ELECTRONIC VERSION

Planning Decision

P16/S2368/FUL

APPENDIX 1

Cesl and UK Atomic Energy Authority
c/o Mr David Maxwell
65 Gresham Street
London
EC2V 7NQ

PLANNING PERMISSION

Application No : **P16/S2368/FUL**

Application proposal, including any amendments :
Development of an Energy Storage Facility (Sui Generis) comprising: a battery building to house plant, an administrative building, security fencing and landscaping; the excavation of land for the installation of a 250MW High Voltage Transformer; extension to existing electricity substation to provide additional plant equipment and building; and the provision of underground cabling between the battery building, transformer and the substation extension.

Site Location : **UK A E A Culham Science Centre near Clifton Hampden OX14 3DB**

South Oxfordshire District Council hereby gives notice that **planning permission is GRANTED** for the carrying out of the development referred to above strictly in accordance with the description, plans and specifications contained in the application (as varied by any amendments as referred to above) subject to the following condition(s) :

1. The development to which this permission relates must be begun not later than the expiration of three years beginning with the date of this permission.

   Reason: By virtue of Sections 91 to 95 of the Town and Country Planning Act 1990 as amended by section 51 of the Planning and Compulsory Purchase Act 2004.

2. That the development hereby approved shall be carried out in accordance with the details shown on the following approved plans, PTD-CAP-ST-G00-DR-AR-

0005, PTD-CAP-ST-G00-DR-AR-0002, PTD-CAP-TR-G00-DR-AR-0013, PTD-CAP-ST-G00-DR-AR-0001, PTD-CAP-ST-G00-DR-AR-010, PTD-CAP-ST-G00-DR-AR-0011, PTD-CAP-BB-ML-DR-AR-0020, PTD-CAP-ST-ML-DR-AR-0020, PTD-CAP-BB-G00-DR-AR-0001, PTD-CAP-BB-G00-DR-AR-0030, PTD-CAP-TR-G00-DR-AR- 0012, PTD-CAP-TR-ML-DR-AR-0013, PTD-CAP-AB-G00-DR-AR-0001, PTD-CAP-BB-G00-DR-AR-0031, 084486-CAP-00-XX-DR-D-000004, 084486-CAP-00-XX-DR-D-000001 P01, 084486-CAP-00-XX-DR-D-000002 P01, CS084486_L_001B, CS084486_L_003 A, CS084486_L_004, CS084486_L_005 A, CS084486_L_006, CS084486_L_011 except as controlled or modified by conditions of this permission.

Reason: To secure the proper planning of the area in accordance with Development Plan policies.

3. Prior to the commencement of the development hereby approved samples of all materials to be used in the external construction and finishes of the development hereby permitted shall be submitted to and approved in writing by the Local Planning Authority.

   Reason: In the interests of the visual appearance of the development in accordance with Policy CSQ3 of the South Oxfordshire Core Strategy 2027 and Policies G2 and D1 of the South Oxfordshire Local Plan 2011.

4. Unless otherwise agreed by the Local Planning Authority 'LPA', development other than that required to be carried out as part of an approved remediation scheme must not commence until phases i) to iv) have been complied with, or further works have been deemed unnecessary as a result of conclusions based on risk assessments during phases i), ii) or iii), and this has been agreed upon in writing by the LPA.

   Document(s) detailing the works undertaken in each phase must be submitted to and approved by the LPA in writing before any other phase commences, and before occupation of any building in relation to phase v). All phases of investigation must be designed and conducted in accordance with DEFRA and the Environment Agency's 'Model Procedures for the Management of Land Contamination, CLR 11.

   i) A South Oxfordshire District Council contaminated land statement questionnaire.
   ii) A preliminary risk assessment, including a site walkover and conceptual site model detailing all potential contaminants, sources and receptors.
   iii) An intrusive site investigation to assess the type, nature, extent and risk(s) of any contamination identified in ii), whether or not it originates on site. It is recommended that the LPA are consulted on proposals.
   iv) A detailed remediation scheme, to bring the site to a condition suitable for the intended use. The scheme shall include all works to be undertaken,

proposed remediation objectives and remediation criteria, a timetable of works and site management procedures. The scheme shall also ensure that after remediation the site will not qualify as Contaminated Land under Part 2A Environmental Protection Act 1990.
v) Validation of the remediation scheme demonstrating the effectiveness of the remediation approved in iv).

If contamination is found during the course of development that was not previously identified, the development must be halted on that part of the site to the extent specified by the LPA and until the LPA are satisfied that all necessary phases above have been undertaken.

Reason: To ensure that risks from land contamination to future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors in accordance with Policy EP8 of the South Oxfordshire Local Plan 2011.

5. Prior to the commencement of the development (including demolition, ground works, vegetation clearance) a construction environmental management plan for Biodiversity (CEMP: Biodiversity) shall be submitted to and approved in writing by the local planning authority. The CEMP (Biodiversity) shall include the following:

a) Risk assessment of potentially damaging construction activities.
b) Identification of "biodiversity protection zones".
c) Practical measures (both physical measures and sensitive working practices) to avoid, reduce or mitigate the impacts on important habitats and protected species during construction (may be provided as a set of method statements).
d) The location and timing of sensitive works to avoid harm to biodiversity features.
e) The times during construction when specialist ecologists need to be present on site to oversee works.
f) Responsible persons and lines of communication.
g) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person.
h) Use of protective fences, exclusion barriers and warning signs.

The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority.

Reason: To ensure there is no harm to biodiversity features during the construction phase of the development, in accordance with provisions of the NPPF and Policies CSB1 of the South Oxfordshire Core Strategy 2027 and C6

of the South Oxfordshire Local Plan 2011.

6. Prior to commencement of development, a lighting strategy for bats around the northern and western site boundaries shall be submitted to and approved in writing by the Local Planning Authority. The strategy shall:

   a) identify those areas/features on site that are particularly sensitive for bats or birds and that are likely to cause disturbance in or around their breeding sites or resting places or along important routes used to access key areas of their territory, for example for foraging; and
   b) show how and where external lighting will be installed (through provision of appropriate lighting contour plans and technical specifications) so that it can be clearly demonstrated that areas to be lit will not disturb or prevent bats using their territory or having access to their breeding sites or resting places.

   All external lighting shall be installed in accordance with the specifications and locations set out in the strategy. Under no circumstances should any other external lighting be installed without the prior consent from the local planning authority.

   Reason: To protect the important species on site in accordance with Policies CSB1 of the South Oxfordshire Core Strategy 2027 and C6 and C8 of the South Oxfordshire Local Plan 2011.

7. Development shall not begin until a surface water drainage scheme for the site, based on sustainable drainage principles and an assessment of the hydrological and hydro-geological context of the development has been submitted to and approved in writing by the local planning authority. The scheme shall subsequently be implemented in accordance with the approved details before the development is completed. The scheme shall also include:
   - Ground permeability test results
   - Groundwater appraisal
   - Design calculations based on these with appropriate climate change allowance
   - SUDs site proposals
   - Hood exceedance routing
   - Phasing of the development
   - Future maintenance plan

   Reason: To ensure the effective drainage of the site and to avoid flooding (Policy EP6 of the adopted Local Plan).

8. Development shall not commence until full details of the specification of the proposed flood mitigation measures, as referenced in the Addendum Flood Risk Assessment (2016) have been submitted to and approved by, the local planning authority, in consultation with the Local Flood Authority. The scheme

shall subsequently be implemented in accordance with the approved details before the development is completed.

