Design and Noise Insulation / Mitigation Scheme Report to protect the said noise sensitive development / uses internally and externally where applicable, from the

following sources of noise, shall be submitted to and approved in writing by the Local Planning Authority:

- a. Existing / future local transport noise in the area (including aircraft associated with Cambridge City Airport and road traffic from Airport Way / Cherry Hinton Road / Teversham Drift, Coldhams Lane / the A14);
- b. Other activity / operations taking place at / within Cambridge City Airport, including aircraft engine ground running testing;
- c. Any industrial, commercial and business premises at Coldhams Business Park, Norman Way;
- d. Any proposed / future local transport noise associated with internal roads / streets / highways of the approved development itself; and
- e. Any proposed / future industrial, commercial, business, education or community premises and uses including local centres and sports / recreational uses and areas of play of the approved development itself.

The Noise Impact Assessment with Acoustic Design and Noise Insulation / Mitigation Scheme Report for each Reserved Matters application for a Development Parcel which includes noise sensitive uses shall include a site specific Noise Impact Assessment of noise impacts (by a combination of noise monitoring and prediction / modelling), the acoustic design approach that will be followed and specific details of the noise insulation / mitigation measures / features to be used and implemented, to achieve acceptable internal and external noise levels.

The report and scheme shall include careful consideration of the following:

- (i) Phasing and build out time of various Reserved Matters application phases;
- (ii) Aircraft engine ground running testing within the ground running enclosure (GRE) at Cambridge City Airport approved under Cambridge City Council planning permission ref. 16/2212/FUL (having regard to low frequency noise characteristics) as part of external building envelope sound reduction performance;
- (iii) The need to provide an alternative form of ventilation (mechanical or acoustically attenuated passive ventilation free areas of sufficient size) to achieve a minimum of 2 to 4 air changes per hour (ACH) in habitable rooms when opening external windows and doors would result in unacceptable internal noise levels; and
- (iv) Timescale for phased implementation;

The relevant Reserved Matters application for each Development Parcel shall be constructed and completed in accordance with the approved Noise Impact Assessment with Acoustic Design and Noise Insulation / Mitigation Scheme Report for

such Development Parcel and any scheme measures and any alternative form of ventilation provision as required in respect of a residential unit or noise sensitive building on such Development Parcel as part of the scheme shall be fully implemented prior to occupation of that building on such Development Parcel and shall be maintained and retained thereafter.

Reason: To avoid noise from giving rise to significant adverse impacts on health and quality of life and to mitigate and reduce to a minimum potential adverse impacts on noise-sensitive uses to secure acceptable internal and external living conditions in accordance with paragraphs 170 e) 180 a) and 182 of the National Planning Policy Framework (NPPF, February 2019), policies CE/10 Road Infrastructure and CE/26 Noise of the Cambridge East Area Action Plan Adopted February 2008, policies SS/3: Cambridge East, HQ/1: Design Principles and SC/10: Noise Pollution of the South Cambridgeshire Local Plan, Adopted September 2018 and policies 13: Cambridge East and 35: Protection of human health and quality of life from noise and vibration of the Cambridge Local Plan, October 2018.

63. NOISE IMPACT ASSESMENT - NON-RESIDENTIAL USES

Within any Reserved Matters application for a Development Parcel which includes any non-residential buildings, uses or activities (e.g. employment areas, industrial / commercial / business / retail units, waste recycling facilities, schools / educational establishments, community buildings /local centres, markets, recreational uses such as sports, games and play areas including associated operational plant and equipment), an operational noise impact assessment of these uses on proposed and existing noise-sensitive uses, including, where appropriate, a scheme for the noise insulation of any building(s) or use(s) / activities and plant / equipment and consideration of other noise mitigation and management measures (location / layout, engineering and administrative) to minimise the level of noise emanating from the said building(s), use(s) / activities and plant / equipment shall be submitted to and approved in writing by the Local Planning Authority.

The approved noise insulation / mitigation and management scheme for each Development Parcel shall be fully constructed, completed and implemented before the relevant building is occupied, uses / activities are commenced or plant / equipment are operated / used and shall be maintained and retained thereafter.

Reason: To avoid noise from giving rise to significant adverse impacts on health and quality of life and to mitigate and reduce to a minimum potential adverse impacts on proposed and existing noise-sensitive uses resulting from noise and secure acceptable living conditions in accordance with paragraphs 170 e) and 180 a) of the National Planning Policy Framework (NPPF, February 2019), policies CE/10 Road Infrastructure and CE/26: Noise of the Cambridge East Area Action Plan Adopted February 2008, policies SS/3: Cambridge East, HQ/1: Design Principles and SC/10: Noise Pollution of the South Cambridgeshire Local Plan, September 2018 and policies 13: Cambridge East and 35: Protection of human health and quality of life from noise and vibration of the Cambridge Local Plan, October 2018.

64. ARTIFICIAL LIGHTING DESIGN SCHEME

Within any Reserved Matters application for a Development Parcel for a Strategic Engineering or Landscaping Element or Development Parcel with any artificial lighting such as street, car park, floodlighting, security and building lighting, an artificial lighting design scheme with detailed impact assessment and a programme for delivery, shall be submitted to and approved in writing by the local planning authority.

The scheme shall include details of any artificial lighting to be installed on site and a horizontal / vertical isolux artificial lighting impact assessment with predicted lighting levels at existing and future residential properties on the relevant Strategic Engineering or Landscaping Element or Development Parcel (including luminaire type / profiles, mounting location / height, aiming angles / orientation, angle of glare, operational controls, horizontal / vertical isolux contour light levels and calculated glare levels to receptors - direct source luminance / luminous intensity in the direction and height of any sensitive residential receiver).

The approved artificial lighting design scheme for a Strategic Engineering or Landscaping Element or Development Parcel shall be fully implemented in accordance with the approved programme for delivery and shall be maintained and retained thereafter.

Reason: To limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation in accordance with paragraph 180 c) of the National Planning Policy Framework (NPPF, February 2019), policy SC/9: Lighting Proposals of the South Cambridgeshire Local Plan, September 2018 and policy 34: Light pollution control of the Cambridge Local Plan, October 2018.

65. ODOUR OPERATIONAL - DETAILS OF EXTRACTION SYSTEMS

Prior to, or concurrently with the submission of any detailed Reserved Matters application for any Development Parcel with non-residential premises / uses, a ventilation scheme for the non-residential premises to include details of equipment and systems for the purpose of extraction, filtration and abatement of odours and fumes to discharge at an appropriate outlet height / level and the standard of dilution / dispersion/abatement expected, shall be submitted to and approved in writing by the local Planning Authority.

The approved extraction/filtration/abatement ventilation scheme for each non-residential premises within a Development Parcel shall be installed before that non-residential premises on that Development Parcel is occupied/ use hereby permitted is commenced and shall be fully maintained in accordance with the manufacturer

specifications / instructions to ensure its continued satisfactory operation and retained thereafter.

Reason: To protect the amenity of nearby properties from malodour or fumes in accordance with policy CE/27: Air Quality of the Cambridge East Area Action Plan 2008, policy SC/14: Odour and Other Fugitive Emissions to Air of the South Cambridgeshire Local Plan, Adopted September 2018 and policy 36: Air quality, odour and dust of the Cambridge Local Plan, October 2018.

66. WASTE - CONSTRUCTION WASTE

Prior to the commencement of development on any Development Parcel except for Enabling Works, a Detailed Waste Management Plan (DWMP) shall be submitted to and approved in writing by the Local Planning Authority for that Development Parcel. The DWMP shall demonstrate how the construction of the Development Parcel will accord with the details of the principles of the Outline Waste Management Plan. The DWMP shall include details of:

- a) The anticipated nature and volumes of waste.
- b) Measures to ensure the maximisation of the reuse of waste.
- c) Measures to ensure effective segregation of waste at source including waste sorting, storage, recovery and recycling facilities to ensure the maximisation of waste materials both for use within and outside the site.
- d) Any other steps to ensure the minimisation of waste during construction
- e) The location and timing of provision of facilities pursuant to criteria b/c/d.
- f) Proposed monitoring and timing of submission of monitoring reports.
- g) The proposed timing of submission of a Waste Management Closure Report to demonstrate the effective implementation, management and monitoring of construction waste during the construction lifetime of the development on that Development Parcel.

Thereafter the implementation and management of the approved DWMP and monitoring of construction waste on that Development Parcel shall be undertaken in accordance with the agreed details.

Reason: To ensure the sustainable management of construction waste.

67. WASTE - WASTE STORAGE DETAILS

Prior to, or concurrently with any Reserved Matters application for a Development Parcel the details required by Condition X above shall be accompanied by full details of the appropriate on-site storage facilities for waste (including waste for recycling) within that Development Parcel, including where appropriate:

a) The detailed position and layout of bin stores and confirmation of acceptable drag distances.

- b) The provision of home composting facilities.
- c) For apartments, confirmation of the capacity of the communal bins.
- d) Proposals for lighting of the communal bin compounds.
- e) Confirmation, including a tracking diagram, that all bins can be accessed by waste collection vehicles.
- f) Arrangements for the provision, on-site storage, delivery and installation of waste containers for each dwelling prior to occupation of that dwelling.

The RECAP Waste Management Design Guide will be utilised to ensure the development design will provide adequate space for internal and external waste storage. No development shall commence on a Development Parcel apart from Enabling Works until the details of on-site storage facilities for waste for that Development Parcel have been approved in writing by the Local Planning Authority. The approved facilities for each building that will be used for residential, commercial or employment purposes within a Development Parcel shall be provided prior to the occupation, use or opening for business of that building and shall be retained thereafter unless alternative arrangements are agreed in writing by the Local Planning Authority.

Reason: To ensure the provision of waste collection infrastructure on site and to protect the amenities of nearby residents/occupiers and in the interests of visual amenity.

68. CONTAMINATION - GROUND WATER REMEDIATION PILOT TRIAL

No development shall commence until a schedule of works containing the design details for a pilot-scale PFOS & PFOA groundwater remediation treatment scheme has been submitted to and approved in writing by the Local Planning Authority. Such details shall include, as a minimum, the type of treatment proposed, treatment locations, number and locations of groundwater monitoring boreholes (pre-trial, during the trial, and post-trial), and a programme (including dates) and methodology for undertaking the works and preparing a completion report. The pilot scale PFOS and PFOA groundwater remediation treatment scheme shall be carried out in accordance with the approved details.

Reason - to ensure an appropriate groundwater remediation treatment pilot scheme in the interests of the protection and prevention of the pollution of controlled waters, and protection of human health, from potential pollutants associated with current and previous land uses in accordance with National Planning Policy Framework (NPPF) paragraphs 170, 178, & 179 (2019), the Environment Agency Groundwater Protection Position Statement (The Environment Agency's Approach to Groundwater Protection, Feb 2018, version 1.2), the objectives of policies CC/7 & SC/11 of the South Cambridgeshire District Council Local Plan, and policies 33 & 31 of the Cambridge City Local Plan.

69. CONTAMINATION: IMPEMENTATION AND COMPLETION OF GROUNDWATER REMEDIATION PILOT TRIAL

No development shall commence until the pilot-scale PFOS & PFOA groundwater remediation treatment scheme approved by condition X above has been fully implemented in accordance with the agreed schedule of works/measures and a completion report detailing the results and an assessment of the performance of the pilot scheme, together with any recommendations and further actions required, has been submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure that the groundwater remediation treatment pilot scheme is deliverable and able to protect and prevent the pollution of controlled waters, and to protect human health, from potential pollutants associated with current and previous land uses in accordance with National Planning Policy Framework (NPPF) paragraphs 170, 178, & 179 (2019), the Environment Agency Groundwater Protection Position Statement (The Environment Agency's Approach to Groundwater Protection, Feb 2018, version 1.2), the objectives of policies CC/7 & SC/11 of the South Cambridgeshire District Council Local Plan, and policies 33 & 31 of the Cambridge City Local Plan.

70. CONTAMINATION: SUBMISSION OF SITE WIDE INVESTIGATION REPORT

Prior to the commencement of development all further site investigation and/or groundwater monitoring as identified in the Pilot Trial Completion Report approved pursuant to condition X shall be undertaken and a final site-wide site investigation report detailing all works that have been undertaken to determine the nature and extent of all contamination, including the results of the soil, gas and/or water analysis and subsequent risk assessment to any receptors, shall be submitted to and approved in writing by the Local Planning Authority.

Reason: In the interests of the protection and prevention the pollution of controlled waters, and the protection of human health, from potential pollutants associated with current and previous land uses in accordance with National Planning Policy Framework (NPPF) paragraphs 170, 178, & 179 (2019), the Environment Agency Groundwater Protection Position Statement (The Environment Agency's Approach to Groundwater Protection, Feb 2018, version 1.2), the objectives of policies CC/7 & SC/11 of the South Cambridgeshire District Council Local Plan, and policies 33 & 31 of the Cambridge City Local Plan.

71. CONTAMINATION: SUBMISSION OF REMEDIATION STRATEGY

Prior to the commencement of development a Remediation Strategy prepared in accordance with the recommendations set out in the Remediation Options Sustainability Assessment (Rev D) dated 2 December 2019 submitted in support of the planning application; the recommendations contained in Chapter 12 of the Environmental Statement dated March 2019; and the findings of the Pilot Trial Completion Report approved pursuant to condition X shall be submitted to and approved in writing by the Local Planning Authority.

The Remediation Strategy shall detail the works and measures, both within and outside of the application site boundary within the ownership and control of the applicants, required in order to bring the site (including controlled waters) to a condition suitable for the intended use. The strategy shall include a schedule and phasing plan for the proposed remediation works and measures (setting out a programme for the phased delivery of all remediation activities in respect of each Development Parcel and Strategic Engineering and Landscaping Element that will be implemented and including any monitoring and maintenance that may be required) and a plan for the reuse of site-won soils (if applicable).

The remediation activities identified by the approved strategy shall be fully implemented on each Development Parcel and Strategic Engineering and Landscaping Element in accordance with the approved details and programme and in each case (save for ongoing maintenance and monitoring) prior to the occupation of any residential dwelling on that Development Parcel or prior to the first use of that Strategic Engineering and Landscaping Element. Any monitoring and maintenance requirements in respect of such Development Parcel or Strategic Engineering and Landscaping Element identified by the approved strategy shall be fully implemented on such Development Parcel or Strategic Engineering and Landscaping Element thereafter.

Reason: To ensure that the site-wide remediation strategy is able to protect and prevent the pollution of controlled waters, and to protect human health, from potential pollutants associated with current and previous land uses in accordance with National Planning Policy Framework (NPPF) paragraphs 170, 178, & 179 (2019), the Environment Agency Groundwater Protection Position Statement (The Environment Agency's Approach to Groundwater Protection, Feb 2018, version 1.2), the objectives of policies CC/7 & SC/11 of the South Cambridgeshire District Council Local Plan, and policies 33 & 31 of the Cambridge City Local Plan.

72. CONTAMINATION: SITE WIDE MAINTENANCE AND MONITORING SCHEME

No development shall commence until a site-wide maintenance and monitoring scheme has been submitted to and approved in writing by the Local Planning Authority. The site-wide maintenance and monitoring scheme shall contain:

- a) the methodology to achieve the effective on-going monitoring and the maintenance of the groundwater remediation works including arrangements for contingency if the remediation proves ineffective or unworkable;
- b) Details of the management body or bodies which will be appointed to undertake the monitoring and maintenance required by the approved scheme; and
- c) Details of the funding mechanism to deliver the long-term requirements of the approved scheme.

Reason: To maintain protection of controlled waters from potential pollutants, in line with National Planning Policy Framework (NPPF), Environment Agency Groundwater Protection: Principles and Practice (GP3) and the objectives of policy of policy CC/7

and SC/11 of the South Cambridgeshire District Council Local Plan, policy 33 and 31 of the Cambridge City Local Plan.

73. CONTAMINATION: COMPLETION/VERIFICATION REPORT

Prior to the first occupation of any residential dwelling on each Development Parcel or first use of a Strategic Engineering and Landscaping Element the following shall be submitted to, and approved in writing by the Local Planning Authority:

- a) A completion report demonstrating that (save for ongoing maintenance and monitoring) the approved site-wide remediation strategy has been fully implemented for that Development Parcel or Strategic Engineering and Landscaping Element and that the site of Development Parcel or Strategic Engineering and Landscaping Element (as applicable) has been remediated to a standard appropriate for the proposed end use.
- b) Details verifying the suitability of materials (soils and aggregates) brought onto, reused, and removed from the Development Parcel or Strategic Engineering and Landscaping Element shall be included in the completion/verification report along with full details of the proposed post-remedial monitoring and maintenance scheme required to monitor the long-term effectiveness of the remediation strategy in respect of the relevant Development Parcel or Strategic Engineering and Landscaping Element over the lifetime of the development.

Thereafter, the approved post-remedial monitoring and maintenance scheme shall be fully implemented in respect of the relevant Development Parcel or Strategic Engineering and Landscaping Element and no works shall take place within the relevant part of the site such as to prejudice the effectiveness of the approved and implemented remediation strategy in respect of that part of the site.

Reason: To protect and prevent the pollution of controlled waters, and to protect human health, from potential pollutants associated with current and previous land uses in line with National Planning Policy Framework (NPPF) paragraphs 170, 178, & 179, the latest Environment Agency Groundwater Protection Position Statement (The Environment Agency's Approach to Groundwater Protection, Feb 2018, version 1.2), the objectives of policies CC/7 & SC/11 of the South Cambridgeshire District Council Local Plan, and policies 33 & 31 of the Cambridge City Local Plan.

74. UNEXPECTED CONTAMINATION

If unexpected contamination is encountered whilst undertaking the development which has not previously been identified, works shall immediately cease on the relevant part of the site until the Local Planning Authority has been notified and the additional contamination has been fully assessed and remediation approved. The approved remediation shall then be fully implemented under condition X.

Reason: To protect and prevent the pollution of controlled waters, and to protect human health, from potential pollutants associated with current and previous land uses in accordance with National Planning Policy Framework (NPPF) paragraphs 170, 178, & 179 (2019), the Environment Agency Groundwater Protection Position Statement

(The Environment Agency's Approach to Groundwater Protection, Feb 2018, version 1.2), the objectives of policies CC/7 & SC/11 of the South Cambridgeshire District Council Local Plan, and policies 33 & 31 of the Cambridge City Local Plan.

75. MATERIALS MANAGEMENT PLAN

Prior to the importation and/or exportation of material (soils and aggregates) necessary for the development of each Development Parcel or Strategic Engineering and Landscaping Element, a Materials Management Plan (MMP) in respect of such Development Parcel or Strategic Engineering and Landscaping Element shall be submitted to and approved in writing by the Local Planning Authority. Each MMP shall:

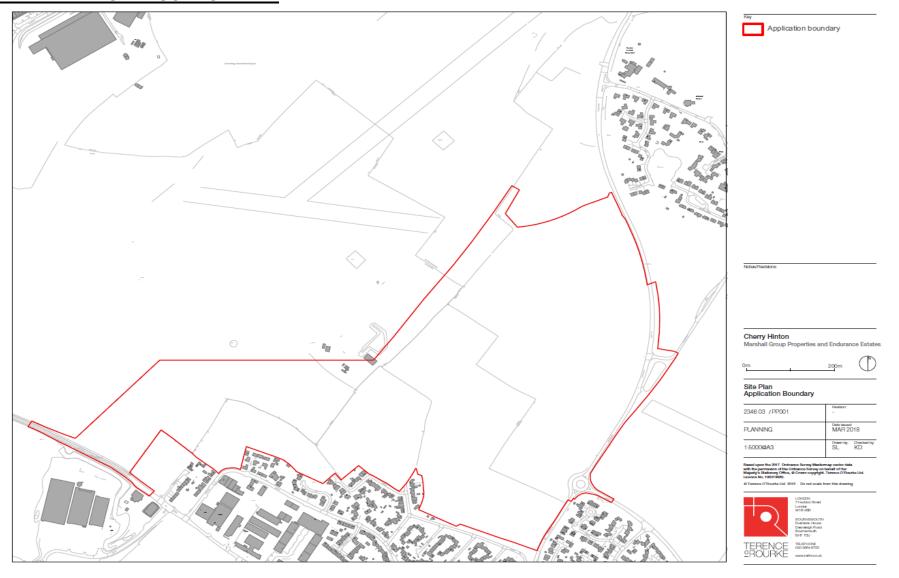
- (a) Include details of the volumes and types of such material proposed to be imported and/or exported from the relevant part of the site
- (b) Include details of the management of the haulage of such materials proposed to be imported and/or exported from the relevant part of the site with respect to local air quality and loss of amenity to nearby residents from associated noise, dust, odour, and light emissions.
- (c) Include details of the proposed source(s) of such imported material in respect of the relevant part of the site.
- (d) Include details of the chemical testing for all such imported materials to be undertaken before placement onto the relevant part of the site.
- (e) Include the results of the chemical testing of contaminants which must show the relevant material is suitable for use on the relevant part of the development.
- (f) Include confirmation of the chain of evidence to be kept during the importation and/or exportation of all such materials necessary for the development and the movement and placement of all reused site-won materials in respect of the relevant part of the site.