Reason: to prevent an increased risk of flooding in accordance with National Planning Policy Framework

9. Development shall not commence until a drainage strategy detailing any on and/or off site drainage works, has been submitted to and approved by, the local planning authority in consultation with the sewerage undertaker. No discharge of foul or surface water from the site shall be accepted into the public system until the drainage works referred to in the strategy have been completed.

Reason: The development may lead to sewage flooding; to ensure that sufficient capacity is made available to cope with the new development; and in order to avoid adverse environmental impact upon the community in accordance with Policy EP1 South Oxfordshire Local Plan 2011.

NB: The above permission/consent may contain pre-conditions, which require specific matters to be approved by the Local Planning Authority before a specified stage in the development occurs. This means that a lawful commencement of the approved development/works cannot be made until the particular requirements of the pre-condition(s) have been met.

NB: This approval is specific to the details of the development as shown on the approved plans and other associated documentation. Unless otherwise agreed by the Council any departure from the approved plans will constitute unauthorised development and may be liable to enforcement action. As such the Council must be advised in writing of any proposed variations from the approved plans and other associated documentation at the earliest stage possible. A decision will then be made as to whether the changes can be dealt with as a minor revision to the approved details or whether a revised application is required.

This permission refers only to that required under the Town and Country Planning Acts and does not include any consent or approval under any other enactment, byelaw, order or regulation.

Reason for Decision

The proposed energy storage facility would represent inappropriate development in the Green Belt and would, by definition, be harmful to the Green Belt. In assessing this application significant weight has been attached to the harm to the Green Belt. However, the Council considers various circumstances outlined in the application present very special circumstances that clearly outweigh the harm to the Green Belt.

The proposed development itself, in terms of scale and appearance, would be in keeping with the nature of existing development on the Culham Science Centre. Furthermore, the landscape mitigation works proposed would not only screen the development proposal itself, but would result in long term beneficial effects on the character of the landscape more widely to the north of the science centre.

n accordance with paragraphs 186 and 187 of the National Planning Policy Framework the Council takes a positive and proactive approach to development proposals. The Planning Service works with applicants/agents in a positive and proactive manner by offering a pre-application advice service and by advising applicants/agents of issues that arise during the processing of their application and where possible suggesting solutions to problems.

In accordance with paragraphs 186 and 187 of the National Planning Policy Framework the Council takes a positive and proactive approach to development proposals. The Planning Service works with applicants/agents in a positive and proactive manner by offering a pre-application advice service and by advising applicants/agents of issues that arise during the processing of their application and where possible suggesting solutions to problems.

Note : A more detailed explanation is available in the officer's report, available in the application case file.

Key Policies

C6	Maintain & enhance biodiversity
C8	Adverse affect on protected species
C9	Loss of landscape features
CON11	Protection of archaeological remains
CON12	Archaeological field evaluation
CON15	Protection of battlefields
CON5	Setting of listed building
CON7	Proposals in a conservation area
CS1	Presumption in favour of sustainable development
CSB1	Conservation and improvement of biodiversity
CSEM3	Culham Science Centre
CSEN1	Landscape protection
CSEN2	Green Belt protection
CSEN3	Historic environment
CSI1	Infrastructure provision
CSM1	Transport
CSM2	Transport Assessments and Travel Plans
CSQ1	Renewable energy
CSQ2	Sustainable design and construction
CSQ3	Design
CSS1	The Overall Strategy
D1	Principles of good design
D10	Waste Management
D2	Safe and secure parking for vehicles and cycles
D6	Community safety
EP1	Adverse affect on people and environment
EP2	Adverse affect by noise or vibration
EP4	Impact on water resources
EP6	Sustainable drainage
EP7	Impact on ground water resources
EP8	Contaminated land
EP9	Hazardous substances
G2	Protect district from adverse development
G4	Protection of Countryside
GB4	Openness of Green Belt maintained
RUR3	Culham Science Centre
RUR5	Use of existing buildings at Culham Science Centre
T1	Safe, convenient and adequate highway network for all users
T2	Unloading, turning and parking for all highway users

Note : The full wording of the above policies are available on our website or in the local plan documents, at our offices.

Head of Planning
15th November 2016

STATUTORY INFORMATIVE

Appeals to the Secretary of State

If you are aggrieved by the decision of your local planning authority to refuse permission for the proposed development or to grant it subject to conditions, then you can appeal to the Secretary of State for the Environment under sections 78 and 79 of the Town and Country Planning Act 1990.

If you want to appeal, then you must do so within **six months** of the date of this notice, using a form which you can get from :

The Planning Inspectorate
Customer Support Unit
Temple Quay House
2 The Square
Temple Quay
Bristol
BS1 6PN
Telephone : 0303 444 5000
www.planningportal.gov.uk
email: enquiries@pins.gsi.gov.uk.

The Secretary of State can allow a longer period for giving notice of an appeal, but he will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.

The Secretary of State need not consider an appeal if it seems to him that the local planning authority could not have granted planning permission for the proposed development or could not have granted it without the conditions it imposed, having regard to the statutory requirements, to the provisions of the development order and to any directions given under the order.

In practice, the Secretary of State does not refuse to consider appeals solely because the local planning authority based its decision on a direction given by him.

Purchase Notice

If either the local planning authority or the Secretary of State for the Environment refuses permission to develop land or grants its subject to conditions, the owner may claim that he can neither put the land to a reasonably beneficial use in its existing state nor can he render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.

In these circumstances, the owner may serve a purchase notice on the Council

(District Council, London Borough Council or Common Council of the City of London) in whose area the land is situated. This notice will require the Council to purchase his interest in the land in accordance with the provisions of Part VI, Chapter 1 of the Town and Country Planning Act 1990.

Compensation

In certain circumstances compensation may be claimed from the local planning authority if permission is refused or granted subject to conditions by the Secretary of State on appeal or on reference of the application to him.

These circumstances are set out in sections 114 and related provisions of the Town and Country Planning Act 1990.

OTHER INFORMATION

The Planning Portal contains a wide range of helpful planning-related guidance and services. You may wish to view their website (www.planningportal.gov.uk).

APPLICATION NO.	P16/S2368/FUL
APPLICATION TYPE	FULL APPLICATION
REGISTERED	18.7.2016
PARISH	CLIFTON HAMPDEN
WARD MEMBER(S)	Sue Lawson
APPLICANT	Cesl and UK Atomic Energy Authority
SITE	UK A E A Culham Science Centre near Clifton Hampden, OX14 3DB
PROPOSAL	Development of an Energy Storage Facility (Sui Generis) comprising: a battery building to house plant, an administrative building, security fencing and landscaping; the excavation of land for the installation of a 250MW High Voltage Transformer; extension to existing electricity substation to provide additional plant equipment and building; and the provision of underground cabling between the battery building, transformer and the substation extension.
AMENDMENTS	None
GRID REFERENCE	453785/196094
OFFICER	Phil Moule

1.0 **INTRODUCTION**

1.1 The application site is located on the Culham Science Centre immediately to the north-east of the existing science centre complex. It is accessed via the main entrance of the science centre on the A415 Abingdon Road. The application site once formed part of the former Royal Naval airfield but now consists of an open grassed area containing within it an approximately 2 metre high earth mound and some informal woodland.

1.2 The site is bound to the north by the science centre perimeter access road (Thame Lane). The eastern and southern site boundaries are formed by additional internal access roads. The western boundary is bound by 1.5 to 2 industrial storey buildings and electricity transformers. Further beyond the site to the east, south and west are buildings, structures and areas of hardstanding used in connection with industrial and business activities as part of the science centre. To the north of the site is Nuneham Park, an Historic Park and Garden.

1.3 The application site along with the rest of the science centre is located within the Oxford Green Belt.

2.0 **PROPOSAL**

2.1 This is an application seeking full planning permission for an energy storage facility. This is to be comprised of three elements. The first relates to the construction of the energy storage facility itself, which consists of a battery building, external electrical equipment, administration building, and associated hardstanding and perimeter fencing. The battery building will be approximately 10m in height, with a floor area of 3,700 sqm. The site area for the facility as a whole will be approximately 13,300sqm. The batteries will store and deliver up to 250 megawatts (MW) of power for the Grid.

2.2 The second element involves the installation of a 250MW High Voltage Transformer, a switchgear building and associated plant equipment. The third element is the extension to the existing National Grid high voltage substation, to provide similar equipment to that which already exists at the substation. The combined site area for these elements of the proposed development will be approximately 6,860sqm.

3.0 **SUMMARY OF CONSULTATIONS & REPRESENTATIONS**

3.1

Clifton Hampden Parish Council - Support

National Grid Plant Protection - No objection

Highways England - No objection

Oxfordshire County Council Single Response - No objection. Negligible traffic impact and suitable access provided.

Health & Housing - Contaminated Land – No objection subject to condition relating to approval of an investigation and remediation scheme.

Landscape Architect - No objection

Health & Housing - Air Quality - No objection

Forestry Officer - No objection

Countryside Officer – No objection subject to conditions relating to approval of a construction and environmental management plan for biodiversity and a lighting strategy

Conservation Officer - No objection

Health & Housing - Env. Protection Team - No objection

Oxfordshire Local Enterprise Partnership - Support

Drainage Engineer (Monson) – No objection subject to conditions relating to off site foul drainage and SUDS design.

4.0 **RELEVANT PLANNING HISTORY**

4.1 P14/S1902/FUL – Approved (24/099/2014)
Erection of a 3,222 sqm Class B1 building (workshop, research and development facility)

P13/S3034/FUL – Approved (18/02/2014)
Erection of new building to accommodate a Materials Research Facility (MRF) with associated car parking

P13/S2287/O – Approved (14/02/2014)
Outline application for erection of up to 9,000 sqm of Class B1 development. As amplified by additional information (email from Kemp & kemp dated 04/11/2013 and 24.11.2013)

P88/W0794 - Approved (11/01/1989)

Retention of buildings J1 and J25 until 2015 (variation of conditions 20 and 21 of planning permission ref SO/W/571/78, and conditions 4 and 5 of planning permission ref P87/W0885.

P87/W0406 - Approved (05/08/1987)
The proposed office building to be known as J20 and associated car parking will be used to accommodate staff at present housed in K5-K7 temporary portakabins.

P86/W0634 - Approved (22/10/1986)
Proposed office building to be known as J20 and associated car parking. (Removal of portakabins K5, K6 and K7).

P86/W0038 - Approved (13/03/1986)
Proposed office building (J20) and associated car parking (removal of portakabins K5, K6 and K7).

P84/W0267 - Approved (08/08/1984)
Extension to the cooling installation P4 i.e. the fourth Cooling Tower (as referred to in application reference SO/W/253/80)

P83/W0411 - Approved (28/09/1983)
EXTENSION OF THE 33KV SUB-STATION SWITCHGEAR (J5).

P81/W0025 - Approved (04/02/1981)
Erection of building to house switch gear.

P80/W0253 - Approved (30/09/1980)
The development of Cooloing Installation for (JET) Experiment.

P79/W0026 - Approved (19/03/1979)
ERECTION OF A COMMON SERVICE BUILDING ON TWO FLOORS ACCOMMODATING REPROGRAPHIC SERVICES, A SEMINAR/LECTURE ROOM, COMPUTER LABORATORIES AND ASSOCIATED OFFICES, TOGETHER WITH LINKS TO ADJACENT BUILDINGS.

P78/W0571 - Approved (13/03/1979)
ERECTION OF NEW BUILDINGS TO PROVIDE AND EXPERIMENTAL HALL FOR A LARGE RESEARCH APPARATUS,THE JOINT EUROPEAN TAURUS(JET), A GENERATOR HALL, A POWER SUPPLY COMPOUND, CONTROL BUILDING AND ASSOCIATED SERVICES AND FACILITIES.

P59/M1015 - Approved (29/01/1960)
Development of site as a research establishment with access.

5.0 **POLICY & GUIDANCE**

5.1 National Planning Policy Framework

5.2 National Planning Practice Guidance

5.3 **South Oxfordshire Core Strategy 2027**

CS1 - Presumption in favour of sustainable development
CSS1 - The Overall Strategy
CSM1 - Transport
CSM2 - Transport Assessments and Travel Plans

CSQ3 - Design
CSB1 - Conservation and improvement of biodiversity
CSEN1 - Landscape protection
CSEN2 - Green Belt
CSEN3 – Heritage assets
CSEM3 - Culham Science Centre
CSQ1 - Renewable Energy
CSQ2 - Sustainable Design and Construction
CSI1 - Infrastructure provision

5.4 **South Oxfordshire Local Plan 2011**

GB4 - Green Belt
RUR3 - Culham Science Centre
RUR5 - Culham Science Centre
C6 - Maintain & enhance biodiversity
C8 - Adverse affect on protected species
C9 - Loss of landscape features
CON5 - Setting of listed building
CON7 - Conservation
CON11 - Archaeology
CON12 - Archaeology
CON15 - Historic landscape designations
D1 - Principles of good design
D10 - Waste Management
D2 - Safe and secure parking for vehicles and cycles
D6 - Community safety
EP1 - Prevention of polluting emissions
EP2 - Noise and vibrations
EP4 - Impact on water resources
EP6 - Sustainable drainage
EP7 - Impact on ground water resources
EP8 - Contaminated land
EP9 - Hazardous substances
G2 - Protect district from adverse development
G4 - Protection of Countryside
T1 - Safe, convenient and adequate highway network for all users
T2 - Unloading, turning and parking for all highway users

5.5 **South Oxfordshire Design Guide (SODG) 2008**

5.6 **Emerging South Oxfordshire Local Plan 2032**

5.7 **Environmental Impact Assessment**

Screening opinion P16/S1738/SCR determined that an EIA is not required for this development.

5.8 **Culham Science Centre Masterplan Supplementary Planning Document**

5.9 A draft Masterplan has been prepared which considers the future development and redevelopment of Culham Science Centre. It has been prepared jointly by the UKAEA and SODC and in consultation with Oxfordshire County Council in its role as Highway Authority. The document has been the subject of public consultation which was undertaken in July 2014 and therefore can be afforded some limited weight, although it is yet to be formally adopted as SPD.

5.10 **Neighbourhood Plan**

5.11 Paragraph 216 of the NPPF allows for weight to be given to relevant policies in emerging plans, unless other material considerations indicate otherwise, and only subject to the stage of preparation of the plan, the extent of unresolved objections and the degree of consistency of the relevant emerging policies with the NPPF.

5.12 Clifton Hampden are working towards the adoption of a neighbourhood plan and are at stage 1 in the process – The area has been designated and the parish are working on the draft plan. The neighbourhood plan has limited weight at this stage.

6.0 **PLANNING CONSIDERATIONS**

6.1 **Development within the Green Belt**

6.2 The application site is located within the Oxford Green Belt. The NPPF attaches great importance to Green Belts. The intention of Green Belt policy around the built-up area of Oxford, is to keep land permanently open and severely restrict development.