All works on each Development Parcel or Strategic Engineering and Landscaping Element will be undertaken in accordance with the relevant approved MMP.

Reason: To protect and prevent the pollution of controlled waters, and to protect human health, from potential pollutants associated with current and previous land uses in accordance with paragraphs 170, 178, & 179 of the NPPF (2019), the Environment Agency Groundwater Protection Position Statement (The Environment Agency's Approach to Groundwater Protection, Feb 2018, version 1.2), the objectives of policies CC/7 & SC/11 of the South Cambridgeshire Local Plan, and policies 33 & 31 of the Cambridge Local Plan.



APPENDIX F - SITE LOCATION PLAN



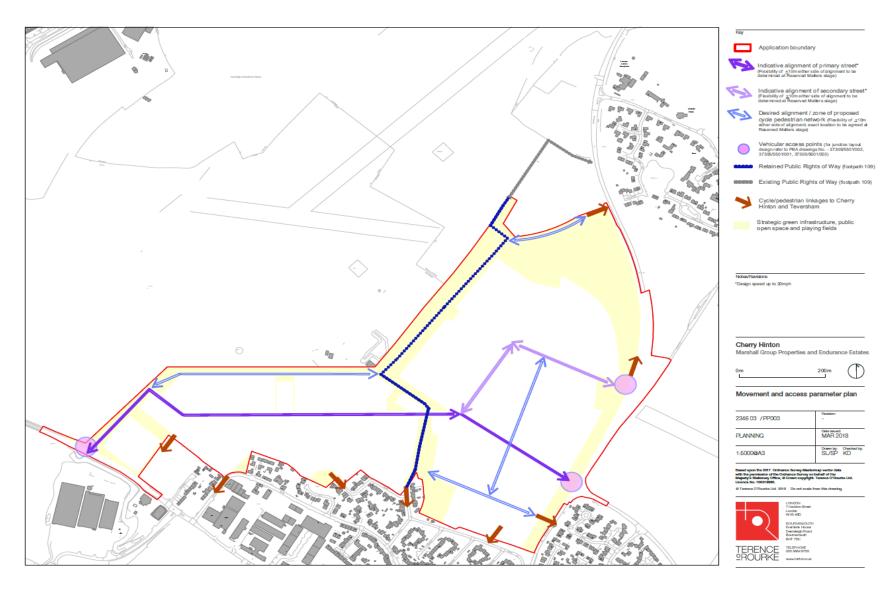
Appendix F – Site Location Plan

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APPENDIX G – PARAMETER PLANS



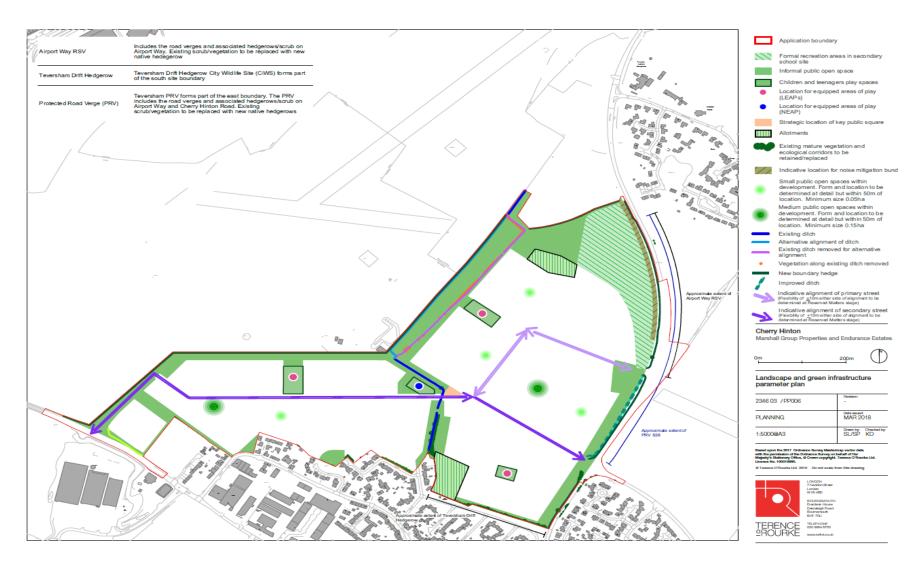
Land Use Parameter Plan



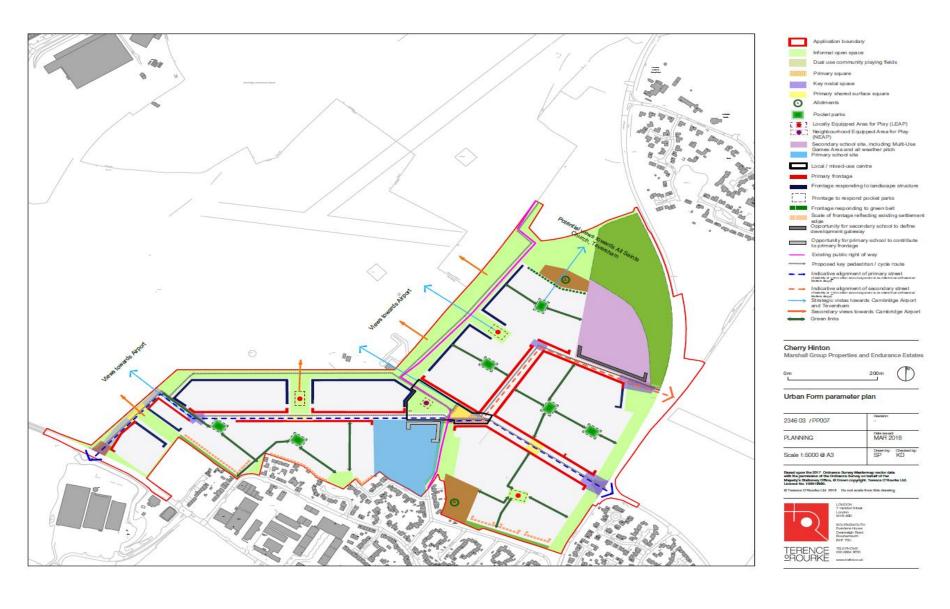
Movement and Access Parameter Plan



Building Heights Parameter Plan



Landscape and Green Infrastructure Parameter Plan



Urban Form Parameter Plan

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APPENDIX H – INDICATIVE MASTERPLAN



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APPENDIX I

PLANNING CONSULTATION RESPONSE

Responding Officer / Team:	Environmental Quality and Growth Team (EQG) Environmental Services, Cambridge City Council As the application development site area covers and includes land within the jurisdiction of both Cambridge City Council (CCiC) and South Cambridgeshire District Council (SCDC) administrative boundaries this is an agreed joint / collective environmental health related response on behalf of officers from both authorities.
Date:	2nd March 2020
Planning Ref No:	18/0481/OUT (CCiC) & S/1231/18/OL (SCDC)
M3 Ref No:	WK/201978956 & WK/201856192
Description of Development:	Land North Of Cherry Hinton (LNCH), Coldhams Lane, Cambridge, Cambridgeshire Outline planning application (all matters reserved except for means of access in respect of junction arrangements onto Coldhams Lane, Cherry Hinton Road and Airport Way) for a maximum of 1200 residential dwellings (including retirement living facility (within Use Class C2/C3), a local centre comprising uses within Use Class A1/A2/A3/A4/A5/B1a/D1/D2, primary and secondary schools, community facilities, open spaces, allotments, landscaping and associated infrastructure. Amendments to the above application: 1) Additional information submitted by covering letter dated 06 December 2019: Remediation Options Sustainability Statement (Mott Macdonald 02.12.19) Proposed draft conditions, reasons and Section 106 obligations in relation to ground conditions (04.12.19) Note of meeting dated 30.10.19 attended by Council officers, Environment Agency and Applicant Team Response to Environment Agency queries (LDA Design) Environment Statement Review (LDA Design November 2019)

2) Additional information submitted by covering letter dated 29 March 2019:

- The information addresses changes to planning policy at national and local levels, since the application was originally submitted in March 2018.
- It also addresses issues raised during the original consultation process, by providing further technical information and supporting documentation.
- The main content of the application, parameter plans and conclusions have not changed.
- For further information in respect of the proposed changes, please refer to the updated Planning Statement (March 2019).
 The revisions have been highlighted in yellow for ease of reference.

Cross one:

X	The development proposed is acceptable subject to the imposition of the condition(s)/informative(s) outlined below for the environmental health issues / topics as detailed.
	The development proposed is unacceptable and should be refused for the reason(s) set out below.
	It is not possible to comment on the proposed development and the additional information set out below will be required in order to provide comments.

This response is our final detailed comments and position having reviewed submissions to date and supersedes our previous planning consultation response memos dated the 23rd August 2019 (our M3 Ref No: WK/201856192) and 18th June 2018 (our M3 Ref No: WK/201856192) respectively.

We have the following comments to make and where appropriate officers have recommended draft conditions / informatives for topic assessments that are found to be acceptable in principle, subject to final agreement.

It is understood that a full list of conditions and associated informatives are likely to be drafted and circulated in due course, for further detailed comment and final agreement.

Please contact the following officers for further guidance in connection with their relevant field:

- Construction Environmental Pollution, Operational Noise, Odour, Artificial Lighting and any other additional Operational Issues - contact: Greg Kearney, Environmental Health Officer - 01223 457891
- Contaminated Land contact: David Abiorwerth, Scientific Officer 01223 457661
 - Air Quality contact: Elizabeth Bruce, Scientific Officer- 01223 457926

List of required conditions/Informatives:

Standard conditions:

CC64 - Details of contractor Operations (Could be incorporated into SW-DCEMP bespoke condition as an item if not already)

• Bespoke conditions:

Construction Phase Environmental Impacts / Pollution

Site Wide Demolition and Construction Environmental Management Plan (SW-DCEMP)

Prior to the commencement of any development, a Site Wide Demolition and Construction Environmental Management Plan (SW- DCEMP) shall be submitted to and approved in writing by the local planning authority. The DCEMP shall include the consideration of the following aspects of demolition and construction:

- a) Demolition, construction and phasing programme.
- b) Contractors' access arrangements for vehicles, plant and personnel including the location of construction traffic routes to, from and within the site, details of their signing, monitoring and enforcement measures.
- c) Construction/Demolition works and the operation of related plant / equipment including maintenance and checking shall only be carried out between 0800 hours to 1800 hours Monday to Friday, and 0800 hours to 1300 hours on Saturday and at no time on Sundays, Bank or Public Holidays (core construction/demolition hours), unless in accordance with agreed emergency procedures for deviation and agreed prior notice and agreement procedures for works outside agreed limits and hours.
- d) Deliveries and collections / dispatches for construction/demolition purposes shall only be carried out between 0800 to 1800 hours Monday to Friday, 0800 to 1300 hours on Saturdays and at no time on Sundays, bank or public holidays (core construction/demolition delivery and collection / dispatch hours), unless otherwise agreed in writing by the local planning authority in advance.
- e) Soil / Materials Management Strategy having particular regard to potential contaminated land and the reuse and recycling of soil on site, the importation and storage of soil and materials including audit trails.
- f) Noise impact assessment methodology, mitigation measures, noise monitoring and recording statements / procedures in accordance with the provisions of BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites. Noise (or as superseded).
- g) Vibration impact assessment methodology, mitigation measures, vibration monitoring and recording statements / procedures in accordance with the provisions of BS 5228-2: 2009+A1:2014 Code of practice for noise and vibration

- control on construction and open sites. Vibration (or as superseded). Details of any foundation piling construction methods / options, as appropriate.
- h) Dust management / monitoring plan and wheel washing measures. Non-Road Mobile Machinery (NRMM), demolition or construction works or similar emissions standards. Confirmation of use of concrete crushers.
- i) Prohibition of the burning of waste on site during demolition/construction.
- j) Site artificial lighting. Site artificial lighting during construction and demolition including hours of operation, position and impact on neighbouring properties.
- k) Drainage control measures including the use of settling tanks, oil interceptors and bunds.
- I) Screening and hoarding details.
- m) Access and protection arrangements around the site for pedestrians, cyclists and other road users.
- n) Procedures for interference with public highways, including permanent and temporary realignment, diversions and road closures.
- o) External safety and information signing and notices.
- p) Consideration of sensitive receptors.
- q) Prior notice and agreement procedures for works outside agreed limits or protocols including core construction/demolition and construction/demolition delivery and collection / dispatch hours.
- r) Implementation of a Stakeholder Engagement / Residents Communication Plan-CEMP Monitoring, Review and Complaints procedures, including complaints response.
- s) Membership of the City Council's and or national Considerate Contractors Scheme.

Thereafter all phases of the development - "Enabling Works", "Strategic Engineering or Landscaping Elements", and "Development Parcels", shall be undertaken in accordance with the approved Site Wide DCEMP.

With Each Reserved Matters Application: Site Specific - Construction Method Statement (SS-CMS) or Site Specific Construction and Environmental Management Plan (SS-CEMP)

Prior to the commencement of development on any Strategic Engineering / Landscaping Element and Development Parcel (apart from Enabling Works), a Strategic Engineering / Landscaping Element and Development Parcel Site Specific Demolition Construction and Environmental Management Plan (SS-DCEMP) shall be submitted to and approved in writing by the local planning authority for that element or Development Parcel.

The SS-DCEMP shall demonstrate how the demolition / construction of the reserved matters approval accords with the construction criteria a) to s) of the approved site wide Demolition and Construction Environmental Management Plan (SW-DCEMP). In addition to criteria a) to s), the SS-DCEMP shall also provide a specific construction programme and plan identifying: the contractor site storage area/compound; screening and hoarding locations; access arrangements for vehicles, plant and personnel; building material, plant and equipment storage areas; contractor parking arrangements for construction and personnel vehicles; and the location of the contractor offices.

Thereafter the development of the Strategic Engineering / Landscaping Element and Development Parcel shall be undertaken in accordance with the relevant approved SS-DCEMP.

Noise and Vibration –Operational

Development Parcel - Noise Impact Assessment with Acoustic Design and Noise Insulation / Mitigation Scheme Report: Residential & Noise-Sensitive Uses

Within any Reserved Matters application for a Development Parcel which includes residential type or other noise-sensitive uses including schools, other educational establishments and public open spaces a Noise Impact Assessment with Acoustic Design and Noise Insulation / Mitigation Scheme Report to protect the said noise sensitive development / uses internally and externally where applicable, from the following sources of noise, shall be submitted to and approved in writing by the Local Planning Authority:

- Existing / future local transport noise in the area (including aircraft associated with Cambridge City Airport and road traffic from Airport Way / Cherry Hinton Road / Teversham Drift, Coldhams Lane / the A14);
- Other activity / operations taking place at / within Cambridge City Airport, including aircraft engine ground running testing;
- Any industrial, commercial and business premises at Coldhams Business Park, Norman Way;
- Any proposed / future local transport noise associated with internal roads / streets / highways of the approved development itself; and
- Any proposed / future industrial, commercial, business, education or community premises and uses including local centres and sports / recreational uses and areas of play of the approved development itself.

The Noise Impact Assessment with Acoustic Design and Noise Insulation / Mitigation Scheme Report for each Reserved Matters application for a Development Parcel which includes noise sensitive uses shall include a site specific Noise Impact Assessment of noise impacts (by a combination of noise monitoring and prediction / modelling), the acoustic design approach that will be followed and specific details of the noise insulation / mitigation measures / features to be used and implemented, to achieve acceptable internal and external noise levels.

The report and scheme shall include careful consideration of the following:

Phasing and build out time of various reserved matters application phases;

- Aircraft engine ground running testing within the ground running enclosure (GRE) at Cambridge City Airport approved under Cambridge City Council planning permission ref. 16/2212/FUL (having regard to and low frequency noise characteristics) as part of external building envelope sound reduction performance;
- The need to provide an alternative form of fresh air ventilation (mechanical or acoustically attenuated passive ventilation free areas of sufficient size) to achieve a minimum of 2 to 4 air changes per hour (ACH) in habitable rooms, when opening external windows and doors would result in unacceptable internal noise levels; and
- Timescale for phased implementation;

The relevant Reserved Matters Application for each Development Parcel shall be constructed and completed in accordance with the approved Noise Impact Assessment with Acoustic Design and Noise Insulation / Mitigation Scheme Report for such Development Parcel and any scheme measures and any alternative form of ventilation provision as required in respect of a residential unit or noise sensitive building on such Development Parcel as part of the scheme shall be fully implemented prior to occupation that building on such Development Parcel and shall be maintained and retained thereafter.

REASON: To avoid noise from giving rise to significant adverse impacts on health and quality of life and to mitigate and reduce to a minimum potential adverse impacts on noise-sensitive uses to secure acceptable internal and external living conditions in accordance with paragraphs 170 e) 180 a) and 182 of the National Planning Policy Framework (NPPF, February 2019), policies CE/10 Road Infrastructure and CE/26 Noise of the Cambridge East Area Action Plan Adopted February 2008, policies SS/3: Cambridge East, HQ/1: Design Principles and SC/10: Noise Pollution of the South Cambridgeshire Local Plan, Adopted September 2018 and policies 13: Cambridge East and 35: Protection of human health and quality of life from noise and vibration of the Cambridge Local Plan, October 2018.

Operational Noise Assessment and Insulation/Mitigation/Management Scheme – Non Residential Uses

Within any reserved matters application for a Development Parcel which includes / incorporating planning class uses other than residential (e.g. non-residential use classes including employment areas, industrial / commercial / business / retail units, waste recycling facilities, schools / educational establishments, community buildings /local centres, markets, recreational uses such as sports, games and play areas including associated operational plant and equipment), an operational noise impact assessment of these uses on proposed and existing noise-sensitive uses, including, where appropriate, a scheme for the noise insulation of any building(s) or use(s) / activities and plant / equipment and consideration of other noise mitigation and management measures (location / layout, engineering and administrative) to minimise the level of noise emanating from the said building(s), use(s) / activities and plant / equipment shall be submitted to and approved in writing by the local planning authority.

The approved noise insulation / mitigation and management scheme shall be fully constructed, completed and implemented before the relevant building(s) are occupied, uses / activities are commenced or plant / equipment are operated / used and shall be maintained and retained thereafter.

REASON: To avoid noise from giving rise to significant adverse impacts on health and quality of life and to mitigate and reduce to a minimum potential adverse impacts on proposed and existing noise-sensitive uses resulting from noise and secure acceptable living conditions in accordance with paragraphs 170 e) and 180 a) of the National Planning Policy Framework (NPPF, February 2019), policies CE/10 Road Infrastructure and CE/26: Noise of the Cambridge East Area Action Plan Adopted February 2008, policies SS/3: Cambridge East, HQ/1: Design Principles and SC/10: Noise Pollution of the South Cambridgeshire Local Plan, September 2018 and policies 13: Cambridge East and 35: Protection of human health and quality of life from noise and vibration of the Cambridge Local Plan, October 2018.