6.3 The purposes of the Green Belt are to:
- preserve the special character and landscape setting of Oxford
- check the growth of Oxford and prevent ribbon development and urban sprawl
- prevent the coalescence of settlements
- assist in safeguarding the countryside from encroachment
- assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

6.4 In accordance with Para's 87 to 89 of the NPPF, the proposed energy storage facility would constitute inappropriate development within the Green Belt. Such development should not be approved except in very special circumstances. In determining this application, substantial weight is given to any harm to the Green Belt. Very special circumstances will only exist if the harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations. This position is echoed in Core Strategy Policy CSEN2

6.5 The planning statement supporting this application sets out the very special circumstances to be considered in this case. The most relevant of these are set out below:

<u>National importance</u>

6.6 The UK has a strategic objective to transform itself into a low carbon economy, in large part via growth of renewable energy generation such as wind and solar. As renewable energy generation grows, the national transmission network run by National Grid has to cope with greater fluctuation in power generation often at very short notice. This can leave the UK's power supply unstable and therefore customers are at risk of losing power and overall stability and safety of the transmission grid network will be at risk.

6.7 In addition to the growth in renewable energy generation, the UK is witnessing a structural reduction in its conventional power generation fleet typically fuelled by coal and gas. In 2014 ~30% of the UK's electricity supply came from coal-fired power stations. However, in November 2015 the Secretary of State for Energy and Climate Change announced proposals, subject to consultation, to close the remaining coal-fired power stations by 2025. Such closures will also place stress on the stability of the UK's transmission network.

6.8 Energy storage provides the fast response capability to adapt to these fluctuations in power generation, arising as consequence of the type of issues referred to above,

whilst at the same time offering a cost effective, secure and green solution. It can manage the amount of power required to supply customers at times when need is greatest. It can also provide frequency regulation to maintain the balance between the network's load and power generated, and it can achieve a more stable and reliable power supply for high tech industrial facilities. Thus, facilities of this kind can act as a catalyst for the transformation of the UK power industry thereby bringing benefits to its customers.

6.9 Among these benefits are:

- improved power quality and the reliable delivery of electricity to customers;
- improved stability and reliability of transmission and distribution systems;
- increased use of existing equipment, thereby deferring or eliminating costly upgrades; and
- improved security with a more efficient grid that is more resistant to disruptions

6.10 It is estimated by National Grid (see National Grid System Operability Framework, November 2015) that approximately 1 GW (1000 MW) of storage will be required by 2030, but with a renewable generation target of 15% by 2020, a first grid-scale storage deployment is required as soon as possible but in any event no later than March 2018. With a storage capacity of up to 250MW, the proposed facility at the Culham Science Centre will make a significant contribution to this requirement.

<u>More efficient use of renewable energy sources</u>

6.11 The proposed Energy Storage Facility has the capacity to enable the more efficient and reliable supply of renewable power generation across the UK. Energy storage can play a big part in the electricity grid and can support the increased generation of renewable electricity. Producing renewable electricity is most commonly associated with wind and solar power. Although these power sources are clean and renewable sources of electricity, they can also be unreliable since they do not produce any power when it gets dark or when the wind stops blowing. The proposed facility will store excess electricity such that it can be released as needed.

6.12 By enabling the more efficient use of renewable electricity generation, energy storage facilities will contribute to carbon dioxide savings and so will assist with countering climate change. Based on the ability to deliver 250 MW of power to the grid, this equates to an annual saving of ~50,000 tonnes of carbon when compared to a diesel generator operating at the same load profile. Furthermore, more efficient use of clean electricity will increase the economic value of wind and solar power and strengthen the UK's competitiveness in the clean energy race.

<u>Optimum site for the delivery of the 250MW energy storage facility</u>

6.13 Details of the site selection process are set out in Section 7 in the planning statement including the site search selection criteria. A total of 429 sites were assessed across the UK, carried out in two waves. The first wave focussed initially on substations where the applicant understood there to be spare capacity to connect to the grid. This included substations next to power stations which were due to close or which had already closed, thereby relinquishing capacity, as well as other sites where it was known there was spare capacity such as the CSC. The second wave involved a UK wide search taking into account all other National Grid Energy Transmission high voltage substations.

6.14 Culham Science Centre emerged from the site selection process as the optimum site for a 250MW Energy Storage Facility for the following reasons:

- There are no grid constraints in the area which would prevent connecting the Energy Storage Facility into the grid;
- There is sufficient transmission entry capacity in the part of the grid into which it is proposed to connect the Energy Storage Facility;
- There is connection entry capacity and physical space available at the substation;
- The site is capable of connecting into the substation and completed in time with National Grid's timescale for the delivery of the facility as early as possible but in any event no later than March 2018;
- The facility would not be subject to flood risk and falls outside flood risk zones 2, 3, 3a and 3b;
- The site does not fall within a SSSI or any other ecological designation;
- Landscape impacts can be appropriately mitigated;
- The land is available; and
- There are no cabling complexities and the site is within 1km from the existing substation

Compatibility with existing uses

6.15 Locating the proposed Energy Storage Facility at Culham Science Centre is consistent with and will enhance further its status and reputation as a world leader in the fields of energy technology and innovation. The facility will also raise the site's profile and the profile of Science Vale. Moreover, it will assist the UKAEA in attracting further energy-related research and development activity to the site without displacing the planned capacity for a 1,000 new science and technology related jobs.

6.16 The points above demonstrate that there are clear benefits arising from the proposed Energy Storage Facility that are in the national interest and support the Government's objectives and targets for renewable energy sources and a low carbon economy. A strong justification also exists to locate the facility at the Culham Science Centre, when assessed against 492 alternative sites across the UK.

6.17 The proposed Energy Storage Facility would constitute inappropriate development and by definition would be harmful to the Green Belt. However, on the basis of the points raised above, it is my opinion that very special circumstances can be demonstrated that clearly outweigh the harm to the openness of the Green Belt.

Landscape

6.18 The application is supported by a Landscape and Visual Appraisal prepared by Capita. The methodology for the appraisal draws upon a range of approaches and techniques but is primarily based on the 'Guidelines for Landscape and Visual Impact Assessment (GLVIA3) and the Landscape Character assessment Guidance for England and Scotland.

6.19 The appraisal concludes that the proposed Energy Storage Facility would be visible within the Culham Science Centre and from publicly accessible locations to the east and north of the site (i.e. by users of public footpaths 171/16, 171/6, 171/10 and 183/4). Glimpsed views of the proposed facility, the laying of underground cabling and the removal of existing vegetation to facilitate the transformer and substation extension areas are also anticipated to be seen from limited locations within the wider study area.

6.20 The facility is not anticipated to be seen from any nearby settlements or nearby properties. The proposed facility would not materially alter landform within the study area or materially alter the characteristics of any defined landscape character types /

areas contained in the National Character Areas, Oxfordshire Wildlife and Landscape Study and South Oxfordshire Landscape Assessment. The proposed facility would be visible from a number of locations within the Nuneham Courtenay Registered Park and Garden and Conservation Area and to a limited extent from within Clifton Hampden Conservation Area. Accordingly, mitigation is proposed in the form of woodland and thicket planting on the northern boundary of the site to screen the proposed facility.

6.21 The council's landscape consultant has commented that the proposed mitigation strategy would retain and protect the key landscape features within the site and provides a scheme that would fit in with the local landscape character. Furthermore the introduction of woodland and scrub planting would create a robust northern boundary to Culham Science Centre. This additional planting would restrict the effects of the development on the perceived openness of the site. Over time the proposed planting would not only screen views of the proposed development, it would also screen some of the existing views of buildings within Culham Science Centre, which currently have a negative contribution to local landscape character and visual amenity. The scheme would therefore have long term beneficial effects on the character of the landscape to the north of the site and on views experienced from public viewpoints to the north and west, including views from Nuneham Court registered Park and Garden and conservation area.