Artificial Lighting Design Scheme - Bespoke Condition

Artificial Lighting Design Scheme – Operational

Within any reserved matters application for a Strategic Engineering or Landscaping Element or Development Parcel with any artificial lighting such as street, car park, floodlighting, security and building lighting, an artificial lighting design scheme with detailed impact assessment and a programme for delivery, shall be submitted to and approved in writing by the local planning authority. The scheme shall include details of any artificial lighting to be installed on site and a horizontal / vertical isolux artificial lighting impact assessment with predicted lighting levels at existing and future residential properties shall be undertaken (including luminaire type / profiles, mounting location / height, aiming angles / orientation, angle of glare, operational controls, horizontal / vertical isolux contour light levels and calculated glare levels to receptors - direct source luminance / luminous intensity in the direction and height of any sensitive residential receiver.

Artificial lighting on and off site shall meet the Obtrusive Light Limitations for Exterior Lighting Installations for an Environmental Zone - E2 in accordance with the Institute of Lighting Professionals - Guidance Notes for the Reduction of Obtrusive Light - GN01:2011 (or as superseded) and any mitigation measures to contain and reduce to a minimum potential artificial light spill and glare shall be detailed / specified.

The artificial lighting design scheme shall be in accordance with the principles and approach detailed in the submitted Environmental Statement (UPDATED), March 2019 - Appendix 5.7: 'Land North of Cherry Hinton - Lighting Assessment (Project Ref: 37305 / Rev: 04/ Date: March 2019 & Doc Ref: 3005)'.

The artificial lighting design scheme as approved shall be fully implemented prior the use of artificial lighting commencing or occupation, whichever is first and shall be maintained and retained thereafter.

Reason: To limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation in accordance with paragraph 180 c) of the National Planning Policy Framework (NPPF, February 2019), policy SC/9: Lighting Proposals of the South Cambridgeshire Local Plan, September 2018 and policy 34: Light pollution control of the Cambridge Local Plan, October 2018.

Air Quality - Operational - Bespoke Conditions

Combustion Appliances – Low Emissions (CHP and Low NOx)

Prior to the installation of any gas fired combustion appliances for any development, technical details and information demonstrating the use of low Nitrogen Oxide (NOx) combustion boilers, i.e. individual gas fired boilers that meet a dry NOx emission rating of ≤40mg/kWh, to minimise emissions from the development that may impact on air quality, shall be submitted to and approved in writing by the Local Planning Authority.

If the proposals include any gas fired Combined Heat and Power (CHP) System, technical details and information demonstrating that the system meets the following emissions standards for various engines types shall be submitted for approval in writing by the Local Planning Authority:

- Spark ignition engine: less than or equal to 150 mg NOx/Nm3
- Compression ignition engine: less than 400 mg NOx/Nm3
- Gas turbine: less than 50 mg NOx/Nm3

The details shall include a manufacturers Nitrogen Oxides (NOx) emission test certificate or other evidence to demonstrate that every boiler installed meets the emissions standards above.

The scheme details as approved shall be fully installed and operational before first occupation and shall be maintained and retained thereafter for the life of that gas fired combustion appliance. Any replacement gas fired combustion appliances shall meet the same or better emissions standards.

Reason: To protect local air quality and human health by ensuring that the production of air pollutants such as nitrogen dioxide and particulate matter are kept to a minimum during the lifetime of the development, to contribute toward National Air Quality Objectives in accordance with the requirements of the National Planning Policy Framework (NPPF, 2019) paragraphs 170 and 181, policy CE/27 Air Quality of the Cambridge East Area Action Plan 2008, policy SC/12: Air Quality of the South Cambridgeshire Local Plan, September 2018, policy 36- Air Quality, Odour and Dust of the Cambridge Local Plan, October 2018 and Cambridge City Councils adopted Air Quality Action Plan (2018).

Pre-Commencement: Site Wide Electric Vehicle (EV) Charge Point Provision and Infrastructure Strategy (Local Air Quality related)

Prior to the commencement of development, a 'Site Wide Electric Vehicle Charging Point Provision and Infrastructure Strategy' including an implementation plan shall be submitted to and approved in writing by the Local Planning Authority.

The strategy shall be appropriate for the proposed end use(s) of the development and shall provide full details of the provision of allocated parking spaces for dedicated electric vehicle charging in line with the principles set out in the National Planning Policy Framework, the Cambridge Local Plan and Cambridge City Council's Air Quality Action Plan. The strategy shall include consideration of both active (slow, fast and rapid) and passive electric vehicle charge point provision and design to enable the charging of electric vehicles in safe, accessible and convenient locations.

The Strategy shall include the following principles which are to be applied to the detailed design of the Development Parcels as they come forward:

- 100% provision of a dedicated active slow electric vehicle charge point with a minimum power rating output of 7kW for each residential dwelling with allocated / dedicated on-plot parking;
- Minimum 50% provision of dedicated active slow electric vehicle charge points with a minimum power rating output of 7kW for residential dwellings with communal and courtyard parking;
- Dedicated slow electric vehicle charge points with a minimum power rating output of 7kW for at least 50% of non-residential parking spaces and
- Either at least one Rapid electric vehicle charge point for each 1,000m² non-residential floorspace, or at least one Fast electric vehicle charge point for each 1,000m² non-residential floorspace, should a Rapid charge point not be technically feasible
- The rapid and/or fast electric vehicle charge point parking spaces shall be exclusively reserved for electric vehicle charging.
- Additional passive electric vehicle charge provision of the necessary infrastructure including capacity in the connection to the local electricity distribution network and electricity distribution board, as well as the provision of cabling to parking spaces for all remaining car parking spaces to facilitate and enable the future installation and activation of additional active electric vehicle charge points as required.
- Electric vehicle charge points shall be compliant with BS7671 and BS EN IEC 61851-1:2019 or as superseded / replaced as applicable at the time for each subsequent Reserve Matters application.

Reason: In the interests of encouraging more sustainable modes and forms of transport and to reduce the impact of development on local air quality, in accordance with the National Planning Policy Framework (NPPF, 2019) paragraphs 105, 110, 170 and 181, policy CE/27 Air Quality of the Cambridge East Area Action Plan 2008, policy SC/12: Air Quality of the South Cambridgeshire Local Plan, September 2018, policy 36 - Air Quality, Odour and Dust of the Cambridge Local Plan (October, 2018) and Cambridge City Council's adopted Air Quality Action Plan (2018).

With Reserved Matters Application Submission: Electric Vehicle (EV) Charge Point Provision and Infrastructure Scheme Strategy Delivery (Local Air Quality related)

With each reserved matters application for any development parcel, an Electric Vehicle Charge Point Provision and Infrastructure Scheme that demonstrates compliance with the over-arching 'Site Wide Electric Vehicle Charging Point Provision and Infrastructure Strategy' approved under condition INSERT NO / title- above shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall include full details of the number, location, unit design, charge time (slow, fast and rapid) , installation, compliance with relevant BS7671 and BS61851 or other relevant standards at that time, management and maintenance of the electric vehicle charge points (active and passive) and how the uptake of electric vehicle charge points will be monitored in order to determine the activation of passive spaces in the future.

The electric vehicle charge point provision and infrastructure scheme for each reserved matters application for any development parcel shall be fully implemented in accordance with the approved scheme details prior to occupation and maintained and retained thereafter.

Reason: In the interests of encouraging more sustainable modes and forms of transport and to reduce the impact of development on local air quality, in accordance with the National Planning Policy Framework (NPPF, 2019) paragraphs 105, 110, 170 and 181, policy CE/27 Air Quality of the Cambridge East Area Action Plan 2008, policy SC/12: Air Quality of the South Cambridgeshire Local Plan, September 2018, policy 36 - Air Quality, Odour and Dust of the Cambridge Local Plan (October, 2018) and Cambridge City Council's adopted Air Quality Action Plan (2018).

Car Clubs – Site Wide (or by S106 Obligation as appropriate)

Prior to commencement of the development, a site-wide car club parking and membership strategy shall be submitted to and approved in writing by the Local Planning Authority.

The strategy shall include the provision of a minimum of one car club vehicle with one dedicated car club parking space per 500 dwellings in new residential developments and/or one vehicle per 10,000 m2 in non-residential developments. The dedicated parking space shall be for the exclusive use of car club vehicle(s). The car club parking spaces shall be provided in accordance with the approved strategy prior to the first occupation of the development and shall be maintained and retained thereafter.

Reason: In the interests of encouraging more sustainable modes and forms of transport and to reduce the impact of development on local air quality, in accordance with the National Planning Policy Framework (NPPF, 2019) paragraph 105, 110, 170 and 181, Policy 36 of the Cambridge Local Plan (2018) and Cambridge City Council's adopted Air Quality Action Plan (2018), Policy SC/12 and Tl/2 of the South Cambridgeshire Local Plan (2018).

Odour / Fume Generation & Control / Building Ventilation - Non-residential premises / uses - Operational

With Reserved Matters Application Submission: Odour / Fume Generation & Control / Building Ventilation - Non-residential premises / uses - Operational

Prior to, or concurrently with the submission of any detailed reserved matters application for any development parcel with non-residential premises / uses, a ventilation scheme to include details of equipment and systems for the purpose of extraction, filtration and abatement of odours and fumes to discharge at an appropriate outlet height / level and the standard of dilution / dispersion expected, shall be submitted to and approved in writing by the local planning authority.

The approved extraction/filtration/abatement ventilation scheme shall be installed before the non-residential premises / use hereby permitted is commenced and shall be fully maintained in accordance with the manufacturer specifications / instructions to ensure its continued satisfactory operation and retained thereafter.

Reason: To protect the amenity of nearby properties from malodour or fumes in accordance with policy CE/27: Air Quality of the Cambridge East Area Action Plan 2008, policy SC/14: Odour and Other Fugitive Emissions to Air of the South Cambridgeshire Local Plan, Adopted September 2018 and policy 36: Air quality, odour and dust of the Cambridge Local Plan, October 2018

Pre-Commencement Conditions - Groundwater Remediation Pilot Trial

Design of Groundwater Remediation Pilot Trial

No development shall commence until a schedule of works containing the design details for a pilot-scale perfluorooctanesulfonic acid (PFOS) and perfluorooctanonic acid (PFOA) groundwater remediation treatment scheme has been submitted to and approved in writing by the Local Planning Authority. Such details shall include, as a minimum, the type of treatment proposed, treatment locations, number and locations of groundwater monitoring boreholes (pre-trial, during the trial, and post-trial), and a programme (including dates) and methodology for undertaking the works and preparing a completion report. The pilot scale PFOS and PFOA groundwater remediation treatment scheme shall be carried out in accordance with the approved details.

Reason - to ensure an appropriate groundwater remediation treatment pilot scheme in the interests of the protection and prevention of the pollution of controlled waters, and protection of human health, from potential pollutants associated with current and previous land uses in accordance with National Planning Policy Framework (NPPF) paragraphs 170, 178, & 179 (2019), the Environment Agency Groundwater Protection Position Statement (The Environment Agency's Approach to Groundwater Protection, Feb 2018, version 1.2), the objectives of policies CC/7 & SC/11 of the South Cambridgeshire District Council Local Plan, and policies 33 & 31 of the Cambridge City Local Plan.

Implementation & Completion of Groundwater Remediation Pilot Trial

No development shall commence until the pilot-scale PFOS & PFOA groundwater remediation treatment scheme approved by condition X has been fully implemented in accordance with the agreed schedule of works/measures and a completion report detailing the results and an assessment of the performance of the pilot scheme, together with any recommendations and further actions required, has been submitted to and approved in writing by the Local Planning Authority.

Reason - to ensure that the groundwater remediation treatment pilot scheme is deliverable and able to protect and prevent the pollution of controlled waters, and to protect human health, from potential pollutants associated with current and previous land uses in accordance with National Planning Policy Framework (NPPF) paragraphs 170, 178, & 179 (2019), the Environment Agency Groundwater Protection Position Statement (The Environment Agency's Approach to Groundwater Protection, Feb 2018, version 1.2), the objectives of policies CC/7 & SC/11 of the South Cambridgeshire District Council Local Plan, and policies 33 & 31 of the Cambridge City Local Plan.

<u>Pre-Commencement Conditions – Site-Wide Site Investigation & Remediation Strategy</u>

Submission of Site Investigation Report

Prior to the commencement of development all further site investigation and/or groundwater monitoring as identified in the Pilot Trial Completion Report approved pursuant to condition X shall be undertaken and a final site-wide site investigation

report detailing all works that have been undertaken to determine the nature and extent of all contamination, including the results of the soil, gas and/or water analysis and subsequent risk assessment to any receptors, shall be submitted to and approved in writing by the Local Planning Authority.

Reason –in the interests of the protection and prevention the pollution of controlled waters, and the protection of human health, from potential pollutants associated with current and previous land uses in accordance with National Planning Policy Framework (NPPF) paragraphs 170, 178, & 179 (2019), the Environment Agency Groundwater Protection Position Statement (The Environment Agency's Approach to Groundwater Protection, Feb 2018, version 1.2), the objectives of policies CC/7 & SC/11 of the South Cambridgeshire District Council Local Plan, and policies 33 & 31 of the Cambridge City Local Plan.

Submission of Remediation Strategy

Prior to the commencement of development a Remediation Strategy prepared in accordance with the recommendations set out in the Remediation Options Sustainability Assessment (Rev D) dated 2 December 2019 submitted in support of the planning application: the recommendations contained in Chapter 12 of the Environmental Statement dated March 2019; and the findings of the Pilot Trial Completion Report approved pursuant to condition X shall be submitted to and approved in writing by the Local Planning Authority. The Remediation Strategy shall detail the works and measures, both within and outside of the application site boundary within the ownership and control of the applicants, required in order to bring the site (including controlled waters) to a condition suitable for the intended use. The strategy shall include a schedule and phasing plan for the proposed remediation works and measures (setting out a programme for the phased delivery of all remediation activities in respect of each Development Parcel and Strategic Engineering and Landscaping Element that will be implemented and including any monitoring and maintenance that may be required) and a plan for the reuse of site-won soils (if applicable). The remediation activities identified by the approved strategy shall be fully implemented on each Development Parcel and Strategic Engineering and Landscaping Element in accordance with the approved details and programme and in each case (save for ongoing maintenance and monitoring) prior to the occupation of any residential dwelling on that Development Parcel or prior to the first use of that Strategic Engineering and Landscaping Element. Any monitoring and maintenance requirements in respect of such Development Parcel or Strategic Engineering and Landscaping Element identified by the approved strategy shall be fully implemented on such Development Parcel or Strategic Engineering and Landscaping Element thereafter.

Reason - to ensure that the site-wide remediation strategy is able to protect and prevent the pollution of controlled waters, and to protect human health, from potential pollutants associated with current and previous land uses in accordance with National Planning Policy Framework (NPPF) paragraphs 170, 178, & 179 (2019), the Environment Agency Groundwater Protection Position Statement (The Environment Agency's Approach to Groundwater Protection, Feb 2018, version 1.2), the objectives of policies CC/7 & SC/11 of the South Cambridgeshire District Council Local Plan, and policies 33 & 31 of the Cambridge City Local Plan.

Site-Wide Maintenance and Monitoring Scheme

No development shall commence until a site-wide maintenance and monitoring scheme has been submitted to and approved in writing by the Local Planning Authority. The site-wide maintenance and monitoring scheme shall contain:

- a) the methodology to achieve the effective on-going monitoring and the maintenance of the groundwater remediation works including arrangements for contingency if the remediation proves ineffective or unworkable;
- b) Details of the management body or bodies which will be appointed to undertake the monitoring and maintenance required by the approved scheme; and
- c) Details of the funding mechanism to deliver the long-term requirements of the approved scheme.

Reason – to maintain protection of controlled waters from potential pollutants, in line with National Planning Policy Framework (NPPF), Environment Agency Groundwater Protection: Principles and Practice (GP3) and the objectives of policy of policy CC/7 and SC/11 of the South Cambridgeshire District Council Local Plan, policy 33 and 31 of the Cambridge City Local Plan.

<u>Pre-Occupation Conditions – Completion of Remediation, Unexpected</u> <u>Contamination, and Material Management Plan</u>

Completion/Verification Report

Prior to the first occupation of any residential dwelling on each Development Parcel or first use of a Strategic Engineering and Landscaping Element the following shall be submitted to, and approved in writing by the Local Planning Authority:

- a) A completion report demonstrating that (save for ongoing maintenance and monitoring) the approved site-wide remediation strategy has been fully implemented for that Development Parcel or Strategic Engineering and Landscaping Element and that the site of Development Parcel or Strategic Engineering and Landscaping Element (as applicable) has been remediated to a standard appropriate for the proposed end use.
- b) Details verifying the suitability of materials (soils and aggregates) brought onto, reused, and removed from the Development Parcel or Strategic Engineering and Landscaping Element shall be included in the completion/verification report along with full details of the proposed post-remedial monitoring and maintenance scheme required to monitor the long-term effectiveness of the remediation strategy in respect of the relevant Development Parcel or Strategic Engineering and Landscaping Element over the lifetime of the development.

Thereafter, the approved post-remedial monitoring and maintenance scheme shall be fully implemented in respect of the relevant Development Parcel or Strategic Engineering and Landscaping Element and no works shall take place within the relevant part of the site such as to prejudice the effectiveness of the approved and implemented remediation strategy in respect of that part of the site.

Reason – to protect and prevent the pollution of controlled waters, and to protect human health, from potential pollutants associated with current and previous land uses in line with National Planning Policy Framework (NPPF) paragraphs 170, 178, & 179, the latest Environment Agency Groundwater Protection Position Statement (The Environment Agency's Approach to Groundwater Protection, Feb 2018, version 1.2), the objectives of policies CC/7 & SC/11 of the South Cambridgeshire District Council Local Plan, and policies 33 & 31 of the Cambridge City Local Plan.

Unexpected Contamination

If unexpected contamination is encountered whilst undertaking the development which has not previously been identified, works shall immediately cease on the relevant part of the site until the Local Planning Authority has been notified and the additional contamination has been fully assessed and remediation approved. The approved remediation shall then be fully implemented under condition X.

Reason - to protect and prevent the pollution of controlled waters, and to protect human health, from potential pollutants associated with current and previous land uses in accordance with National Planning Policy Framework (NPPF) paragraphs 170, 178, & 179 (2019), the Environment Agency Groundwater Protection Position Statement (The Environment Agency's Approach to Groundwater Protection, Feb 2018, version 1.2), the objectives of policies CC/7 & SC/11 of the South Cambridgeshire District Council Local Plan, and policies 33 & 31 of the Cambridge City Local Plan.

Material Management Plan

Prior to the importation and/or exportation of material (soils and aggregates) necessary for the development of each Development Parcel or Strategic Engineering and Landscaping Element, a Materials Management Plan (MMP) in respect of such Development Parcel or Strategic Engineering and Landscaping Element shall be submitted to and approved in writing by the Local Planning Authority. Each MMP shall:

- (a) Include details of the volumes and types of such material proposed to be imported and/or exported from the relevant part of the site
- (b) Include details of the management of the haulage of such materials proposed to be imported and/or exported from the relevant part of the site with respect to local air quality and loss of amenity to nearby residents from associated noise, dust, odour, and light emissions.
- (c) Include details of the proposed source(s) of such imported material in respect of the relevant part of the site.
- (d) Include details of the chemical testing for all such imported materials to be undertaken before placement onto the relevant part of the site.
- (e) Include the results of the chemical testing of contaminants which must show the relevant material is suitable for use on the relevant part of the development.
- (f) Include confirmation of the chain of evidence to be kept during the importation and/or exportation of all such materials necessary for the development and the movement and placement of all reused site-won materials in respect of the relevant part of the site.

All works on each Development Parcel or Strategic Engineering and Landscaping Element will be undertaken in accordance with the relevant approved MMP.

Reason – to protect and prevent the pollution of controlled waters, and to protect human health, from potential pollutants associated with current and previous land uses in accordance with National Planning Policy Framework (NPPF) paragraphs 170, 178, & 179 (2019), the Environment Agency Groundwater Protection Position Statement (The Environment Agency's Approach to Groundwater Protection, Feb 2018, version 1.2), the objectives of policies CC/7 & SC/11 of the South Cambridgeshire District Council Local Plan, and policies 33 & 31 of the Cambridge City Local Plan.