Highways and transport

6.22 Oxfordshire County Council have raised no objection to the proposal, stating that there would be little traffic generation and impact related to the operation of the proposed facility. The access to the development site via the main entrance and internal roads is also considered to be suitable in terms of visibility and geometry and an appropriate provision is made for parking and manoeuvring.

6.23 Highways England have not raised any objection in relation to the proposed development

Drainage

6.24 The application is supported by Flood Risk Assessment and a Sustainable Urban Drainage Strategy, both prepared by Capita. The development site lies within Flood Zone 1, indicating that flooding from rivers (namely the RiverThames) is very unlikely. There is less than 0.1 per cent (1 in 1000) chance of flooding occurring each year from flooding of the Thames. The assessment also demonstrates that flood risk from fluvial, pluvial, tidal, land, surface water, sewers, groundwater, artificial and residual sources are low or negligible.

6.25 Whilst not classified by the Environment Agency, there is an unnamed stream which drains a small catchment lying to the north east of the site which is carried in two branches beneath the land flanking the site to the east. The closest culver is 33m from the closest point of the proposed battery building with the other 80m away. There is evidence that the western branch backed up c2000 causing localised ponding in neighbouring fields. Remedial earthworks were applied at that time involving the widening of the stream channel to provide more flood storage and the application of flood bund.

6.26 The addendum Flood Risk Assessment (August 2016) demonstrates that in more extreme flood events, including the 1% AEP climate change events, significant storage upstream of the bund can occur leading to flow entering the site within a low point adjacent to the concrete wall to the east of the site. The concrete wall is not perfectly linked to the edge of the bund and a larger gap exists where the wall terminates which is the key mechanism for flooding. Mitigation is proposed in the form of extending the

current wall further east which would adequately manage flood risk to the site, leading to water storing on the boundary access road and into the adjacent fields. Full details of the specification of the mitigation works will need to be approved via condition.

6.27 The council's drainage engineer has confirmed that Sustainable Urban Drainage Strategy provides an acceptable basis for SUDs design, and that the details of the details of this should be approved via condition. Any required details for off-site foul drainage will need to be secured via condition and approved by Thames Water.

Ecology

6.28 The application is supported by a Preliminary Ecology Assessment prepared by Capita, which was carried out in May 2016. Further ecology surveys inclusive of bats, birds, botany, invertebrates and reptiles were carried in June 2016 with further surveys carried out in July and August 2016.

6.29 The council's ecologist has commented that the suite of ecological surveys indicate that there are no significant ecological constraints on site for which mitigation is not possible. As such, there are no objections to the scheme on ecology grounds. Conditions are required relating to the approval of a construction environmental management plan for biodiversity and a lighting strategy for bats around the northern and western site boundaries prior to the commencement of development.

Trees

6.30 The application is supported by both an arboricultural method statement and an arboricultural appraisal and impacts assessment. Several trees will need to be removed from the north-west corner of the site to enable the installation of the high voltage transformer and switchgear and the extension to the existing high voltage substation.

6.31 None of the trees within the affected area are subject to Tree Preservation Order. The council's forestry officer has commented that the trees to be removed are varying in quality. However, the impact of the tree removal on the wider landscape would be minimal and the proposed mitigation planting would offset the loss, securing long term tree cover to help soften the development

Conservation

6.32 The application is supported by a Heritage Statement, prepared by Capita. Although there are no designated heritage assets within the application site, there are a number of assets identified nearby including; Nuneham House Grade I Registered Park and Garden, Nuneham Courtenay and Clifton Hampden Conservation Areas, five scheduled monuments and a number of listed buildings.

6.33 The council's conservation officer has assessed the proposals and concluded that the proposed development will not directly or indirectly impact the closest designated assets to the detriment of their special interest or significance nor the contribution of their settings. The proposed built structures will be visually associated with the existing built form on the site and will cause no further impact to the setting of the assets than the existing site. There will be no harm to scheduled monuments or listed buildings nearby.

Environmental Protection

6.34 The application is supported by an Air Quality, a Noise Impact Assessment and a Geo-Environmental Preliminary Risk Assessment. The council's environmental protection team have considered these studies and raise no objection on noise or air quality grounds. With regard to land contamination, no objections have been raised subject to a condition relating to a phased programme of site investigation and remediation.

6.35 The proposed development site does not currently lie within the Health and Safety Executive (HSE) consultation distance of a major hazard site or major accident hazard pipeline.

Oxfordshire Local Enterprise Partnership

6.36 The Oxfordshire LEP support the proposal, stating that 'not only is the facility of high national importance due to the changing nature of the UK's power generation fleet, and an important facility to be based in the South Oxfordshire araea.it creates an excellent opportunity for Culham Science Centre to further enhance its world leading position in the fields of energy innovation and of energy high tech development'.

6.37 In accordance with paragraphs 186 and 187 of the NPPF (2012), and guidance on 'Determining a planning application' in the National Planning Practice Guidance (2014), the Council takes a positive and proactive approach to development proposals. The application was acceptable in its submitted format and the Planning Service worked with the applicant/agent in a positive manner by dealing with the application in a prompt and timely way

7.0 **CONCLUSION**

7.1 The proposed energy storage facility would represent inappropriate development in the Green Belt and would, by definition, be harmful to the Green Belt. In assessing this application I have attached significant weight to the harm to the Green Belt. However, considerations raised in Para's 6.6 to 6.15 in this report (an in more detail in Section 7 the accompanying planning statement) in my opinion represent very special circumstances that clearly outweigh the harm to the Green Belt.

The proposed development itself, in terms of scale and appearance, would be in keeping with the nature of existing development on the Culham Science Centre. Furthermore, the landscape mitigation works proposed would not only screen the development proposal itself, but would result in long term beneficial effects on the character of the landscape more widely to the north of the science centre.

8.0 **RECOMMENDATION**
Planning Permission

1: Commencement 3 years – Full Planning Permission
2: Approved plans
3: Materials to be approved
4: Contaminated land investigation and remediation to be approved
5: Construction environmental management plan for biodiversity to be approved
6: Lighting strategy to be approved
7: SUDs details to be approved
8: Flood mitigation measures to be approved
9: Details of off-site foul drainage to be approved

Sharon Crawford

Development Management Team Leader (Applications)

LEGEND

Proposed Site Boundary

Extent of Study Area

SCALE 1:10,000

50 150

0m 100 250 500

N

Client

Capita GSS / National Grid

Project

Culham Science Centre
Energy Storage Facility

Drawing Title

FIGURE 1
SITE LOCATION PLAN

Drawing Status

FOR INFORMATION

Scale	Date	Drawn
1: 10,000	July 16	CC/PD
Drawing No	**Checked**	**Approved**
CS084486_L_LVA 01		PD

CAPITA

1st Floor, Eleven Brindleyplace
2 Brunswick Square, Birmingham, B1 2LP
Tel +44(0)121 423 6060
Fax +44(0)121 423 6065
www.capitasymonds.co.uk

A1

1 Application Site Red Line Boundary
1 : 1000

Project No.
CS 084486

0cm 2cm 4cm 6cm 8cm 10cm
SCALE BAR

Project: Culham Science Centre, Energy Storage Facility
Client: NEC

Drawing Number: PTD - CAP - ST - G00 - DR - AR - 0002
Drawing Title: Application Site Red Line Boundary Plan
Scale: 1 : 1000@ A1
Revision: P01
Revision Description: Planning Issue
Date: 29-06-2016

architecture | design | town planning
75 Wells Street
London W1T 3QH
telephone 020 7580 5886
fax 020 7612 9200
info@esa-ltd.com
ESA Design Limited, Registered in England No. 03145848
Registered at 75 Wells Street W1T 3QH

A0

1 Site Masterplan
1 : 500

Project No:
CS 084486

0cm 2cm 4cm 6cm 8cm 10cm
SCALE BAR

Project: Culham Science Centre, Energy Storage Facility
Client: NEC
Drawing Number: PTD - CAP - ST - G00 - DR - AR - 0010
Drawing Title: Site Masterplan
Scale: 1 : 500@ A0
Revision: P01
Revision Description: Planning Issue
Date: 29-06-2016

architecture | design | town planning
75 Wells Street
London W1T 3QH
telephone 020 7580 3040
fax 020 7612 5000
info@esa-ltd.com
ESA Design Limited. Registered in England No. 03145848
Registered at 75 Wells Street W1T 3QH

APPENDIX 2

Policy CUL4: Enhancing Culham Conservation Area

Development proposals within the Culham Conservation Area and its setting should preserve or enhance its significance as a designated heritage asset. Features identified as positive characteristics of the Conservation Area and its immediate setting are defined in the Culham Design Code. All development proposals in the Conservation Area should have full regard to the Design Code.

Policy CUL5: Design Code for Culham

Development proposals in Culham will be supported provided they have full regard to the essential design considerations and general design principles set out in the Culham Design Code attached as Appendix B.

5.21 The policies establish the importance of design of new development in the Conservation Area, its setting and the village to maintain and enhance its character. It directs applicants bringing forward proposals in and around the village to the design codes contained in the Culham Design Code attached at Appendix B.

5.22 The Code refines South Oxfordshire and Vale of White Horse District Councils' Joint Design Guide, and establishes the principles of essential design considerations within three distinct area typologies of the main village settlement as well as certain features of the area outside of the main village settlement. These considerations set out features of each typology that make it distinctive, and the extent of each is defined in the Design Code document. In turn it complements Policies DES1 and DES2 of the SODCLP by highlighting particular characteristics of the Parish. The policies require proposals demonstrate, where relevant to the nature and location of the proposal, that full regard has been paid to the Code. The policies do not advocate pastiche or historic solution, however it is important that any new development demonstrates a connection with local character and place making.

Culham Design Code

June 2022

Contents

Front Cover image source: SCLHS I Location – Culham Village - The Green & Burycroft I Photo originally by Percy Simms of Chipping Norton (Victorian photographer)

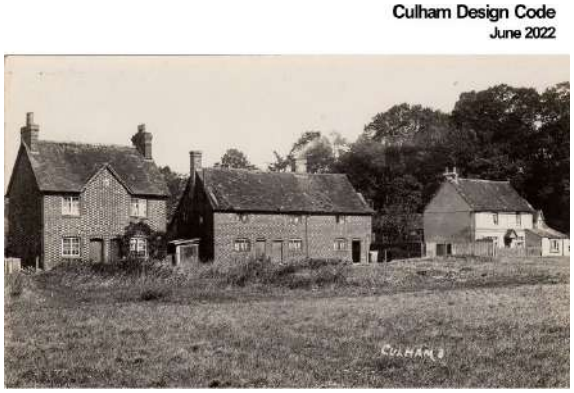
1. What is a Design Code?

Design Codes are tools used to inform the design process of new development. They are prepared through establishing the principles of essential design considerations.

2. The purpose of this document

The Design Code Document refines the Joint Design Guide that covers the whole of South Oxfordshire and Vale of White Horse Districts. The Joint Design Guide replaced the South Oxfordshire Design Guide 2016 following its adoption in 2022. This Design Code Document appraises the main village settlement including identifying important features of the Culham Conservation Area, designated on 11 December 1984, due to all South Oxfordshire District Council records concerning Culham Conservation Area having been lost in the 2015 fire.

The Code has been prepared in accordance with the National Model Design Code and its Guidance Notes published by the Ministry of Housing, Communities & Local Government in July 2021 as relevant to this area and policy context. Its content will inform the Culham Neighbourhood Plan to bring clarity to the definition of the village and the Conservation Area to raise the standards of design for the purpose of managing future infill development proposals and/or rural exception sites.

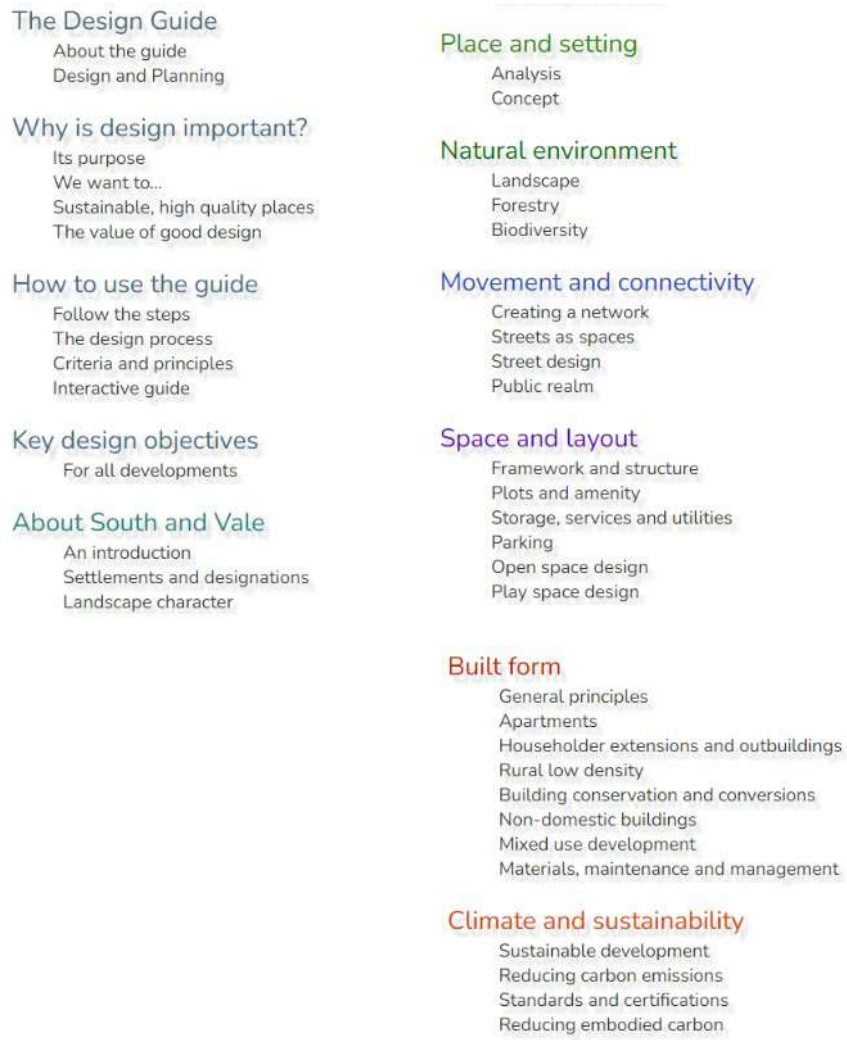


3. Understanding, Responding to and Applying the Code

The Joint Design Guide comprises a series of steps. An introduction sets out information about the districts. The Analysis that follows in this Code mirrors this approach tailored to the Parish. The Joint Design Guide then sets out a series of design principles which applicants should adopt as their design goals, where applicable. This Code relates itself to the overarching design principles in a way that reflects the distinct characteristics of the main village settlement.