Other miscellaneous conditions

Cessation of Fire Training Ground (FTG) and use of Cross Wind Runway – Cambridge City Airport

The continued use of the current Fire Training Ground (FTG) and cross wind runway at Cambridge City Airport have the potential to have adverse noise and air quality impacts on the quality of life / amenity of the proposed development.

These impacts have not been fully assessed within the ES. However Table 17.1: Summary of Primary and Tertiary Mitigation Measures of the ES states that the 'existing Fire Training Ground (FTG), located immediately adjacent to the Site, would cease operation prior to the first occupation of any residential unit to be constructed as part of the Proposed Development.'

The buildings and infrastructure associated with the FTG would remain in-situ within the boundary of Cambridge Airport. The cross wind runway at Cambridge Airport will cease use for the taking off and landing of aircraft prior to the occupation of any dwelling on the Site.

It is stated that this can be secured by a planning obligation or condition. We agree with this approach and if secured the impacts of these sources of pollution will be negated and no further action is required.

However, the timing of Fire Training Ground (FTG) cessation may also need to have regard to remediation works that may be required for any ground water contamination.

Phasing Prior to, or concurrently with the submission of the first of the reserved matters application(s) for a Development Parcel, a Phasing Plan which accords with the section 106 triggers shall be submitted to the local planning authority for approval. The Phasing Plan shall include the broad sequence of providing the following elements and a mechanism for the Plan's review and amendment:

- a) development parcels
- b) major distributor roads/routes within the site, including timing of provision and opening of access points into the site
- c) the local centre
- d) strategic foul surface water features and SUDS
- e) open space and allotments
- f) strategic electricity, telecommunications, potable water mains provisions and gas networks
- g) environmental mitigation measures, actions or activities including phasing, intended to remedy, reduce, or offset known negative adverse impacts as a

result of existing pollution in the area and the development itself, as identified in the submitted ES.

h) primary and secondary schools

No development shall commence apart from enabling works and Strategic Engineering and Landscape Elements until such time as the phasing plan has been approved in writing by the local planning authority. The development shall be carried out broadly in accordance with the approved phasing contained within the phasing plan unless otherwise agreed in writing by the Local Planning Authority.

Site Wide Design Code Prior to, or concurrently with the submission of the first of the reserved matters applications for a Development Parcel, **a Site Wide** Design Code, shall be submitted to the local planning authority for approval. The **Site Wide** Design Code shall be prepared in accordance with the principles and parameters established by this outline approval and shall include both strategic and detailed elements. The **Site Wide** Design Code shall include:

- a) The overall vision of the development;
- b) The character, mix of uses and heights established through the approved parameter plans and include the block principles and the structure of public spaces, making reference to the phasing of land parcels;
- c) The street hierarchy, including the principles and extent of the adoptable highway, along with traffic calming measures;
- d) Typical street cross-sections which will include details of tree planting, tree species, underground utility/service trenches, and on street parking;
- e) How the design of the streets and spaces takes into account mobility and visually impaired users;
- f) Block principles to establish use, density and building typologies. In addition, design principles including primary frontages, pedestrian access points, fronts and backs and threshold definition shall be provided;
- g) Key groupings and other key buildings including information about height, scale, form, level of enclosure, building materials and design features;
- Approach to incorporation of ancillary infrastructure/buildings such as substations, pumping stations, pipes, flues, vents, meter boxes, external letterboxes, electric vehicle charging infrastructure, fibres wires and cables required by statutory undertakers as part of building design;
- Details of the approach to vehicular parking across the entire site including the location and layout of parking for people with disabilities and for each building type, including details of a design approach for access points into and the ventilation of undercroft/underground parking;
- Details of the approach to cycle parking for all uses and for each building type, including the distribution (resident/visitor parking and location in the development), type of rack, spacing and any secure or non-secure structures associated with the storage of cycles;
- k) The approach to the character and treatment of the structural planting to the development areas within the primary open land and secondary open land (including the approach to SuDS design integration into the green fingers);
- I) The approach to the treatment of any hedge or footpath corridors and retained trees and woodlands:
- m) The conceptual design and approach to the public realm (making reference to the Public Art Strategy, materials, signage, utilities and any other street furniture);

- n) The conceptual design and approach to the **artificial** lighting strategy and how this will be applied to different areas of the development with different lighting needs, so as to maximise energy efficiency, minimise light pollution and avoid street clutter:
- o) Details of waste and recycling provision for all building types and underground recycling points;
- p) Utility routes, type and specification;
- q) Measures to demonstrate how the design can to maximise resource efficiency and climate change adaptation through external, passive means, such as landscaping, orientation, massing, and external building features;
- r) Details of measures to minimise opportunities for crime;
- s) Measures to show how the principles of good acoustic design will address and minimise the impact of existing traffic/aircraft noise, traffic noise from the internal roads of the development itself, noise from Cambridge City Airport etc on future noise sensitive uses e.g. residents and schools;
- t) Details of good Urban Design principles and design of urban infrastructure to reduce air pollution including street dimensions, use of Green Infrastructure (GI) such as trees, parks, and green walls
- u) Details of the Design review procedure and of circumstances where a review shall be implemented.

The Site Wide Design Code shall explain its purpose, structure and status and set out the mandatory and discretionary elements where the Design Code will apply, who should use the Design Code, and how to use the Design Code. No development apart from enabling works and Strategic Engineering and Landscape Elements shall commence until the Design Code for the entire site has been approved in writing by the local planning authority.

Allotment provision

Any reserved matters applications for a Development Parcel or Strategic Engineering and Landscape Element which incorporate allotment provision shall where appropriate include the following details:

- a) A plan of the allotments, principles of plot layout and design providing for a range of plot sizes designed to allow flexibility to meet the needs of future plot holders; areas for communal storage of, for example, manure and compost;
- b) Proposed management arrangements and draft allotment tenancy agreements / rules- 'Allotment Management Strategy'. This should include consideration of general and individual plot holder draft Rules, Conditions and Code of Conduct, with compliance thereafter.
- c) Access and parking arrangements to allow easy and safe access to the allotments;
- d) Details of the allotment clubhouse / store;
- e) Boundary treatment, including security arrangements for the allotments;
- f) Water supply, including use of stored rainwater and SuDS for watering crops.

The provision of allotments shall be carried out in accordance with the approved details and in accordance with the approved phasing programme.

Standard Informatives:

DCNVI - Dem/Con noise/vibration informative

EHOC62 – plant noise insulation informative

ENVAGI - Environment Agency Informative

PLNOIN - Plant sound insulation informative

SUBSTI - Substation Informative

CONCR - Concrete crusher informative

HHSRS - Housing Health & Safety Rating System In

Bespoke informatives:

INFORMATIVE: Noise Conditions: Development Parcel - Noise Impact Assessment with Acoustic Design and Noise Insulation / Mitigation Scheme Report: Residential & Noise-Sensitive Uses Operational Noise Assessment and Insulation/Mitigation/Management Scheme - Non Residential Uses

For the purposes of satisfying condition x & x: (Development Parcel - Noise Impact Assessment with Acoustic Design and Noise Insulation / Mitigation Scheme Report: Residential & Development Parcel - Noise-Sensitive Uses Operational Noise Assessment and Insulation/Mitigation/Management Scheme – Non Residential Uses), 3D propagation sound / noise modelling should be used to predict and assess the outdoor propagation of noise across the site including façade incident noise levels (at various floor levels) from all sources of noise cumulatively, taking account of how noise is attenuated by topography, existing buildings and proposed new buildings and environmental noise barriers. This will help to ensure effective noise control / attenuation measures are incorporated and optimised at the design stage and allows the façade attenuation performance to be tailored relative to the predicted external noise level and determine which habitable rooms are likely to require an alternative form of ventilation, if opening external windows is not acceptable.

Due regard shall be given to relevant national and industry standards, codes of practice and best practice technical guidance including:

- Defra's Noise Policy Statement for England, March 2010
- BS 8233:2014 Guidance on sound insulation and noise reduction for buildings,
- BS 4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound
- ProPG: Planning & Noise Professional Practice Guidance on Planning & Noise-New Residential Development, May 2017
- The Acoustics of Schools: a design guide Institute of Acoustics (IOA) and the Association of Noise Consultants (ANC), November 2015
- Acoustic Design of Schools: Performance Standards, Building Bulletin 93, February 2015
- WHO Environmental Noise Guidelines for the European Region, 2018
- Night noise guidelines for Europe WHO/Europe, 2009
- WHO Guidelines for Community Noise WHO, 1999
- 'Greater Cambridge Sustainable Design and Construction Supplementary Planning Document, Adopted January 2020' Section 3.6 Pollution Noise Pollution (including vibration) (pages 89 -113) and appendix 8 : Further technical guidance related to noise pollution- available online at:

- https://www.scambs.gov.uk/planning/local-plan-and-neighbourhood-planning/sustainable-design-and-construction-consultation-spd/
- https://www.scambs.gov.uk/media/14406/final-greater-cambridge-sus-dc-spd.pdf

The report shall demonstrate that a good acoustic design approach / process has been followed for both internal and external spaces including consideration of the following hierarchy of noise management measures (but not limited to) in descending order of preference; to mitigate and to reduce to a minimum potential adverse impacts arising from noise, so that the use of building envelope and landscape noise insulation / mitigation scheme measures, whilst necessary in some areas is minimised:

- (i) Maximising the spatial separation of noise source(s) and receptor(s).
- (ii) Using existing topography and existing structures (that are likely to last the expected life of the noise-sensitive scheme) to screen the proposed development site from significant sources of noise.
- (iii) Using the site layout of the scheme to reduce noise propagation across the site and to locate non-noise-sensitive buildings adjacent to road noise sources to provide screening to residential units.
- (iv) Creating setbacks.
- (v) Using the shape and orientation of buildings to reflect and or shield noise to protect the most noise sensitive uses / habitable rooms including the provision of 'quiet facades' to residential units where practicable.
- (vi) Locating noise sensitive areas/rooms away from the parts of the site most exposed to noises and careful internal configuration of internal rooms to reduce the noise exposure of noise-sensitive habitable rooms.
- (vii) Stacking similar room uses (such as kitchens and living rooms) above each other.
- (viii) Positioning non-residential uses closer to the noise source in mixed use developments
- (ix) Anti-vibration foundations/vibration reducing separation trenches.
- (x) Opportunities for incorporating environmental acoustic / noise barriers as part of the scheme to screen the proposed development site from significant sources of noise - such as landscaping / mounds, fencing and solid balconies to reflect/shield sound.
- (xi) Architectural features such as side fins / balconies to provide local screening to windows / doors to noise sensitive habitable rooms.
- (xii) Incorporating 'sound proof' construction/cladding materials e.g. absorptive materials/finishes to balcony soffits and reveals.
- (xiii) Building noise insulation scheme use the building envelope / fabric to mitigate and attenuate noise ingress to acceptable levels – acoustic insulating and soundproofing doors, walls, windows, floors and ceilings with an appropriate level of acoustic performance
- (xiv) Ventilation strategy alternative forms of ventilation provision if acceptable internal noise levels within habitable rooms are exceeded with partially open external windows / doors (to negate the need to ventilate passively via an openable window) e.g. mechanical ventilation systems or acoustically attenuated passive ventilation free areas to achieve background and rapid / purge ventilation standards / requirements.

Where sound insulation requirements of the building envelope preclude the opening of windows for rapid ventilation to facilitate thermal comfort control / summer cooling, an alternative form of ventilation will also need to be considered within the context of achieving acceptable internal design noise level criteria.

If internal acceptable noise levels in habitable rooms cannot be achieved with windows partially open for ventilation (assuming a 15dB reduction across / for an open window) and where the associated rooms are not dual aspect (to a quieter facade), an alternative form of background and rapid / purge ventilation (acoustically attenuated passive or mechanical) will need to be provided at a minimum rate of 2 - 4 air changes per hour (ACH) to each habitable room with full operational controls for occupants.

Building Regulations - Approved Document F: ventilation does not control mechanical ventilation operational noise but advises that self-generated ventilation system noise should not discourage their use by occupants. In duct attenuation / lined ducting may be required for whole house systems. It will therefore be necessary to demonstrate that the operating sound level of any system does not discourage the use by occupiers and an internal Noise Rating level of NR25 to 30 or lower is recommended. Ventilation systems should be tested in accordance with ISO 3741:2010: Acoustics -- Determination of sound power levels and sound energy levels of noise sources using sound pressure -- Precision methods for reverberation test rooms or similar.

Each complete window system, including frames, glass and seals should be tested in accordance with BS EN ISO 10140-2:2010 (various) and rated in accordance with BS EN ISO 717-1:2013 'Acoustics. Rating of sound insulation in buildings and of building elements' or as superseded. The test certificates should be provided to the LPA when available.

Dust Informative

If a dust management plan is required during construction reference and regard shall be given to various national and industry best practical technical guidance such as:

- Guidance on the assessment of dust from demolition and construction, version 1.1 (IAQM, 2016)
- Guidance on Monitoring in the Vicinity of Demolition and Construction Sites, version 1.1 (IAQM, 2018)
- Control of dust and emissions during construction and demolition -supplementary planning guidance, (Greater London Authority, July 2014).

Overall Conclusion

Officers have reviewed the revised and updated application documents submitted under cover of a Terence O'Rourke (TOR) letter dated 29th March 2019 and 6th December 2019 respectively, along with the original application submissions.

Additional impacts / effects assessment and information / clarifications have been provided in relation to noise / vibration, air quality / odour, artificial lighting and contaminated land effects and impacts.

Having reviewed all the submissions to date, we conclude that the following environmental health issues and any associated direct and indirect effects / impacts will not give rise to any significant adverse impacts and can be controlled, mitigated and reduced to an acceptable level, to protect the health and quality of life (amenity)

of existing premises in the area and proposed future residential premises, subject to the imposition of the conditions recommended above under various issue / topic sections):

- Construction Phase Environmental Impacts / Pollution
- Noise / Vibration Operational Impacts on both existing and proposed Noise Sensitive Receptors (Living Conditions):
 - Airport / aircraft activity noise from Cambridge Airport and traffic noise from Coldhams Lane, Cherry Hinton Road and Airport Way on future residents, public open spaces and schools
 - Noise from industrial noise sources at Cambridge Airport on future residential premises
 - > Traffic noise impact from any internal primary roads within the development site on future residents of development itself
 - Operational Off-Site Traffic Noise Impact on Local Roads
 - Operational noise and vibration impact of proposed employment, commercial and mixed-uses including fixed plant and equipment and school / recreational development and Local Equipped Areas of Play (LEAPs) and Neighbourhood Equipped Areas of Play (NEAPs) on existing and proposed residential uses
- Artificial Lighting Construction and Operational
- Air Quality Operational
- Odour / Fume Generation & Control / Building Ventilation Non-residential premises / uses Operational
- Contaminated Land / Land affected by Contamination
- Additional Operational Issues:
 - Design Coding
 - Fire Training Ground (FTG) and use of Cross Wind Runway Cambridge City Airport
 - Operational Odour / Fume Generation & Control
 - > Odour / Fume Generation & Building Ventilation Operational
 - Proposed Allotments Location
 - Cumulative Effects

For these topic areas the conditions recommended would either ensure that no significant adverse impacts associated with the development are likely to arise or where there is the potential for any residual adverse impacts they can be mitigated and reduced to a minimum / negligible acceptable level. It is our view that the proposals are acceptable in respect of these impacts and the recommended conditions will secure and provide an acceptable level of protection for the amenity / quality of life of existing and future residential properties both off and on site.

It is understood that a full list of conditions and associated informatives are likely to be drafted and circulated in due course, for further detailed comment and final agreement.

1.0 Additional ES Updated Information / Clarifications Submission

Our initial planning consultation response memo dated the 18th June 2018 (Planning Ref No: 18/0481/OUT (CCiC) & S/1231/18/OL (SCDC) / M3 Ref No: WK/201856192) detailed a number of outstanding issues and deficiencies associated with the originally

submitted application and in particular the Environmental Impact Assessment – Environmental Statement Volume 2 - Main Report, June 2016.

We concluded that the submissions were lacking sufficient detail / assessment and in particular in relation to the following environmental health related issues / impacts and in particular:

- Noise and Vibration Operational: Living Conditions of future occupiers
- Odour Impacts Cambridge Airport Potential Odour Sources Odour Field Study
- Artificial Lighting Operational: Environmental Zone Classification
- Contaminated Land Environment Agency Objection

Further additional impacts / effects assessment and information / clarifications were requested.

In response to this request, various technical meetings and discussions have been held with applicant and their consultants (mainly relating to noise, air quality and contaminated land), followed up by information exchange and correspondence to agree the remit of any additional technical assessment and a way forward.

Relevant application documents have been revised and updated accordingly and a set of amended documents / supplementary information have been formally submitted for consideration by covering letter dated 29 March 2019, including the following:

- LAND NORTH OF CHERRY HINTON PLANNING STATEMENT (UPDATED), March 2019
- LAND NORTH OF CHERRY HINTON DESIGN AND ACCESS STATEMENT (UPDATED), March 2019
- Land North of Cherry Hinton Environmental Statement: Non-Technical Summary
 UPDATED, March 2019
- Land North of Cherry Hinton Environmental Statement UPDATED Volume II: Main Text, March 2019
- Addendum to Sustainability Statement (Date: 25/06/2018 with updates on 07/03/2019 & 25/03/2019)
- Remediation Options Sustainability Statement (Mott Macdonald 02.12.19)
- Proposed draft conditions, reasons and Section 106 obligations in relation to ground conditions (04.12.19)
- Note of meeting dated 30.10.19 attended by Council officers, Environment Agency and Applicant Team.
- Response to Environment Agency queries (LDA Design)
- Environment Statement Review (LDA Design November 2019)

December 2019 Additional Info

- Remediation Options Sustainability Statement by Mott Macdonald, ref: 400182, rev D, dated 2nd December 2019
- Letter Report Proposed Draft Bespoke Conditions, Reasons, & Section 106
 Obligations in relation to ground conditions, dated 4th December 2019

- Response to Environment Agency Queries by LDA Design, ref: 5776 EA Response
- Environment Statement Review by LDA Design, ref: 5776_EIA_Review, V 0.2, dated 24th November 2019

2.0 <u>Summary - Application Proposals</u>

The application has been submitted to both Cambridge City Council (CCiC) and South Cambridgeshire District Council (SCDC) as the site area covers land within the jurisdiction of both local planning authorities.

As an outline application, a set of Parameter Plans are submitted to provide a framework to guide future detailed development proposals, initially through the production of a Design Code, and then progression of detailed Reserved Matters.

The application prescribes the proposed land uses, access and movement strategy, landscape and green infrastructure, maximum building heights and sets urban form principles for future development.

The application includes full detailed submissions in the form of new highway junction arrangements onto / off Coldhams Lane, Cherry Hinton and Airport Way and highway improvement works necessary to create access to the site. The new junctions off Coldhams Lane and Cherry Hinton Road will be connected by a new spine road running through the site.

To summarise, outline planning permission with all matters reserved, except for the means of access to the development, is sought for:

- Mixed use residential led scheme providing up to a maximum of 1,200 dwellings (Class C3).
- Potential retirement living facility; up to 90 bed spaces (Class C2/C3 within 1,200 above).
- Local centre; up to 1,850 sq.m floorspace (Use Class A1/A2/A3/A4/A5/B1a/D1/D2 flexible units of which a food store will not be more than 500 sq.m).
- Community hall (Class D2); up to 250 sq.m (within 1,850sq.m above).
- Primary School 2FE.
- Secondary School 6FE.
- New primary access street from Cherry Hinton Road to Coldhams Lane (that passes through the local centre), as well as other access routes.
- Pedestrian, cycle and vehicle routes and parking.
- Open space and landscaping; including pocket parks, play areas, playing fields, allotments, SuDs water features, and formal and informal open space.

(It is noted that a variety of public open spaces and green infrastructure will also be provided as part of the proposed development, including Local Equipped Areas of Play (LEAPs) and Neighbourhood Equipped Areas of Play (NEAPs), allotments, community gardens, and community sports pitches provided within the secondary school Site.)

Ancillary works and infrastructure.