Applicants preparing development proposals should be familiar with the Joint Design Guide and then relate the proposed development location to the Neighbourhood Area. The District Council will apply the generic and process principles of the Joint Design Guide and the specific requirements of this Code as relevant to the location and nature of the proposal. The Parish Council will use both the Joint Design Guide and the Code to inform their judgement of proposals in making their representations to the District Council when it is consulted on planning applications.

As with all design guidance, the standards and requirements should be regarded as setting the design brief for a proposal, but the applicant may depart from them where it can be justified in the circumstances. Given the Green Belt status of the Neighbourhood Area, for which full regards needs to be paid to national policy, the scope for change in character will remain very limited. However, in all cases, the burden will be on the applicant to demonstrate that the Joint Design Guide and this Code have been acknowledged, understood and responded to in a way that is appropriate to the location and nature of the proposal.

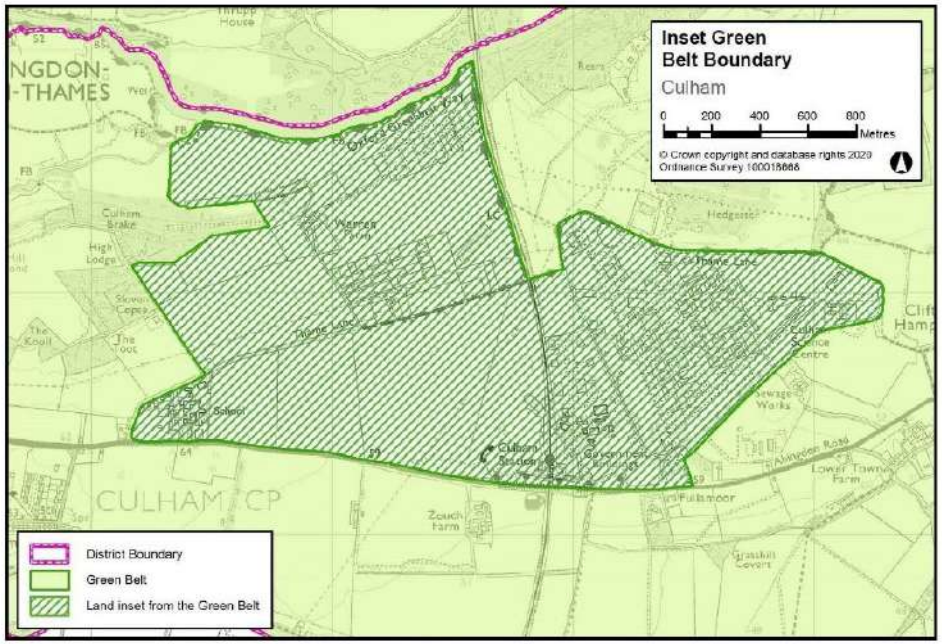


4. Analysis

Introduction

The Parish

Culham is a small village and rural parish in a bend of the River Thames, 1 mile (1.6 km) south of Abingdon in South Oxfordshire with more than 12 centuries of recorded history. The Parish lies entirely within the Green Belt (and the village itself is 'washed over'), however the recently adopted South Oxfordshire Local Plan has made alterations to the Green Belt to accommodate major strategic allocations in the Parish (see plan below) including safeguarding land for strategic transport schemes being planned within and adjacent to its boundary..



Policy STRAT9 of the Local Plan requires the delivery of 3,500 new homes (extending beyond the plan period), employment, retail and social infrastructure – including a GP surgery and 2FE primary school focussed around the railway station as part of the major strategic allocation in the northern part of the Parish.

There are also a number of other Local Plan designations in the Parish including a mineral safeguarding area, Culham Brake Site of Special Scientific Interest (SSSI) which is located to the north of the major strategic allocation, listed buildings and the Culham Conservation Area.

The main village settlement lies to the south west of the major strategic allocation nestled between Culham Cut, a lock cut to the north of the main stream of the River Thames, and the A415 Abingdon Road. The southern and western areas of the settlement maintains flat, low-lying riverside meadows alongside the parkland characteristics associated with Culham House surrounded by wooded and open farmed hills and valleys reflecting the settlement's predominately rural character.

Population

The 2011 Census recorded the population of Culham as 453.

Economy

Though small, Culham is known internationally through the nearby research centre, Culham Science Centre, home to two major nuclear fusion experiments, JET and MAST.

4. Analysis

Introduction

When JET was built, the European Commission set up the European School in Culham, located to the north east of the main village on the A415, to provide an international education for the children of Euratom scientists who would come to work at JET. The European Commission withdrew from managing the school, and it is now a multicultural multilingual UK state school called the Europa School UK used by Culham village residents. Tourism also plays an important part given Culham's location bordering the Thames.

Historic development

(Based on the Culham Parish Council and the village run website about Culham and its history)

"The origins of the parish system go back to Anglo-Saxon times. We do not know when the parish of Culham first came into existence, but a survey of it was made in 940 in the time of King Edmund. The boundaries of the parish seem to be exactly as now, except for the loss of some eyots in the river to Abingdon in 1894. The survey mentions the ford where Abingdon Bridge now stands and refers to 'barrows' (earthworks) at some points along the Parish's eastern boundary; but all trace of the barrows has long since disappeared.

The parish of Culham divides geographically into three distinct sections. Most of it lies between Clifton Hampden and a backwater of the Thames once known as Swift Ditch:Andersey Island, comprising the area between the backwater and Abingdon; and the Otneys, an area on the right bank of the Thames adjoining the west side of Sutton Courtenay.

The parish is bounded by the Thames to the north, west and south, and by present and former field boundaries to the east. It is low-lying and fairly flat, rising from the Thames floodplain in the south to a north-facing escarpment in the north up to 260 feet (80 m) above sea level. The Thames was certainly navigable during the Middle Ages from London to Henley, and perhaps to Burcot; but the barges moving upstream from Burcot had to face a shallow, rocky bottom at Clifton and a very tricky passage through Sutton to Abingdon. There was, of course, no Clifton or Culham Cut until the 19th Century. At Abingdon the river was again shallow and there were numerous obstructions on the way to Oxford. Hence the wharfage for Abingdon came to be at Culham. We know, for instance, that stone and lead from the dissolved Abbey of Abingdon were brought by road to Culham Wharf to be loaded upon barges for transportation to London. In Tudor times barges became bigger and this made it almost impossible for them to moved between Burcot and Oxford. Hence by two Acts of 1605 and 1624 Parliament set up the Oxford - Burcot Commission to improve the passage of the Thames between these places.

4. Analysis

Introduction

The Commission did much to improve the river between 1624 and the outbreak of the Civil War in 1642. It built the first pound locks on the Thames at Iffley, Sandford and Culham. The Culham Lock was constructed about 1636 in a new cutting at the head of Swift Ditch, which was made the main artery for the barge traffic. The remains of the lock can still be seen as well as the assembly pool for barges that lay near it. There was a flash lock about half way along Swift Ditch, which existed at least as early as 1585. Swift Ditch remained the chief navigation channel until 1790 when it was abandoned in favour of the present route through Abingdon. Water communications through Culham were made much easier in 1809 with the construction of The Culham Cut and Lock. The Cut was made partly along the line of the old Speel Ditch, a straggling channel that left the Thames at the head of the present Cut and turned south to rejoin the river near Sutton Mill.