This major urban type development project with submitted application documents and reports (plans / statements / strategies) and Environmental Impact Assessment (EIA) with associated Environment Statement (ES) with Appendices /Figures is complex and detailed in many respects.

The overall aim of EIA is to "protect the environment by ensuring that a local planning authority when deciding whether to grant planning permission for a project, which is likely to have significant effects on the environment, does so in the full knowledge of the likely significant effects, and takes this into account in the decision making process".

The purpose of an ES is to provide all the necessary information in a readily understandable format for public scrutiny to allow an informed decision to be made on whether planning permission should be granted. The ES should assess the potential significance environmental effects / impacts, namely their evaluation, prediction (nature, extent and magnitude of any impact) and the identification and description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment, as appropriate.

The proposed Application Site – LNCH is allocated for development in the Cambridge East Area Action Plan 2008, South Cambridgeshire Local Plan, Adopted September 2018 and the Cambridge Local Plan, October 2018.

However, it is also important to note that the local plans state that proposals for residential development on the LNCH Site, amongst other requirements, 'will be supported if acceptable mitigation of environmental and health impacts (including noise) from the airport can be provided'.

2.1 Environmental Health Issues / Health Determinants

In summary, the following environmental health issues / health determinants need to be considered and effectively controlled in order to minimise potential adverse impacts on existing and future local residents, to protect the quality of life / amenity and health of the wider community / living environment and to secure acceptable living conditions and a sustainable development:

- Construction Phase Environmental Impacts / Pollution
- Noise / Vibration Operational Impacts on both existing and proposed Noise Sensitive Receptors (Living Conditions):
 - Airport / aircraft activity noise from Cambridge Airport and traffic noise from Coldhams Lane, Cherry Hinton Road and Airport Way on future residents, public open spaces and schools
 - Noise from industrial noise sources at Cambridge Airport on future residential premises
 - > Traffic noise impact from any internal primary roads within the development site on future residents of development itself
 - > Operational Off-Site Traffic Noise Impact on Local Roads
 - Operational noise and vibration impact of proposed employment, commercial and mixed-uses including fixed plant and equipment and school / recreational development and Local Equipped Areas of Play (LEAPs) and Neighbourhood Equipped Areas of Play (NEAPs) on existing and proposed residential uses

- Odour Impacts / Effects Cambridge Airport Potential Odour Sources
- Artificial Lighting Construction and Operational
- Air Quality Operational
- Odour / Fume Generation & Control / Building Ventilation Non-residential premises / uses - Operational
- Contaminated Land / Land affected by Contamination
- Additional Operational Issues:
 - Design Coding
 - Fire Training Ground (FTG) and use of Cross Wind Runway Cambridge City Airport
 - > Proposed Allotments Location
 - Cumulative Effects

2.2 Impacts / Effects on Existing Sensitive Premises

As the proposed development will be constructed in phases likely to be built out over a 7 to 10 year period and due to the nature, scale and location of the development it is paramount that environmental pollution from the demolition / construction and operational phases in the long term do not give rise to unacceptable significant and other adverse impacts / effects.

Potential off-site existing sensitive receptors include existing local residential premises at the following general locations:

- along the south-west / southern boundary border of the Site (Coldhams Lane, Hatherdene Close, Rosemary Lane, Braybrooke Place, Reilly Way, March Lane, Teversham Drift including recently approved application ref 17/1381/S73 -variation of 16/0970/S73 for development of site to provide up to 57 dwellings at Field at Corner of Norman Way and Hatherdene Close),
- east / south east of Cherry Hinton Road (Dolphin Close, Caribou Way, Gazelle Way), and
- east of Airport Way (Church Road, Lady Jermy Way, Lapwings Close, Marshalls Close in Teversham)

2.3 Impacts / Effects on Future Development - Noise Sensitive Premises

The existing environmental noise climate experienced at and within the proposed development site is comprised of various noise sources dominated mainly by airport / aircraft noise from Cambridge Cityl Airport and traffic noise from Coldhams Lane, Cherry Hinton Road and Airport Way. Distant A14 traffic noise can also be heard to varying degrees but at lower levels.

Noise levels vary spatially throughout the development site in volume, intensity, character and duration during the day, evening and night time periods.

Whilst we accept that the principle of residential development on the proposed site is established in local plan / policy terms it will be important to ensure that existing environmental noise sources do not give rise to unacceptable adverse noise impacts / effects on any new noise sensitive development and in particular the proposed residential premises and primary and secondary school. It is paramount that any development follows the principle of good acoustic design to avoid noise from giving

rise to unacceptable significant adverse impacts on health and quality of life of future and existing uses and any other adverse impacts on health and quality of life arising from noise need to be mitigated and reduced to a minimum.

One of the core planning principles of the national planning policy framework is to always seek to secure high quality design including good acoustic design and a good standard of amenity / quality of life for all existing and future occupants of land and buildings.

3.0 Construction Phase Environmental Impacts / Pollution

(This section should be read in conjunction with comments relating to Chapter 12 - Noise and Vibration - Construction noise and vibration impacts / effects)

The proposed development will be constructed in phases likely to be over an approximate 7 to 10 year period. At this stage in the planning process, an indicative three-phase construction programme is proposed with construction phase starting in 2020 and finish in 2027. It is anticipated that the development will be built out at approximately 170 homes per annum.

Pollution such as noise / vibration and dust / emissions to air from the demolition and construction phases has the potential to affect the amenity of surrounding properties both on and off site, if not controlled and minimised by the use of best practical mitigation means.

3.1 Construction & Environmental Management Plan - CEMP

An updated Appendix 4.1 titled 'Land North of Cherry Hinton - Outline Construction and Environmental Management Plan (Project Ref: 37305 | V5.0 | Date: March 2019 (Peter Brett Associates (pba) Doc Ref: 37305/3003/CEMP)' has been submitted in support of the ES.

It is stated that the outline CEMP provides a framework which governs the construction works associated with the proposed development of the Land North of Cherry Hinton for all contractors.

It sets out, in broad terms, the environmental issues and management procedures to be adopted during the construction works on site to help control potential adverse impacts to the environment and the local community – identifies methods to avoid, minimise and mitigate construction effects on the environment. The document has also considered the potential impact of construction on Cambridge Airport and identified measures required to mitigate potential construction effects which could impact its operation.

The Outline CEMP will be passed onto the Principal Contractor, once appointed, to review, implement and audit a Detailed CEMP. It is understood that the Principal Contractor will be charged with responsibility for management, co-ordination and implementation of the CEMP.

The CEMP has been prepared on the basis of the Environmental Impact Assessment (EIA) undertaken in relation to the proposed development and documented in the

Environmental Statement (ES), as well as additional technical work such as the Lighting Assessment.

The EIA / ES and supporting technical documents which have been used to inform the CEMP have considered relevant local policy requirements in relation to construction impacts associated with each discipline.

In summary, the objectives of this Outline CEMP are to:

- Minimise (eliminating where practicable) the adverse environmental effects of the construction of the proposed development;
- Document the environmental controls to be adopted during construction;
- Enable agreement with the relevant approval authorities on mitigation measures to be adopted during construction; and
- Provide a framework for contractors to manage construction impacts.

The CEMP is comprised of the following sections:

- 1. Introduction
- 2. Site Location and Proposed Development
- 3. Construction Management & Methodology
- 4. Visual Considerations
- 5. Ecology and Nature Conservation
- 6. Transport
- 7. Air Quality
- 8. Noise and Vibration
- 9. Lighting
- 10. Protection of Historic Features
- 11. Water Resources
- 12. Contamination and Ground Conditions
- 13. Waste and Materials Management
- 14. Consideration for Others and the Environment
- 15. Conclusions

3.2 Conclusion – Construction Phase Environmental Impacts / Pollution

As the proposed development will be constructed in phases likely to be over a 7 to 10 year period some of which are relatively close to existing residential premises it is paramount that pollution such as noise / vibration and dust / emissions to air from the construction phases are controlled and minimised by the use of best practical mitigation means.

The submitted ES updated Appendix 4.1 - outline CEMP is comprehensive in respect of environmental health related matters and in particular sections 2, 3, 7, 8, 9, 12, 14, and 15. It has been carried out with reference to national and industry standards, codes of practice and best practice technical guidance.

It is a strategic environmental plan for the construction of the proposed development and provides a framework that sets out the environmental issues and management procedures to be adopted during construction works on site.

More detailed plot specific CEMPs of similar (final wording to be finalised) for specific development phases as they come forward should be provided. In addition, it is noted that Construction Waste Management Plans (CWMPs), Materials Management Plan (MMP) and Construction Traffic Management Plans (CTMPs) are to be prepared in parallel.

The submitted outline CEMP is sufficient for an outline application. A bespoke condition could be imposed requiring compliance with the submitted ES updated Appendix 4.1 - Outline CEMP general principles, assessment methodologies and approach to secure mitigation. Such an approach is detailed in para. 3.6.8 - Construction Environmental Management Plan (CEMP) of Chapter 3 - The Proposed Development of the ES, Volume 2, Main Report.

However, as the submitted ES updated Appendix 4.1 - Outline CEMP is generic an alternative Site Wide Construction Environmental Management Plan (SW-CEMP) condition is recommended.

In addition, as the development is likely to be phased, a condition should also be imposed requiring that for each detailed reserved matters application / phase a Site Specific Construction Method Statement (SS-CMS) / Site Specific Construction and Environmental Management Plan (SS-DCEMP demonstrating compliance with any approved SW-CEMP as approved and as appropriate, shall be submitted for approval.

4.0 <u>Noise and Vibration – Construction & Operational Impacts on both existing and proposed Noise Sensitive Receptors (Living Conditions):</u>

The following updated submissions make reference to and or consider potential environmental noise impacts on existing residential premises and the proposed development itself:

- LAND NORTH OF CHERRY HINTON PLANNING STATEMENT (UPDATED), March 2019
- LAND NORTH OF CHERRY HINTON DESIGN AND ACCESS STATEMENT (UPDATED), March 2019
- Land North of Cherry Hinton Environmental Statement: Non-Technical Summary
 UPDATED, March 2019
- Land North of Cherry Hinton Environmental Statement UPDATED Volume II: Main Text, March 2019
 - ➤ Chapter 9 Noise and Vibration,
 - Chapter 16 Cumulative Effects
 - Chapter 17 Summary of Mitigation
- Addendum to Sustainability Statement (Date: 25/06/2018 with updates on 07/03/2019 & 25/03/2019)
- HEALTH IMPACT ASSESSMENT, March 2018 (Project Ref: 37305/3004 | Rev: V1.2 | Date: March 2018)

4.1 Chapter 9 – Noise and Vibration (updated, Match 2019)

The ES Chapter 9 – Noise and Vibration is comprised of the following sections:

Introduction

Planning Policy and Legislation (National and Local - Noise and Aviation)

- > Planning Policy
 - National Planning Policy Framework (NPPF, 2019)
 - Noise Policy Statement for England (NPSE, 2010)
 - Planning Practice Guidance Noise (PPG-N, 2015)
 - Aviation Policy Framework (APF, 2013)
- Local Planning Policies
 - CCiC and SCDC
- Legislative Context
 - Control of Pollution Act 1974
 - Environmental Noise Directive 2002/49/EC

Assessment Methodology

- Consultation (with CCiC and SCDC)
- > Sources of Information and guidance documents
 - British Standard (BS) 5228:2009+A1:2014
 - British Standard (BS) 4142:2014
 - British Standard (BS) 8233:2014
 - BB93, 2015 (Department for Education. Acoustic Design of Schools: Performance Standards, Building Bulletin 93, February 2015).
 - Calculation of Road Traffic Noise (1988)
 - Design Manual for Roads and Bridges (2011)
 - World Health Organisation Guidelines (2000, 2009 and 2018)
 - Possible Options for the Identification of SOAEL and LOAEL in support of the NPSE (AECOM, 2014)
 - Professional Practice Guidance on Planning and Noise ProPG (2017)
 - Cambridge Airport Noise Action Plan 2014 2019
 - Aircraft Engine Ground Running (EGR)
- Study Area
- > Assessment Process/Criteria
- Noise Surveys
- > Suitability of the site
 - Road Traffic noise
 - Fixed Wing Aircraft and Helicopter noise
 - Engine Ground Running (EGR) Noise
 - Combined noise from all sources
- Construction Noise Assessment
- Operational Noise Assessment
- Assessing significant effects
- > Assumption and Limitations

Baseline Conditions

- Suitability of the Site
- Public outdoor amenity spaces
- Residential receptors
- Primary school
- Secondary school
- Local centre

Potential Effects

- Construction Phase
 - Construction traffic
- Operational Phase
 - Suitability of the site
 - Operational noise from the Proposed Development
- Proposed Mitigation
- Residual Effects
 - > Construction Phase
 - Operational Phase
 - Residential
 - School Site
- Impact Interactions
- Summary
- References

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During the post-submission period, discussions have been held between the applicant team and this service to address comments made to the original submission. The amended / updated ES chapter documents the post submission engagement, the additional assessments undertaken and information / evidence gathered since the original submission following a request for further information, clarifications and assessment,.

The chapter details the approach and findings of the assessment of potential effects of the proposed development relating to noise and vibration both during the construction and operational phases and provides a review of the baseline noise conditions within the Application Site and surrounding area. The Chapter then presents the results of the assessment of the effect of the proposed development on the baseline assessment scenarios to determine the anticipated magnitude and significance of effects on existing environments. The suitability of the proposed site for noise sensitive residential type uses is considered.

Mitigation measures are presented and discussed to avoid significant adverse noise impact from arising and to reduce and minimise to an acceptable level the effects of noise and vibration during both the construction and operational phases of the proposed development.

4.2 Conclusion: Noise / Vibration – Construction

The impact of noise and vibration during construction is also discussed in detail under section '3.0 Construction - Environmental Pollution' above.

In summary, during construction noise will be generated both within the site and on local roads as additional vehicles will be travelling to and from the site. Exact details of construction work, plant to be used and where activities will take place are not known at this stage. Therefore, an indicative construction noise assessment has been carried out using typical plant, fixed distances and worst-case assumptions.

Construction noise generated within the site would be of temporary minor adverse significant effect at the nearest residential units to the Site and within any occupied residencies within the site. Construction traffic flow data was provided by transport consultant PBA, which was used to calculate the magnitude of change in road traffic noise during the construction. It is concluded that the proposed development would have a negligible impact on road traffic noise during construction which is categorised as being of minor significance. Residents on Cherry Hinton Road and Airport Way will be particularly sensitive to noise generated from construction road traffic. It is also anticipated that some of the residential units that form part of the proposal will be occupied whilst construction works are being undertaken on site and therefore have the potential to be affected.

The noise impact assessment of construction phase activities and construction related traffic that has been undertaken is acceptable.

It is agreed that the proposed development would have a negligible impact on road traffic noise during construction which is categorised as being of minor significance. It is also agreed that with the implementation of best practical means to mitigate noise and vibration as proposed, construction noise generated within the site would be of temporary minor adverse significant effect at the nearest residential units to the Site and within any future occupied residencies within the site. No adverse health impacts are envisaged.

As stated in section 3.0 above it is recommended that bespoke conditions are imposed requiring compliance with the submitted site wide Construction Environmental Management Plan (CEMP) which details general principles, assessment methodologies and approach to secure adequate noise / vibration mitigation. Each detailed reserved matters application / phase require a specific CEMP / Construction Method Statement (CMS) demonstrating compliance with the approved site wide CEMP, as appropriate.

4.3 Conclusion - Operational off-site traffic noise impact on local roads

Operational noise impacts from the proposed development relate to changes in road traffic flows and any plant associated with the schools or local centre. Operational road traffic flow data has been predicted for future scenarios with and without the proposed development – traffic flow years 2027 and a completed design year of 2043. This traffic flow data has been used to calculate the difference in road traffic noise along the existing road network.

Operational noise generated by the proposed development will include changes in local road traffic noise off-site. We agree with the conclusion that the proposed development would have a negligible impact on long term local road traffic noise during operation, which is categorised as being of minor significance. No mitigation or further action required.

4.4 Conclusion: Noise / Vibration – Operational

In summary, the following operational related noise and vibration impacts with effects are relevant:

 Noise / Vibration – Operational Impacts on both existing and proposed Noise Sensitive Receptors:

- Airport / aircraft activity noise from Cambridge City Airport and traffic noise from Coldhams Lane, Cherry Hinton Road and Airport Way on future residents, public open spaces and schools
- Noise from industrial noise sources at Cambridge Airport and Coldhams Lane on future residential premises
- Traffic noise impact from any internal primary roads within the development site on future residents of development itself
- Operational noise and vibration impact of proposed employment, commercial and mixed-uses including fixed plant and equipment and school / recreational development and Local Equipped Areas of Play (LEAPs) and Neighbourhood Equipped Areas of Play (NEAPs) on existing and proposed residential uses

The updated noise assessment is comprehensive and has been undertaken having regard to and is in accordance with relevant planning policy and national / industry impact assessment methodologies, noise standards, codes of practice and best practice technical guidance.

The existing environmental noise climate experienced at and within the proposed development site is comprised of various noise sources dominated mainly by airport / aircraft noise from and associated with Cambridge City Airport and traffic noise from Coldhams Lane (on the western site boundary), Cherry Hinton Road and Airport Way (along the eastern site boundary). Distant A14 traffic noise can also be heard to varying degrees but at lower levels.

The main operational activities at Cambridge Airport comprise of:

- Aircraft maintenance, repair and overhaul operations including aircraft Engine Ground Running (EGR);
- Aircraft operations (fixed wing and helicopters), including general and business aviation, East Anglian Air Ambulance and occasional commercial and charter passenger flights; and
- Flying clubs (fixed wing and helicopters)

Noise levels vary spatially throughout the development site in volume, intensity, character and duration during the day, evening and night time periods and are relatively complex.

The contribution from each noise source has been individually assessed along with the overall combined noise for the suitability for the proposed development. The assessment for suitability of use has been considered against proposed Lowest Observed Significant Effect Levels (LOAELs) and Significant Observed Adverse Effect Levels (SOAELs) for noise. Although the word 'level' is used here, this does not mean that the effects can only be defined in terms of a single value of noise exposure. In some circumstances adverse effects are defined in terms of a combination of more than one factor such as noise exposure, the number of occurrences of the noise in a given time period, the duration of the noise and the time of day the noise occurs.

In addition there is no definitive absolute methodology / approach or defined thresholds / numerical criteria to determine significance of noise impacts / effects for every noise source. The subjective nature of noise means that there is not a simple

relationship between noise levels and the impact on those affected. This will depend on how various factors combine in any particular situation.

Noise levels across the public outdoor amenity spaces within the proposed development vary. Some, more screened amenity spaces, would experience noise levels between 50 dB LA eq 16 hour and 55 dB LA eq 16 hour, which is an appropriate level of noise for such spaces considering the urban location. Other public amenity spaces are exposed to noise levels up to 57 dB LA eq 16 hour, which is reasonable as the slightly higher noise levels are contained to only part of the space.

Due to the proximity with Airport Way, the noise levels at the location of the proposed secondary school are currently at the upper end of acceptable and it is possible that for some periods of the day the noise levels will exceed this limit.

However, as part of the proposed development, an environmental noise barrier (most likely to be in the form of an acoustic screen / earth bund) is proposed as embedded mitigation along part of the eastern site boundary with Airport Way, to reduce noise levels within the secondary school grounds.

The height of the noise barrier has been tested at 2m, 2.5m and 3m to assess the corresponding potential noise reduction benefits for those height options. The distribution of noise does not substantially change by increasing the height of the barrier above 2m and the eastern facades of the school buildings still experience noise levels in excess of 55 dB under all three scenarios. The noise assessment concludes that an increase in the height of the noise barrier is not warranted and, a 2m barrier is deemed most appropriate.

At 2m, the screening from this noise barrier and other buildings within the site will assist in providing further mitigation. Furthermore, internal noise levels will be achieved through design layout and/or building fabric to comply with various standards. A detailed noise assessment will be provided at Reserved Matters stage.

It is also noted that the submitted LAND NORTH OF CHERRY HINTON PLANNING STATEMENT (UPDATED) March 2019, states in section 6.243 that 'The impact of raising the height of the barrier in reducing levels is not considered justified when measured against the visual impact on the boundary of Airport Way and into the Green Belt'.

We agree that the noise levels at the location of the proposed primary school are currently within an acceptable range. Once screening from the buildings within the proposed development is considered the noise level at the primary school site reduces further.

Potential noise impacts upon existing receptors, brought about by operational phases of the proposed development, have been determined and assessed against relevant criteria. Noise limits have been discussed for any plant such that the impacts are not significant.

We accept that the principle of residential development on the proposed site is established in local plan / policy terms and it will be important to ensure that existing environmental noise sources do not give rise to unacceptable adverse noise impacts

/ effects on any new noise sensitive development and in particular the proposed residential premises and primary and secondary school.

The noise assessment has identified the need to specify a minimum acoustic criterion for building fabric, glazing and ventilation for the dwellings and school buildings to protect against suitable internal noise levels being exceeded. Following the implementation of these measures the noise climate across the site is considered appropriate for the Proposed Development.

Good acoustic design of site / building layout and noise mitigation measures are proposed and specified for residential dwellings across the site in order to protect the amenity of future residents externally and to prevent suitable internal noise levels being exceeded. Mitigation measures could include acoustic glazing, building materials, fenestration and ventilation design, with specific details to be secured by condition at Reserved Matters stage.

The site is suitable for development. However it is paramount that any development follows the principle of good acoustic design to avoid noise from giving rise to unacceptable significant adverse impacts on health and quality of life of future and existing uses and to ensure that any other adverse impacts on health and quality of life arising from noise need to be mitigated and reduced to a minimum.

The specific mitigation measures and approach applicable to operational noise are outlined in section 9.6 - Proposed Mitigation and summarised in Chapter 17.0 - Summary of Mitigation and Table 17.1:Summary of Primary and Tertiary Mitigation Measures, which also includes the delivery method to ensure the mitigation measures are implemented as detailed below.

Environmental Effector or Receptor	Mitigation Measure	Type of Mitigation: Avoidance, Reduction, Compensation, Remediation, Enhancement	Delivery Method (e.g. planning condition, S106, design etc.)	
Primary – Embedded Mitigation				
Noise Impact on Outdoor Amenity Space	Greater distribution of a network of public open spaces within the built development.	Avoidance	Planning Condition requiring Reserved Matters Application(s) to demonstrate residents have access to suitable outdoor amenity space.	
Noise Impact on Outdoor	Noise Barrier/Bund along the eastern edge of the Site as	Reduction	Planning Condition requiring	

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teaching spaces at the Secondary School Site	shown on the Landscape and Green Infrastructure Parameter Plan		submission of a detailed noise assessment and design details of the noise barrier/bund.
Residential Amenity, Noise and Air Quality	The existing Fire Training Ground (FTG), located immediately adjacent to the Site, would cease operation prior to the first occupation of any residential unit to be constructed as part of the Proposed Development. The buildings and infrastructure associated with the FTG would remain in-situ within the boundary of Cambridge Airport.	Avoidance	Planning Obligation
	The cross wind runway at Cambridge Airport will cease use for the taking off and landing of aircraft prior to the occupation of any dwelling on the Site.		
Tertiary Mitigation	า		
Exceedance of internal noise level guideline values at residential and school façades	The design, layout, orientation of buildings and uses will need to be considered at the detailed design stage, and planning conditions will be imposed to ensure that the internal noise levels are compliant with Government guidance/standards for both residential properties (BS8233:2014), schools (BB93) and community buildings (BS8233:2014) The types of measures that may be required include the standard	Reduction	Planning Condition requiring Reserved Matter Application(s) to include details of noise attenuation/insulation scheme (having regard to the building fabric, glazing and mechanical ventilation requirements) for the residential units and school
	be required include the standard of masonry construction and specification of glazing. Mechanical ventilation may be required to ensure internal air flow without compromising internal noise levels, the detail of which will be explored at reserved matters stage.		buildings.

In conclusion, the main sources of noise in the area are road traffic, aircraft activity at Cambridge Airport and aircraft maintenance repair and overhaul work at the airport.

The assessment for suitability of use for the Proposed Development and significance of any noise impact has been assessed having regard to relevant noise related planning policy and national / industry impact assessment methodologies, noise standards, codes of practice and best practice technical guidance.

We agree with the overall ES conclusion that the noise climate across site for the majority of the time lies between the Lowest Observed Significant Effect Levels (LOAELs) and Significant Observed Adverse Effect Levels (SOAELs), which is considered an observed adverse effect level for noise.

National planning practice guidance on noise states that likely outcomes / impacts experienced would be that 'noise can be heard and causes small changes in behaviour, attitude or other physiological response, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise with potential for some reported sleep disturbance'. The national planning advice is to mitigate and reduce noise impacts to a minimum.

It is important to understand that the LOAEL and SOAEL threshold values derived for road traffic and aircraft noise correlate to the noise exposure average over / during the whole day period over 16 hours (0700 to 2300hrs), aircraft engine testing / running over 11 hours. It is not appropriate to assess short-term exposure noise descriptors (for example 1 hour, 5 minute and SEL / Lmax) using LOAEL and SOAEL, as there are no acceptability standards for such short periods during the daytime.

Due to the context of the site the reality is that from time to time short periods of aircraft noise will be clearly audible e.g. intermittent airplane and helicopter take off and landings. When the GRE is in use engine noise will also be audible and in particular during periods of high powered running for typically 30 mins at a time.

However, these are considered relatively infrequent and for the majority of the time occur during the daytime hours 0700 to 1900hrs. The level of activity at the airport reduces considerably during the evening (1900 to 2300hrs) and apart from exceptional circumstances e.g. East of England air ambulance movements there is little or no activity during the night-time hours (2300 to 0700hrs).

The application site external edge boundaries / periphery of the site will experience the highest noise levels due to a direct line of sight and proximity to various noise sources.

The noise levels at the location of the secondary school are currently at the upper end of acceptable. However, as part of the Proposed Development, a noise bund is proposed along part of the eastern site boundary with Airport Way. When screening from this barrier and other buildings within the Proposed Development is considered, the noise levels reduce to an acceptable level. The

noise levels at the location of the proposed primary school are currently within an acceptable range.

Noise levels across the public outdoor amenity spaces within the Proposed Development vary. Some, more screened amenity spaces, would experience an appropriate level of noise for such spaces, other public amenity spaces are exposed to higher noise levels which is reasonable as the slightly higher noise levels are contained to only part of the amenity spaces.

The noise assessment has identified the need to specify a minimum acoustic criterion for building fabric, glazing and ventilation for the dwellings and school buildings to protect against suitable internal noise levels being exceeded. Following the implementation of these measures the noise climate across the site is considered appropriate for the Proposed Development.

Having regard to the character of the area with urban sources of noise, the noise climate is considered appropriate for the proposed development subject to good acoustic design and noise insulation / mitigation measures to reduce and minimise adverse noise impacts / effects. The need for and type of mitigation will depend on a variety of factors including the nature of the aviation activity, location and normal environmental conditions in that context.

At the detailed design stages, it is recommended that 3D propagation sound / noise modelling should be used to predict and assess the outdoor propagation of noise across the site including façade incident noise levels (at various floor levels) from all sources of noise cumulatively, taking account of how noise is attenuated by topography, existing buildings and proposed new buildings (heights and location) and any environmental noise barriers. This will help to ensure effective noise control / attenuation measures are incorporated and optimised at the design stage by considering good acoustic design.

This can be secured by bespoke conditions as recommended.

This approach has been evidenced through the noise assessment and design process which will need to ensure that the development accords with the following planning policy requirements:

- paragraph 170 e) and 180 a) of the National Planning Policy Framework (NPPF, February 2019)
- policies CE/10 Road Infrastructure and CE/26 Noise of the Cambridge East Area Action Plan Adopted February 2008,
- policies SS/3: Cambridge East, HQ/1: Design Principles and SC/10: Noise Pollution of the South Cambridgeshire Local Plan, Adopted September 2018
- policies 13: Cambridge East and 35: Protection of human health and quality of life from noise and vibration of the Cambridge Local Plan, October 2018
- Land North of Cherry Hinton Supplementary Planning Document (LNCH SPD), adopted March 2018

4.5 Additional Operational Noise Issues - Non-residential uses

The following operational noise issues will also require consideration and noise mitigation as necessary:

 Non-residential uses – Operational: Operational noise levels associated with non-residential uses such as the community hub including function rooms, retail and commercial uses and recreational uses such as sports halls / sports pitches and community uses at schools, Local Equipped Areas of Play (LEAPs) and Neighbourhood Equipped Areas of Play (NEAPs) and any MUGA.

Mitigation measures including careful design and location / distance separation and acoustic barriers / screening may need to be considered and put in place to ensure that noise from any noisy activities / uses, operational plant / equipment and delivery and servicing do not give rise to significant adverse noise effects and to otherwise mitigate and reduce any adverse noise impact to a minimum.

It is noted that the DAS, March 2019 refers to the fact that LEAPs and NEAPs will require buffer zones of 20m and 30m respectively between the activity area and houses. The recommended source of these buffer zones is not detailed but it appears that they are in accordance with SCDCs' 'Local Development Framework: Open Space in New Developments - Supplementary Planning Document, Adopted January 2009'. The Buffer Zone is the space between the facility and the nearest residential property, which is required to minimise disturbance. This is general guidance and may need to be supported by noise assessment depending on the nature of the activities and play equipment proposed.

Any impacts can be assessed and mitigated by condition as recommended.

• Internal streets / roads - Operational: Traffic noise impact from any internal primary roads within the development site on future residents of development itself

The impact of traffic noise from the proposed development itself affecting new dwellings on site and in particular those alongside and overlooking primary and secondary traffic / highway routes, based on predicted traffic modeling is a material consideration. A noise insulation scheme for residential uses in these locations will be required. External amenity areas such as balconies on the noisy façade may not be acceptable unless justified.

 There are three separate commercial / industrial and warehouse / storage units located at 3 to 13 Coldhams Business Park, Coldhams Lane / Norman Way, Cambridge, CB1 3LH with rear accesses and service yards approximately 50 to 70 metres directly opposite the western edge of the development site, where residential premises are proposed.

It is understood that these industrial / commercial type premises operate on a 24/7 basis and night-time deliveries and collections are permitted. Operational noise associated with these units may have a significant adverse impact on the proposed residential in this general location. A BS 4142 type noise assessment will be required to assess such impacts as part of any reserved matters application for residential in this area etc. The applicant should be aware that such industrial noise sources may influence the final design and layout of noise sensitive residential premises in this location including internal habitable room layout / configuration and whether any opening windows would be acceptable on facades overlooking the industrial estate.

However, it is considered that these matters are detailed design issues which can be controlled by condition and assessed and mitigated as necessary at any reserved matters application detailed design stage, as recommended.

5.0 Odour Impacts - Cambridge City Airport (CCA) Potential Odour Sources

Chapter 10 - Air Quality Impact Assessment of the ES (UPDATED) -Volume II: Main Text, March 2019 also considers the approach and findings of the assessment of potential odour impacts associated with Cambridge City Airport (CCA) on the proposed development.

The development site is located adjacent to CCA and a number of emission sources have been identified that are potentially odorous. The principal sources of odour pollution are from aircraft emissions, from the main aircraft engines and auxiliary power units (APUs), and emissions from the engines used in Ground Support Equipment (including airside vehicles and mobile ground power units). Odours are primarily from the incomplete combustion of aviation kerosene and diesel when aircraft are taxiing or idling

It is stated that odour emissions will occur at the runway (during take-off and landing), taxiways, aprons and the recently approved Ground Running Enclosure (GRE) which is to be located close to Hangar 17 on the west side of the airport site. The majority of odour emissions (>90%) are likely to be released during the engine start-up, taxiing and queuing of aircraft, when aircraft engines are at low (idle) thrust settings. Historically complaints about odours from the airport have been related to aircraft Engine Ground Running (EGR) – engine testing, rather than normal airport operations.

The chapter acknowledges that while the proposed development will introduce sensitive properties closer to the runway than those existing properties at Church End, there are already properties at a similar distance or closer to the runway than the at Nuttings Road and Airport Way.

Furthermore, it is stated that the recently approved and constructed Ground Run Enclosure (GRE - Cambridge City Council permission 16/2212/FUL and South Cambridgeshire District Council permission S/3591/16/FL) at the CCA is located approximately 500 m away from the site and will be operated to align with an Odour Management Plan (OMP) as required by condition, to prevent potential odour nuisance, such that complaints relating to engine testing should be minimised. It is also noted that the new GRE can only be used up to 500 hours per year as required by condition, with each test lasting no longer than four hours at any time. Some engine testing will occur outside the GRE on main runways but such occurrences are considered as being very exceptional rather than the norm. The nearest airport apron is located over 700 m away from the proposed development.

5.1 Conclusion: Odour Impacts - Cambridge City Airport (CCA) Potential Odour Sources

We agree with the ES (UPDATED), March 2019, that in the case of airports, the use of odour dispersion modelling for impact assessment is relatively uncommon and highly uncertain, is generally considered to be unreliable, and therefore the conclusions of the impact assessment have been based mainly on the findings of an odour risk assessment which is considered to be most appropriate.

The impact assessment has used a risk-based approach undertaken having regard to national and industry odour standards, guidance and criteria including the Institute of Air Quality Management (IAQM) 'Guidance on the assessment of odour for planning (IAQM, 2014)'.

It is also important to note that the human nose is very sensitive to odours, and many substances that are perceived as odorous are usually present at detection threshold levels below which there is a direct harmful effect on human health.

However, as agreed with the CCiC Environmental Health Officers, prior to the original application submission, additional field survey work in the form of a total of twelve field odour site surveys (sniff testing) were undertaken between 19 June and 21st August 2018 to support the findings of the odour risk assessment. These surveys follow the methodology set out in Appendix 10.9 of the updated ES, March 2019. These surveys followed a methodology agreed with CCiC and consistent with the IAQM odour guidance and were carried out by certified, trained assessors.

Surveys were undertaken for as many wind speeds and directions as possible, as many times of day as possible (covering the operational hours of CCA), and to coincide with as many aircraft operations as possible (including engine testing as well as small and large aircraft movements). Additionally, the surveys include sniff-tests surrounding CCA to provide additional context to the assessment.

The use of a multi-tool approach to the odour assessment adheres with the guidance provided by the IAQM. The findings of this work are submitted as part of the updated ES as supplementary information to assist the Council's assessment of odour related matters.

It is reported in the ES that the field surveys demonstrate that CCA odour emissions are infrequently detectable outside of the airport and are only detectable during engine testing or large aircraft operations, both of which occur very infrequently and for short durations. When detected, the odours will be very faint and the overall odour effect throughout application site is considered negligible.

Overall, it is judged that odour effects at the Proposed Development resulting from the operation of CCA will be negligible and not significant. This judgement is based on the conclusions of the odour risk assessment and odour field surveys, which identify the potential for negligible odour effects.

As reported in the ES, we agree with the results of the odour field surveys which support the risk based odour impact assessment conclusion that the odour effects of the airport are negligible and not significant. CCA odours are very unlikely to have an adverse impact on the health and quality of life / amenity of the development site, and therefore no mitigation is required. No further action is required in relation to this matter.

6.0 Artificial Lighting - Construction & Operational

In response to our initial planning comments and request for additional assessment, clarifications and justification an updated / revised ES Appendix 5.7 titled 'Land North

of Cherry Hinton - Lighting Assessment (Project Ref: 37305 | Rev: 04| Date: March 2019 & Doc Ref: 3005)' has been submitted.

It is stated that this lighting assessment supports the Landscape and Visual Impact Assessment provided in Chapter 5 of the Environmental Statement (ES) submitted with the outline planning application.

The updated / revised light assessment considers the potential effects from obtrusive light that may arise from the artificial lighting associated with the construction and long term operation of the Proposed Development.

The key aims and objectives of the lighting assessment are to:

- identify national and local planning policy and guidance as relevant to lighting for the proposed development;
- determine the existing lighting conditions within the Site and wider study area;
- establish the minimum lighting levels required to construct and operate the proposed development safely, securely and energy efficiently;
- assess the potential effects of the minimum exterior artificial lighting required for the proposed development on light sensitive receptors (including CCA); and
- establish design objectives for the lighting design to ensure obtrusive light is minimised to within guideline levels.

6.1 Artificial Lighting: Construction

Artificial lighting during the construction phases will generally be temporary in nature. With a careful lighting scheme / design, location / orientation of luminaire including security lighting and use we do not envisage any unacceptable adverse impacts on the local area.

The submitted Appendix 4.1 titled 'Land North of Cherry Hinton - Outline Construction and Environmental Management Plan (Project Ref: 37305 | V4.0 | Date: March 2018 & Doc Ref: 37305/3003/CEMP)' also includes a section of artificial lighting which is generally acceptable.

In conclusion, prior to commencement of development a site wide CEMP and reserved matters application CMS type conditions are recommended which includes an item on artificial lighting control and consideration of appropriate mitigation measures to be submitted in writing for approval by the LPA.

6.2 Artificial Lighting: Operational

The updated / revised ES Appendix 5.7 titled 'Land North of Cherry Hinton - Lighting Assessment (Project Ref: 37305 | Rev: 04| Date: March 2019 & Doc Ref: 3005)' includes consideration of the following:

- relevant legislation / policy / guidance;
- assessment methodology;
- existing baseline conditions determination / ILP Environmental Zone classification;
- the location of sensitive receptors;
- lighting sources / requirements;

- potential impacts and
- consideration of mitigation including lighting design schemes.

It is recommended in Appendix 5.7 that all detailed lighting design for externally lit areas will need be conditioned and submitted for approval as part of subsequent reserved matters application(s). This approach is robust and acceptable.

It is stated that the potential effects of obtrusive light from the operational development may therefore affect both existing sensitive receptors outside of the proposed development, as set out in Table 5.2: Existing Sensitive Receptor – closet existing residents along the southern south-west boundary border of the Site (those at Coldhams Lane, Hatherdene Close, Rosemary Lane, Braybrooke Place, Reilly Way, March Lane, Teversham Drift), to the east / south east of the Site to the east of Cherry Hinton Road (Dolphin Close, Caribou Way, Gazelle Way - adjacent to south boundary) and east of Airport Way (Church Road, Lady Jermy Way, Lapwings Close, Marshalls Close in Teversham) and future sensitive receptors within the proposed development (as set out in Table 5.3). Potential effects are set out in Section 7.5 and 7.6.

The predominant light sources introduced at the proposed development are identified as follows:

- residential street / security lighting
- car park lighting for residential
- educational and community uses
- · flood lighting for sports pitches and MUGAs, and
- road lighting where necessary for access junctions onto the highway network.

6.3 Conclusion: Artificial Lighting – Operational

The NPPF states that good design needs to limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

Environmental Health are particularly concerned about the impact / effects of obtrusive lighting / light intrusion including glare on residential premises as it can be considered a statutory nuisance and can have an adverse impact on quality of life / amenity.

We do not consider the impacts on other potential receptors such as Cambridge Airport (Aviation), road users, the general public, landscape and visual or nature conservation / ecology (flora and fauna).

The operational artificial lighting impact assessment has been undertaken having regard to relevant planning policy and national / industry artificial lighting standards, codes of practice and best practice technical guidance and in particular the following Institution of Lighting Professionals (ILP) documents / guidance:

- Guidance Notes for the Reduction of Obtrusive Light GN01:2011
- Professional Lighting Guide 04: Guidance on Undertaking Environmental Lighting Impact Assessments, 2013 (ILP, PLG04, 2013)

It was qualitatively determined in the original submitted Lighting Assessment Report, March 2018 that the baseline conditions of the application site is located within Environmental Zone E3 (Suburban). However, the results of the additional lighting **Appendix I** – Environmental Health Consultation Response

survey undertaken in August 2018 (Appendix G - Response to EHO Comments Technical Note) show that the application site is Environmental Zone E2 (Rural with low district brightness in the Site and it is in rural surroundings) with a small section of land on the edge of the application site being classified as Environmental Zone E3 (Suburban, with medium district brightness) due to light obtrusion from the existing settlement area.

The ILP guidance suggests that localised elevated levels of lighting should not be considered as part of the overall classification. Therefore, the Site has been categorised as ILP Environmental Zone E2 (Rural) as there are low levels of district brightness predominantly in the Site and it is in rural surroundings.

Given the scale and nature of the land uses within the proposed development, it is anticipated that in area which are to be developed (i.e. residential, mixed-use/local centre and schools) the ILP Environmental Zone may change to E3 (Sub-urban) once the proposed development (or phases of the proposed development) becomes operational.

It is also noted that the preliminary lighting design for the MUGA (Appendix F - Multi-Use Games Area Lighting Design Technical Note) associated with the secondary school indicates that flood lighting can be installed to minimise the impact of obtrusive light on proposed residents to the west within guideline levels.

The location of the MUGAs has been reviewed in relation to the consideration areas. As such, the MUGAs have been relocated to areas with the least possible effect of the lighting onto the other consideration areas.

Luminaires have been designed to be directed into the MUGAs to aid in mitigating the light spill. Due to advancements in external lighting, LED technology allows for luminaires to be directionally focused which further limits light spill. Internal louvres shall also be attached to the luminaires.

The central principle of mitigation for operational lighting of the proposed development outline is that any future lighting designs prepared for submission of reserved matters should confirm light levels are, as far as possible, are kept within the limitations set for ILP Environmental Zone. It is therefore recommended in the submissions that as part of the mitigation strategy, that wherever technically and financially feasible; and appropriate in terms of safety, new artificial lighting for each phase is kept within the limits set out for ILP Environmental Zone E2 (Rural).

A lighting design showing lux contour lines should be prepared to support the reserved matters application for Compliance for any given plot(s) for any external lighting in publically accessible locations. These areas include road lighting, car park lighting, security lighting and flood lighting to and are required to demonstrate that the lighting levels will be kept within the thresholds of ILP Environmental Zone E2 where technically possible.

Airport Hangar mounted task and security lighting give rise to a degree of glare on the application site but vertical lux readings show that due to the distance of the application site from Cambridge Airport, the lux levels are within guideline values (ILP Guide, 2011).

We conclude that operational artificial lighting is unlikely to give rise unacceptable adverse impacts on existing residential premises in the area and future occupiers of the site subject to further detailed lighting design approval.

Therefore further detailed lighting design for externally lit areas of the scheme (e.g. residential, educational, sports pitches, MUGAs, community use and roads) should be submitted and approved by the Local Planning Authority. This should be secured for each reserved matters application by condition, as recommended.

7.0 Air Quality - Operational

The proposed outline application is located within both Cambridge City and South Cambridge District Council areas and includes 1,200 homes, a 750 pupil intake Secondary School, 472 pupil intake Primary School and 1,850m² Local Centre incorporating shops, cafes and community centre.

Although located outside both districts designated Air Quality Management Areas (AQMA), the proposed development represents an intensification of use in a currently undeveloped area and introduces new emission sources and receptors into the area.

There is a Supplementary Planning Document (Land North of Cherry Hinton SPD, March 2018) pertaining to this application, of which section 5.47 relates to air quality. An Environmental Statement (ES) was submitted with the application of which Chapter 10 relates to Air Quality. This information has been reviewed in Environmental Health memos dated 18th June 2018 and 23rd August 2019. These comments remain relevant and in particular our air quality comments in our memo dated the 23rd August 2019, which for completeness are repeated below in italics 'Air Quality Comments - planning consultation response memo dated the 23rd August 2019 (our M3 Ref No: WK/201856192) repeated in italics below.'

Predicted vehicle movements associated with the proposed development have been agreed with the Cambridgeshire County Council Transport Team. These are higher than those modelled in the Air Quality Assessment (AQA); however this change is not considered significant and will not impact on the overall conclusions. An update of the AQA is therefore not considered necessary.

The conclusions and recommendations are summarised below.

The methodology for the AQA was agreed at pre application stage with dispersion modelling undertaken at receptor points both inside and outside the development site and both inside and outside the AQMA.

The AQA demonstrates that the proposed development will not lead to any new exceedances within the development, surrounding area or AQMA's. We accept this conclusion. However the proposed development will lead to a worsening of air quality within the Cambridge City Council AQMA. This is contrary to Policy 36 of the Cambridge City Council Local Plan. Therefore mitigation is required.

In accordance with Policy 36 of the Cambridge Local Plan and the adopted Air Quality Action Plan (2018) all new developments require Electric vehicle (EV) charge points, car clubs and emissions limits on any combustion emissions to air. These should be

delivered to the standards outlined in the recently adopted Sustainable Design and Construction SPD (2020). These can all be secured by bespoke conditions, as recommended.

This approach for mitigating the impact on air quality has been agreed with the South Cambridge District Council Air Quality Officer.

7.1 Conclusion - Air Quality - Operational

We accept the conclusion that the development will not lead to any new exceedances within the development, surrounding area and AQMA however the AQA demonstrates that it will have a negative impact on air quality within the Cambridge City Council AQMA which is contrary to Policy 36 of the Cambridge City Council Local Plan. We will expect mitigation measures to be put in place.

These should be secured by condition in the form of emission limits for boilers, both active and passive provision of EV charge points and the incorporation of car clubs. These measures are supported by the Land North of Cherry Hinton SPD, recently adopted Sustainable Design and Construction SPD (2020) and the adopted Cambridge City Council Air Quality Action Plan (2018).

<u>Air Quality Comments - planning consultation response memo dated the 23rd August 2019 (our M3 Ref No: WK/201856192) repeated in italics below:</u>

'8.1 Background information/Additional comments

Having reviewed the amendments to Chapter 10.0 - Air Quality Impact Assessment of the ES (UPDATED) March 2019, we confirm that the methodology for the assessment is considered acceptable.

In terms of local air quality the main changes / updates are references to and the consideration of updates to the national and local planning policy framework, including the following:

- Draft Clean Air Strategy 2018 (Defra)
- Reducing Emissions from Road Transport: Road to Zero Strategy (The Office for Low Emission Vehicles (OLEV) and Department for Transport (DfT) published a Policy Paper DfT, 2018a)
- The National Planning Policy Framework (NPPF) (2019)
- Cambridge City Council (CCiC) Local Plan (CCiC, 2018) September 2018 Policy 36 on air quality, odour and dust
- The South Cambridgeshire Local Plan (2018) Policy SC/12: Air Quality
- CCiC Air Quality Action Plan (CCiC, 2018)

It is also noted that section 10.6.4 of the ES states that, a low emission strategy will be submitted to help minimise pollution, which will include a detailed travel plan setting out measures to encourage sustainable means of transport (public, cycling and walking), both active and passive provision of EV charging points and incorporation of car clubs.

We welcome the inclusion of the provision of electric vehicles and car clubs. These air quality mitigation measures should be secured by condition in accordance with Policy 36 of the Cambridge Local Plan 2018 and the Cambridge City Councils Air Quality Action Plan (2018)

Therefore our original comments remain relevant and these were as follows:

NB: These comments are provisional subject to Cambridgeshire County Council agreeing the Transport Figures. However it is worth noting that we consider the predicted vehicle movements associated with this development to be low.

This is a new outline application. The methodology for the Air Quality Assessment (AQA) was agreed at the pre-application stage. There is a 'LAND TO THE NORTH OF CHERRY HINTON (LNCH) - SUPPLEMENTARY PLANNING DOCUMENT, March 2018 Approved for adoption with the Local Plan (LNCN SPD, March 2018)' pertaining to this application, of which sections 3.62 to 3.64, 5.39 and 5.46 relate / refer to air quality.

The development includes 1,200 homes, a 750 pupil intake Secondary School, 472 pupil intake Primary School and 1,850m² Local Centre incorporating shops, cafes and community centre.

An Environmental Statement (ES) was submitted with the application. The following chapters, supporting appendices and documents have been considered in relation to the impact of the proposed development on air quality:

- Chapter 8 Transport
- Chapter 10 Air Quality
- Chapter 15 Cumulative Impacts
- Chapter 16 Mitigation
- Energy Statement

8.2 Cumulative Effects

A list of developments that should be modelled as part of the AQA was agreed at the pre application stage. These developments are listed in Chapter 15. Section 15.9 confirms that the potential traffic from these developments has been built into the Transport Assessment. Until the Transport Figures have been approved by Cambridgeshire County Council we assume that the cumulative impact of permitted developments will have been built into the findings of the AQA as stated in Section 15.11.12.

8.3 Traffic Emissions

Chapter 8 'Transport' of the ES considers the impact of the development based on a comparison of baseline 2016 vehicle flows, future baseline vehicle flows for 2031 which incorporates the cumulative impact of permitted developments and predicted vehicle flows 'with the development'. It is supported by a Transport Assessment (TA) and Travel Plan produced by Peter Brett Associates and dated March 2018. (Appendices 8.1, 8.2 & 8.3)

18hr & 24hr 5 & 7 days averages for all vehicles and heavy vehicles were calculated based on traffic counts undertaken on two occasions across the study site in 2016. These counts formed the basis for the 2016 baseline traffic flows. The future baseline for 2031 agreed with Cambridgeshire County Council includes the cumulative impact of all predicted flows from the list of permitted developments listed in Chapter 15 Cumulative Impact, Table 15.1. This list was agreed at the pre application stage.

Section 10.2 of the TA predicts total person trip generation at peaks hours based on TRICS person trip rates for the proposed proportion of different land uses and incorporates trip rates for staff coming from outside the development. Figures were adjusted to take account of internalisation and potential for double counting.

Predicted external person trip rates are 1,087 AM Peak and 788 PM Peak (Table 10.11). It is worth noting that we consider the rates of internalisation applied 49% AM peak and 25% PM Peak to appear high.

Table 12.8 of the TA summarises the modal share applied to the trip rates and gives a total of 994 peak AM and 709 peak PM trip rates of which 429 AM peak and 342 AM peak are predicted to be car drivers and trips to the station.

Clarification is required on why the total trip rates for the AM and PM Peak do not match the total external person trip generation in Table 10.11 and it should be possible to confirm this once Cambridgeshire County Council agree the Transport figures.

These external trip rates were then allocated across the network and considered in relation to different link roads. The AADT figures used for the purposes of the air quality assessment are included in Appendix 8.3 and relate to the impact of the development on road links across the study area.

8.4 Travel Plan

We welcome the measures recommended in the Travel Plan (produced by Peter Brett Associates and dated March 2018) which encourage the uptake of cycling, walking and the use of Public Transport.

We would welcome the incorporation of electric bike charging facilities across all land uses to encourage this increasingly popular and sustainable method of getting around the city.

Section 6.7.5 refers to the provision of a car club on site. We welcome this as a proposed measure. We would expect the provision of more than a single car club vehicle and this can be secured by condition.

Section 6.7.5 refers to electric vehicle charge points and the need to future proof. It is worth noting we will expect the provision of active EV charge points across all land uses from the outset of the development and this will be secured by condition. Monitoring of use should be incorporated into the Travel Plan monitoring and review to establish the need and triggers for converting passive to active EV charge points. The conversion of passive to active EV charge points should be built into the measures covered under the contingency fund referred to in section 8.6.8.

8.5 Combustion emissions

The Energy Statement Produced by Peter Brett Associates and dated March 2018 outlines the energy strategy for the development and reviews the opportunities for improving energy efficiency and reducing energy use. At this stage the document looks at viable options and no detailed information is available. However, it dismisses the use of district heating (gas and biomass) and CHP at this site. This is supported by the Air Quality Assessment which excludes emissions from combustion sources as no CHP or large emissions are predicted.

We would expect all boilers installed both domestic and commercial which produce emissions to air to be low NOx (meet an emission limit of 40mg/kWh). Should CHP be installed then City Council emissions limits should be met to minimise emissions to air. This can be secured by condition at outline stage with details on individual boilers provided at the reserved matter stages.

8.6 Air Quality Assessment (AQA)

Chapter 10 Air Quality of the ES considers the operational impact of the development on local air quality in relation to receptors both inside and outside the development area including within the air quality management areas (AQMA).

The methodology for the AQA was agreed at the pre application stage including cumulative impact of other permitted developments and the extent of the study area on the road network and local receptors. This methodology is outlined in Appendix 10.2 and is considered acceptable however the results and therefore these comments are provisional until the traffic data has been approved by the county's Transport Officer.

The modelling found levels of nitrogen dioxide, PM10 and PM2.5 to be below the national air quality objective at all receptors when modelled both with and without the development. The biggest increase in nitrogen dioxide levels was modelled at receptor 83 with an increase of 0.3 micrograms per cubic metre (1%) and of PM10 at receptor 36 with an increase of 0.3 micrograms per cubic metre. There is a predicted increase of 0.3 micrograms per cubic metre at receptor 48 with levels predicted above the national objective limit. This receptor is located inside the AQMA.

When modelled again using the worst case sensitivity test exceedances were predicted at three receptor points all of which are located within the City Councils AQMA. These exceedances were predicted both with and without the development. The maximum increase in nitrogen dioxide levels was predicted at receptor 36 (outside AQMA) with a predicted increase of 0.8 micrograms per cubic metre but a predicted level below the objective level.

Although it is acknowledged that this model may be over estimating concentrations it clearly demonstrates the development will lead to a worsening of air quality within the Cambridge City Council AQMA which is contrary to policy 4/14 of the existing Local Plan and Policy 36 of the emerging Local Plan. Therefore mitigation is required.

Section 10.5.30 judges the operational effects on air quality as 'not significant' and offers no recommendations for mitigation. Section 10.6 'Proposed Mitigation' concludes that the development will not lead to any new exceedances of air quality objectives.

8.7 Low Emission Strategy

The development of a Low Emissions Strategy is referenced in several locations including Chapter 16 'Mitigation', Table 16.1 and section 10.2.31 of the Health Impact Assessment within the application documents. However no detail on the content of this is provided. This could be secured by condition and S106 as referenced in Table 16.1.

8.8 Conclusion: Air Quality

Construction Impacts

The Site has been identified as a High Risk site for dust soiling effects during earthworks and construction, a Low Risk site for dust soiling effects for trackout, and a Low Risk site for human health effects

Therefore, the need to implement a Construction Environmental Management Plan (CEMP) which contains a package of measures to minimise dust emissions is recommended by the assessment. With these measures in place, it is agreed that it is expected that any residual effects will be 'not significant'.

A CEMP can be secured by condition or similar as recommended under section 3.0 Construction & Demolition Pollution above. The potential impact and requirements for mitigation must be comprehensively assessed and carried out. Dust monitoring should also be considered.

Operational Impacts

We accept the conclusion that the development (operational) will not lead to any new national air quality objective exceedances within the proposed development and surrounding area. However the AQA demonstrates that it will have a negative impact on air quality within the current AQMA which is contrary to the Cambridge City Council Local Plan both current and emerging (policies 4/14 and 36).

Therefore we will expect mitigation measures to be put in place. These should be secured by conditions in the form of emission limits for boilers, both active and passive provision of EV charge points and the incorporation of car clubs as recommended below. These measures are supported by the Land North of Cherry Hinton SPD (LNCN SPD, March 2018) and the 'Cambridge City Council - Air Quality Action Plan 2018 – 2023: In fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management – 2018' recently approved by the Councils Environment Scrutiny Committee.'

8.0 Odour / Fume Generation & Control / Building Ventilation - Non-residential premises / uses Operational

The proposal includes provision for cafés, restaurants and pubs uses (categorised as A1 to A5 / B1a/D1/D2) likely to be located within the mixed use / local centre. The proposed buildings may include commercial type / size kitchens with residential premises immediately above or nearby. The schools may also have commercial kitchens.

These uses with associated ventilation / extraction systems have the potential to generate cooking fumes, smoke and odours which may have an adverse impact on the quality of life / amenity of future residents, even at relatively low concentrations.

Ventilation systems serving kitchens or similar will need to be designed to prevent harm to amenity / quality of life so the odour controls systems will need to include an adequate level of odour control and stack dispersion. The equipment installed to remove odour from the extract air will depend upon the level of control required. Due

regard should be given to the guidance document 'Control of Odour and Noise from Commercial Kitchen Exhaust Systems (An update to the 2004 report prepared by NETCEN for the Department for Environment, Food and Rural Affairs, EMAQ 05-09-2018)'.

Potential operational odour / fume generation is not mentioned anywhere in the ES although relevant national and local odour related planning policy is referenced in Chapter 10 - Air Quality Impact Assessment.

However, it is acknowledged that potential operational odour / fume generation and control and abatement as necessary is usually a detailed design matter which is use and phase specific.

We are confident that any potentially significant adverse or other adverse impacts can be ether avoided or minimised to an acceptable level providing industry best practice and design is followed. This should be secured by imposition of an Odour / Fume Generation & Control / Building Ventilation - Non-residential premises / uses Operational bespoke condition as recommended.

9.0 Contaminated Land I land affected by Contamination

9.1 Documents reviewed:

- Remediation Options Sustainability Statement by Mott Macdonald, ref: 400182, rev D, dated 2nd December 2019
- Letter Report Proposed Draft Bespoke Conditions, Reasons, & Section 106
 Obligations in relation to ground conditions, dated 4th December 2019
- Response to Environment Agency Queries by LDA Design, ref 5776_EA_Response
- Environment Statement Review by LDA Design, ref: 5776_EIA_Review, V 0.2, dated 24th November 2019

9.2 Comments / Conclusion

This outline application was originally submitted to the City Council back in March 2018. After a review of the information submitted at that time, both Environmental Health and the Environment Agency advised that it was not possible to make an informed decision about the acceptability of the proposed development in terms of contaminated land risk due to a lack of robust site investigation. In particular there was a lack of information on the full extent of groundwater contamination resulting from the former use of part of the site as a fire-training ground. Former fire-training grounds have a significant and lasting legacy of contamination due to the complex chemistry of fire-fighting foam chemicals - specifically perfluorooctanesulfonic acid (PFOS) and perfluorooctanonic acid (PFOA).

The preliminary site investigations undertaken up until March 2018 clearly demonstrated the elevated presence of fire-fighting foam chemicals in controlled waters. However there was insufficient information in terms of the background monitoring of controlled waters and also to the exact extent of PFOS & PFOA contamination within the soils of the former fire-training ground. Under most circumstances the need for further qualitative site investigation does not usually

present an unsurmountable barrier to development and consent is granted with appropriate planning conditions. However in this particular case the contaminants of concern are relatively poorly understood when compared to other more typical industrial contaminants. What is well understood though is their toxicity, their long-term environmental persistence and mobility (especially in water), and their ability to accumulate over time both within the environment and within human tissue. As such PFOS & PFOA are classed as 'emerging' legacy contaminants that require a high level of qualitative site investigation data in order to truly quantify the risks and to inform the decision as to whether effective remediation is feasible given the conditions found on-site and the nature of the proposed development.

Since March 2018 both the Environment Agency and Environmental Health have engaged with the applicants (under respective charging and pre-application arrangements) in order to address the PFOS & PFOA data gap and the associated uncertainty described above. In the intervening 18 months the application site has been subject to further investigation and further groundwater monitoring. As a result the conceptual site model (CSM) has been greatly refined and a site-specific Detailed Quantitative Risk Assessment (DQRA) for controlled waters has been developed and accepted by the Environment Agency. As a result of this extensive liaison, both the Environment Agency and Environmental Health are now satisfied that the lack of information that characterised the 2018 submission has been addressed to such an extent that it is now possible to begin the design of a site-specific groundwater remediation strategy for PFOS & PFOA that has a reasonable prospect of being both deliverable and effective.

However, due to the inherent uncertainties associated with the current state of knowledge of PFOS & PFOA treatment in the long-term, and uncertainties over the influence of site-specific factors upon such remedial treatment (such as localised hydrogeology and the presence of other organic contaminants), there is significantly less guarantee of success than there ordinarily would be in the case of more typical industrial contaminants. This uncertainty is further compounded by the lack of a similar UK-based precedent (i.e. PFOS & PFOA contamination of a Chalk aquifer) at this time.

This higher risk of treatment failure therefore requires a highly precautionary approach when considering the granting of planning consent. However, as result of the applicant's liaison with the Environment Agency and Environmental Health, a suitably precautionary way forward has now been agreed.

The current joint EA/EH objection to the development may be withdrawn as long as site-specific pre-commencement conditions are imposed on the consent together with a Section 106 agreement. Such an approach will enable a limited scale groundwater treatment pilot trial to proceed and its results critically assessed by the Local Planning Authority prior to the commencement of development. Should the pilot trial fail then development cannot take place. However, should the pilot trial be effective, then development may progress subject to a Section 106 agreement that addresses the longer-term issues and uncertainties associated with PFOS & PFOA treatment. Any such Section 106 agreement must address the longer-term issues and uncertainties associated with PFOS & PFOA treatment, including (but not limited to) on-going groundwater monitoring post treatment, unexpected remediation results (and any associated monitoring), maintenance of capping systems, and the need for future remediation. These issues have to be secured in the face of future changes of ownership of the site (as a whole or in part) and future planning applications.

On the basis of the information made available during the recent liaison with the applicants, these two mechanisms working together can overcome the uncertainties associated with PFOS & PFOA treatment (both short-term and long-term) and to provide the necessary level of comfort to the Local Planning Authority that any remediation strategy that may be developed for the site in the future is robust enough to ensure the effective remediation of the site for the lifetime of the development.

10.0 Additional Operational Issues - Bespoke Conditions

10.1 Design Coding - Bespoke Condition

It is assumed that a site wide 'Design code' type condition is likely to be imposed to set the rules / guidance for the design of any new development to ensure high quality design and coordinated development in accordance with various planning policies.

The layout and design of buildings and planting can reduce energy and water use and mitigate against flooding, noise pollution and overheating.

If this is the case the following items / elements should be included in any such condition:

- i. Outdoor sports and children's play space strategy including the formal playing fields, NEAP, LEAPs and LAPs
- ii. The conceptual design and approach to the lighting strategy and how this will be applied to different areas of the development with different lighting needs, so as to maximise energy efficiency, minimise light pollution, in general accordance with Appendix 5.7: 'Land North of Cherry Hinton Lighting Assessment (Project Ref: 37305 / Rev: 04/ Date: March 2019 & Doc Ref: 3005)' approved as part of this outline permission
- iii. Detail how a good acoustic design approach / process will be followed to address and minimise the impacts of noise (from traffic, aircraft, Cambridge City Airport etc.) on noise sensitive uses and achieve acceptable internal and external noise levels with reference to and in accordance with 'BS8233:2014- Guidance on sound insulation and noise reduction for buildings (or as superseded), The Acoustics of Schools: a design guide (Institute of Acoustics (IOA) and the Association of Noise Consultants (ANC), November 2015) and Acoustic Design of Schools: Performance Standards, Building Bulletin 93, February 2015'

It is noted that TOR have submitted a suite of draft conditions (Land North of Cherry Hinton – Draft conditions, 19 August 2019) which includes a Site Wide Design Code condition 6. Under the bespoke conditions section above, we have included this TOR draft condition 6. Site Wide Design Code and have recommended some amendments in bold, to reflect the above.

10.2 Fire Training Ground (FTG) and use of Cross Wind Runway – Cambridge City Airport - Bespoke Condition

The continued use of the current Fire Training Ground (FTG) and cross wind runway at Cambridge City Airport have the potential to have adverse noise and air quality impacts on the quality of life / amenity of the proposed development.

These impacts have not been fully assessed within the ES. However Table 17.1: Summary of Primary and Tertiary Mitigation Measures of the ES sates that the existing Fire Training Ground (FTG), located immediately adjacent to the Site, would cease operation prior to the first occupation of any residential unit to be constructed as part of the Proposed Development. The buildings and infrastructure associated with the FTG would remain in-situ within the boundary of Cambridge Airport. The cross wind runway at Cambridge Airport will cease use for the taking off and landing of aircraft prior to the occupation of any dwelling on the Site.

It is stated that this can be secured by a planning obligation or condition. We agree with this approach and if secured the impacts of these sources of pollution will be negated and no further action is required.

However, the timing of Fire Training Ground (FTG) cessation may also need to have regard to remediation works that may be required for any ground water contamination.

10.3 Proposed Allotments Location - Bespoke Condition

We have some concerns about the proximity of the proposed allotments to existing residential premises / houses and gardens at 10 to 22 March Lane, CB1 3LG and 169 to 173 Teversham Drift, CB1 3LA towards the centre of the southern application site boundary and to proposed residential units.

Allotments near homes can cause particular problems if plot-holders persistently burn waste and experience has shown this can be a general issue on certain allotment sites within the City, when they are relatively close to residential premises. If only dry garden waste is burnt under favourable weather conditions, the occasional bonfire should not cause a major problem but Environmental Health receive many complaints about smoke, smuts and smell from bonfires. Smoke can prevent residents from enjoying their gardens, opening windows or hanging out washing. It may also cause a hazard to motorists using nearby roads as a result of decreased visibility.

Having a bonfire produces smoke especially if the material is damp which can lead to smoldering. The smoke will also contain pollutants such as dioxins, carbon monoxide, nitrogen oxides and particulates. The bonfire can also add to the already high pollution levels within certain parts of the City. Bonfire emissions may also have a direct effect on residents' health, particularly for those suffering from pre-existing medical conditions such as asthma, lung problems or heart conditions.

It is a common misconception that there are specific national laws or local byelaws that prohibit garden / allotment bonfires or similar or specify times they can occur / be lit, but this is not the case. The law does not prohibit allotment holders having a bonfire, and we can only take action under the Environmental Protection Act 1990 if statutory nuisance from smoke or smell is caused but every individual complaint would have to be assessed and it is difficult to gather evidence. The planning standard is the protection of quality of life / amenity.

It is understood for example that Cambridge City Council have a set of allotment rules / guidance for the provision of allotments which includes the management and control of bonfires and similar.

It is assumed that management arrangements for the allotments are to be finalised if permission granted. If the allotments are to remain in their proposed locations we recommend that consideration should be given to controls / mechanisms such as a condition, S106 or similar, to ensure that the allotments are operated under strict allotment society type rules (The National Allotment Society) to be approved by the LPA.

This should include a clause prohibiting the lighting of fires, or having bonfires within the allotments and also prohibiting / restricting the use of powered gardening / horticultural equipment that may cause a noise nuisance. For example the allotment rules should clearly state that no bonfires are allowed. Any allotment holder who is found having a bonfire should be issued with a warning and may have their allotment lease terminated. Similar restrictions should also be considered for the keeping of livestock / animals and cockerels / pigeons, composting and waste storage.

It is recommended that a condition is imposed requiring that any reserved matters application pursuant to the grant of outline permission, which incorporates allotment provision shall include an 'Allotment Management Strategy' that shall be submitted in writing for approval by the LPA. This should include consideration of general and individual plot holder Rules, Conditions and Code of Conduct, with compliance thereafter. The principle and final wording of any such condition requires further consideration and this service should be consulted in due course.

It is noted that TOR have submitted a suite of draft conditions (Land North of Cherry Hinton – Draft conditions, 19 August 2019) which includes a Site Wide Design Code condition 13. Under the bespoke conditions section above, we have included this TOR draft condition 13. Allotment provision and have recommended some amendments in bold, to reflect the above.

11.0 Cumulative Effects

Chapter 16- Cumulative Effects details the general approach and methodology taken throughout the ES assessment in relation to consideration of possible cumulative impacts / effects of the proposed development in combination with the environmental effects of other key major developments in the area / region on sensitive receptors identified through the EIA process.

The chapter draws together the findings from the individual inputs in the ES; defines inter-relationships between the other developments in the area surrounding the site; and establishes whether there are any other cumulative effects on the identified sensitive receptors which may require additional mitigation not previously identified.

Cumulative impacts assessment is particularly relevant to traffic / transport modelling and assessment which inform the noise and air quality chapters and assessments.

The assessment approach taken is generally acceptable and we agree with the conclusions of the cumulative assessment that following the implementation of appropriate design and mitigation secured by conditions, as outline in Table

17.1: Summary of Primary and Tertiary Mitigation Measures (Chapter 17.0 Summary of Mitigation), for the majority of environmental health topics the cumulative residual effects are 'negligible to minor' and therefore 'not significant and can be reduced to minimum acceptable level following mitigation as outlined.

12.0 Waste Strategy

Environmental Health no longer comments on waste/recycling strategies. Please contact the Waste Strategy team direct for advice and information on these matters.

Regards,

Greg Kearney
Principal Environmental Health Officer
Environmental Quality & Growth Team
Environmental Services
Cambridge City Council



CAMBRIDGESHIRE QUALITY PANEL

REPORT OF PANEL MEETING

Scheme: Land North of Cherry Hinton (up to 1,200 dwellings)

Date: Monday 4th June 2018

Venue: Cambridgeshire County Council

Time: 13:45 – 16:00 hrs.

Quality Panel Members

• Robin Nicholson (Chair)

- Steve Platt
- Luke Engleback
- Phil Jones
- Ashely Bateson
- David Pritchard

Panel secretariat and support

• Stuart Clarke – Cambridgeshire County Council

Local Authority Attendees

- Jonathon Brooks Principal Urban Designer, Cambridge City Council
- Philippa Kelly Principal Planner, Cambridge City Council

Applicant and Representatives

- Richard Oakley Marshall Group Properties
- Richard Burton Terence O'Rourke
- Elliot Page Peter Brett Associates
- Sarah Pullen Terence O'Rourke

1. Scheme description and presentation



Architect/Designer: Terence O'Rourke

Applicant: Marshall Group Properties and Endurance Estates

Planning status: Outline Planning Application

2. Overview

Marshall Group Properties and Endurance Estates (hereafter referred to as the applicant) have submitted an outline planning application for a new neighbourhood at Land North of Cherry Hinton. The proposals comprise:-

- Up to 1,200 new homes;
- A primary school;
- A secondary school;
- A local centre and associated community facilities; and
- Open space.

The site lies across the boundary of Cambridge City and South Cambridgeshire and comes forward as an allocated site under the Cambridge East Area Action Plan and emerging local plans for the respective council administrations.

Pre-application discussion with the local authorities (including the county council) have taken place as well as public consultation events and workshops.

A supplementary planning document has been approved for the development site, which will be adopted with the local plan in due course.

The draft proposals for the site were considered previously by the Panel on 8th January 2018 who were broadly encouraged by the emerging plans for the new neighbourhood.

3. Cambridgeshire Quality Panel views

Introduction

The Panel's advice reflects the issues associated with each of the four 'C's' in the Cambridgeshire Quality Charter. The comments below include both those raised in the open session of the meeting and those from the closed session discussions.

The applicant opened the session by presented the actions they had taken since January to refine the scheme, including their response to the Panel's comments and which have been reflected in the submitted outline planning application. In particular, it was highlighted that there is an agreed approach with the local authorities on the design and nature of the spine road, which is to be a through road with a 20mph design speed. Changes have also been made to the northern attenuation pond which is now no longer required, however, the applicant considered that there were still benefits in retaining and enhancing the pedestrian and cycle linkages through this land to provide access to and from Teversham.

Character



The Panel asked about how surface water will be used in the development not just in terms of attenuation but also as a feature and way of adding character. The applicant advised that the local water table is high, which is a constraint in terms of gravity-feed features, but that they had looked at sustainable urban drainage features such as swales and urban rills, but there were further practical challenges to overcome in terms of adoption of rills by the local highway authority.

The Panel cited examples of exemplar water features, in New Zealand (Waitangi Park) and France (Nantes and Paris) where interesting features, such as stepping stones and more creative ways of providing blue infrastructure, can greatly enhance the setting of development and encourage interaction and integration rather than segregation.

The Panel further suggested that the applicant could consider features such as wet grassland, reed fenland and even wet woodland and that whilst it is recognised that encouraging bird habitat to the site could be a hazard to aircraft at the neighbouring airport, species native to these types of settings are smaller species that pose minimal

The site contains a sub-surface gas pipe, which constrains development in terms of what can be built over it. The Panel asked about the cost and financial impact on the development and whether the design could be integrated to avoid this cost. The applicant responded that they had given much thought to this, but relocation was considered the best solution and that the cost of relocating the pipe at around £2M would not impact on the ability to deliver the affordable housing offer.

The applicant acknowledged that the linear park currently has an edge with the airport, something which is to be celebrated rather than mitigated, however, in the future it could be a more central park if future development, as part of the wider Cambridge East proposals, come forward. This needs to be treated carefully to be able to adapt to future changes.

The Panel supported the general approach to massing and scale of the development and treatment of the edges to the airport.

Community

The Panel asked for confirmation on affordable housing provision. The applicant responded that they are proceeding with their financial modelling on the basis of 40% affordable provision with 75% social rented and 25% intermediate tenure. This complies with local planning policy. Housing will be delivered tenure blind with affordable provision pepper potted throughout the site. The Panel supported this.

The Panel also welcomed the proposal for a trim trail and opportunity for active play but enquired about the management of this and other public provision. The applicant stated that because there are two landowners with different development strategies, they are currently considering an either/or approach for the city council to adopt public infrastructure or a resident-led alternative solution.

The applicant explained their thinking behind the local centre/hub, the locations of the schools and opportunities for community use. The local hub is not intended to be a new centre as Cherry Hinton will remain the local centre for local retail and community facilities, however, there was a request from the community for a community-



café and they were considering various models on how to secure this which makes it viable in the longer term. The Panel welcomed this approach and agreed that the primary school is located in the right place. They also supported the fronting of both schools onto active streets but still had some reservations about linkages from the secondary school to the local hub/centre.

The Panel asked if the schools were correctly sized, especially if adjacent land comes forward in the future as part of the wider Cambridge East proposals. Although this was not responded to at the meeting, it is noted post meeting that the applicant and county council are discussing flexibility to future-proof the school sites, as far is reasonably practicable.

As a general comment rather than specific matter for this development, the Panel raised a concern with the piecemeal development on the airport site and whether sufficient public infrastructure can be secured and delivered if parcels of land come forward at different points in time. Whilst it is acknowledged that there are plans – such as the Area Action Plan – to coordinate infrastructure provision, piecemeal development can erode this should smaller parcels of land be less viable to deliver than the whole developable area and therefore put public infrastructure at risk.

The Panel asked if the needs of older people have been considered, building on the earlier presentation board discussed by the applicant on health and wellbeing. The 'edible' streets theme (street fruit, herb and vegetable plants for all) is something to consider too.

Connectivity

The Panel supported the provision of a bus service through the site but sought clarity on the nature of shared spaces and whether they will be pedestrian priority streets, with the car as a guest, or an informal street. The applicant explained that the peak hour flow along the spine road will be around 500 vehicles (2-way), which is busy but realistic for achieving the desired setting.

The Panel queried the access junction at Coldhams Lane in terms of its location and why it could not be integrated with the adjacent Western Homes development. The applicant responded that the adjacent development was currently being implemented and therefore was not an option due to the differing timescales of delivery. It therefore meant that the development access junction was pushed further down Coldhams Lane to meet the safety requirements of the Highway Authority.

The Panel also queried the tight bends on the spine road at the Coldhams Lane end of the development and whether this would allow for the safe passage of buses. The applicant responded that the road had been tracked for the type of buses proposed to use it, and the design was considered acceptable. Furthermore, the design should deter 'rat running' and offer different views of the streetscape as vehicles turned each corner. The Panel suggested the right angle bend could be eliminated by continuing the Primary Street straight until it hits the road from Coldhams Lane obliquely.

The applicant confirmed that measures to give cyclist priority would be included in the development, both along the spine road and also through other cycle routes across the site and linear park to connect to the city, Teversham and Cherry Hinton. There would also be improvements made along Coldhams Lane and access to the Tins path.



The Panel mooted a type of crossing that allows for cyclists to cross the whole road whilst pedestrians use a staggered crossing. This would be a first for Cambridge and demonstrate the exemplar nature of the development if it could be achieved.

The Panel queried the widths of roads being 7m in places they thought. The applicant responded that the roads vary from 3.5m to 7m but that might include parking and cycle provision too.

The applicant explained that there will be improvements made to Airport Way to increase accessibility to Teversham, as a result of the Wing development, and that the development will provide a signal crossing too across Cherry Hinton Road. A northern pedestrian and cycle link will be provided towards Teversham and the Panel identified a further potential desire line adjacent to the secondary school playing fields boundary for consideration as well as a new link from Airport Way to Lapwings Close in Teversham. Also, it was suggested that lighting is important to ensure these routes feel safe for all users, especially during the darker months of the year. Cambridge has many examples of lighting for cycle and pedestrian routes that differ from standard lighting columns which reflect the sensitivities of an area (e.g. green belt) and the example of the various trial lighting columns and luminaries on Parker's Piece was cited.

The chosen route for the spine road was supported by the Panel, albeit their comments about a route with less severe bends remain and they raised issues of connectivity, if and when future development comes forward on adjacent land. The applicant responded that they considered there was sufficient flexibility to provide strong linkages in the future if needed.

Climate

The Panel emphasised the role of water and water retention for cooling of the microclimate, although it was not clear at this stage what the numbers would need to be achieved are. The use of water features should be spread across the site to maximise the benefits, not just around existing water channels.

The Panel also highlighted the use of mineralisation of materials to absorb carbon dioxide as part of the response to climate change.

Trees are also very important for absorbing carbon dioxide, but also provide shading and cooling benefits. Overheating in modern housing, especially with climate change, mean this is something that has increasing importance in future proofing new housing. Trees such as willows and poplars were cited as examples thought appropriate.

The Panel asked the applicant about their commitment to environmental and energy standards. The applicant responded that the development would be policy compliant and provide 10% renewables and 10% better than required energy efficiency. The Panel considered that a 20% better than required energy efficiency approach might offer more

flexibility in finding the best and most effective solutions with the delivery partners (housebuilders).

The applicant also said that they will take a fabric first approach together with PV and solar panels, but that they were also exploring Passive house standards to achieve low-energy buildings and reduce the ecological footprint of the development. The Panel supported this.

The applicant further stated that they will be required to produce an overheating report as part of any planning consent (if approved) and that in considering plot sizes they had taken account of space for recycling/bins, cycles and electric vehicle charging as the shift from combustion powered vehicles takes effect in years to come.

4. Conclusion

The Panel thanked the applicant for bringing this development back and responding to their previous matters raised. They recognised that this planning application is from two landowners but comes forward as one development.

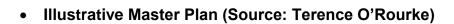
The Panel made a number of recommendations as set out below in summary and explained in further detail in the commentary above:-

- Can smaller parcels of land deliver public infrastructure intended for the wider developable area? Is the development future-proofed?
- Welcome trim trail, play spaces, community access to school playing fields and community café but how will these be delivered and maintained in the longer term – are there mechanisms in place to secure this?
- Welcome proposed cycle provision, but can exemplar features be incorporated?
- Does the site make best use of blue infrastructure the panel would encourage the applicant to explore some of the opportunities discussed to enhance the development further.
- The Panel acknowledge the development is policy compliant for energy efficiency and would support and encourage the applicant to further explore and deliver Passive house measures.
- Each parcel of land for house builders to deliver should include streets rather than be divided up along streets, to provide for a better designed development.
- Use trees for all their benefits and whilst providing bird habitat is an issue for the neighbouring airport and associated aircraft, smaller bird species can be encouraged that need not be a concern.
- Consider, in conjunction with the local planning authorities, a 20% over-all energy efficiency target rather than the current approach.
- Do facilitate recycling, bike and EV charging spaces on housing plots.

• Continue to develop the health and wellbeing theme



5. Drawings







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APPENDIX K - LOCATION PLAN SHOWING APPLICATION SITE, SITE ALLOCATION AND ADMINISTRATIVE BOUNDARY



Appendix K – Location Plan showing application site, site allocation and administrative boundary

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Committee Dates - 2020/21

The proposed dates are:

2020/21	Committee Meeting	Development	Control
		Forum	
June	24 th	As required	
July	15 th	As required	
August	19 th	As required	
September	16 th	As required	
October	21 st	As required	
November	18 th	As required	
December	16 th	As required	
January	20 th	As required	
February	17 th	As required	
March	17 th	As required	
April	14 th	As required	

Members are requested to contact the Committee Manager in advance of the meeting if they have any comments regarding the above dates.