Communications by road were poor until the early 15th Century. The main Dorchester - Abingdon road runs through the parish from east to west, but before the reign of Henry V the traveller from Dorchester had to ford the river both at Culham and Abingdon. The highway from Dorchester to Abingdon is undoubtedly very old - it is said in an Act of Parliament of 1416 to have existed from "time immemorial". Between 1416 and 1422 a major scheme for improving communications between Abingdon and Culham was undertaken by the Abingdon Guild of the Holy Cross. Abingdon Bridge, the causeway across Andersey, and the old bridge at Culham were built at the Guild's expense.

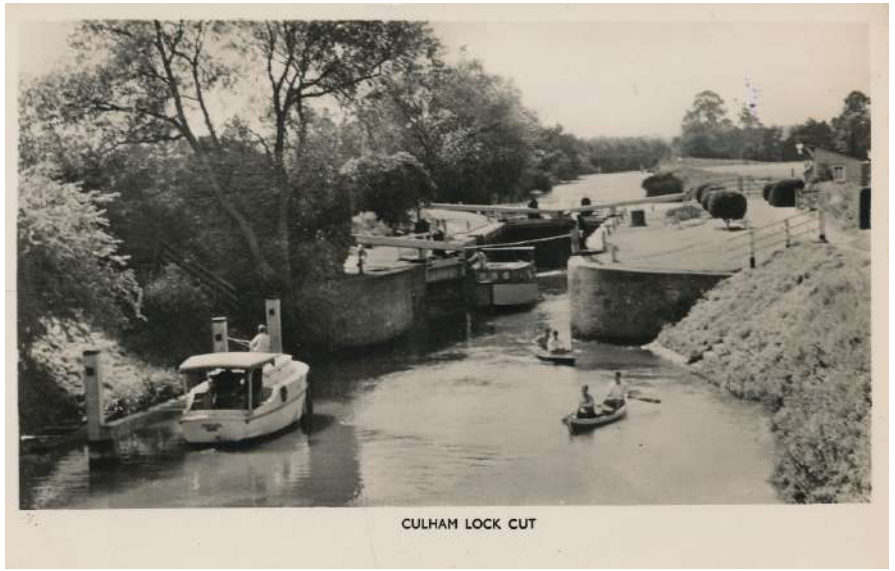


Image Source: SCLHS

Image Source: SCLHS

4. Analysis

Introduction

Image Source: SCLHS

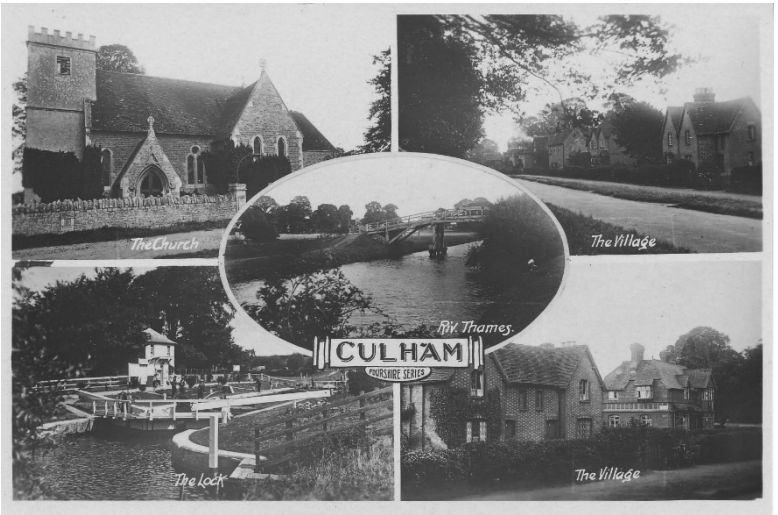


Image Source: SCLHS

The old bridge is built across the site of the ancient ford known as Culham Hyth; it is of stone and has five perpendicular arches. It lies just to the south of the new bridge erected in 1928 by the Oxfordshire County Council. An Act of Parliament in 1736 created a turnpike trust to maintain the roads between Henley and Abingdon; the trust was empowered to levy tolls for the repair of the roads. Not until 1875 were tolls completely abandoned. The trust set up toll-houses at Culham Bridge and at the junction of Thame Lane with the main highway. The toll-houses are still standing.

The highway is joined near the Wagon and Horses Inn by Thame Lane, which used to continue its journey across Clifton Heath. It was cut in 1941 when a Royal Naval Air Station was built on the east side of the railway line between Didcot and Oxford. A field to the north of Thame Lane bounded by the railway line was probably the site of the Abingdon races, held on Culham Heath from the 1730's to 1811. Visitors from Oxford could approach the racecourse by a road, or rather track, from Nuneham.

Culham village was never on the main road. The village High Street is part of a long loop beginning at the Wagon and Horses and ending at Culham Bridge. Before 1813 the straight stretch of road from Culham Bridge to the Village green, cutting through Bury Croft, did not exist; the main highway was linked to the village by a road running close to the west side of Culham House. This road was closed when the straight stretch of road to the Bridge was made. Before 1807 a road from the Wagon and Horses ran to the ferry which took travellers over the Thames to Sutton.

4. Analysis

Introduction

The ferry lay just to the west of the present bridge. Built in 1807, it was extended over the Culham Cut in 1908. It was privately owned until 1939 when it was jointly purchased by the Berkshire and Oxfordshire County Councils.

The railway line from Didcot to Oxford runs through the eastern fringe of the parish. It was built in 1843 and 1844 after the objections of local landowners, the University and the city of Oxford had been overcome. The local station was known as "Abingdon Road" and was served by horse-drawn omnibuses from Abingdon which were timed to meet the trains. When Abingdon secured its own station in 1856 "Abingdon Road" was rechristened "Culham". The old ticket office at Culham Station, a Grade II listed building, was designed by the famous Victorian engineer Isambard Kingdom Brunel.*

Culham's old English name (Cula's Hamm) suggests a possible 6th Century Anglo-Saxon settlement in the bend of the river, and it was a place of some importance in later Saxon times. For six centuries it was a possession of the Abbey of Abingdon, though the Abbey did not have continuous possession before the middle of the 10th Century; and it was 150 years after that before the Abbey finally secured Andersey. The Mercian King Offa (d.796) is said to have had a hunting lodge on Andersey. The remainder of the parish was apparently in royal hands at this time. The abbey later claimed that King Kenwulf of Mercia (796-821) had granted Culham to it and produced two charters, dated 811 and 821 to prove its case.

The charters are certainly spurious, but may nonetheless have a basis of truth. The forgery of documents by monks was a not unusual procedure in the Dark Ages; they probably forged them to ensure their Abbey's possessions had a legal basis. This may well be the case with Culham. Certainly, Culham enjoyed a spell of royal favour in the Middle Ages.

The manor of Culham remained in the hands of Abingdon Abbey as a rest house until the dissolution of the Abbey in 1538 when it was seized by the Crown. In 1545 Henry VIII granted it to a London wool merchant, William Bury, in exchange for land in the Isle of Sheppey and £600. The house is largely of fifteenth century origin but in I610 Thomas Bury rebuilt the north front. Bury's house was much larger than the present one, for an eastern section was demolished during the Civil War. The Manor House was in possession of the Bisshopp family from 1666 until 1856 but their interest in it ceased in 1749 and the Manor began a long period of decline; for many years it was a farm house. However, the house was restored splendidly by Sir Esmond Over from its sadly dilapidated state of 1933.

The majority of villagers obtained a living from agriculture, farming strips of land in the great open fields which surrounded the village. Originally, there were two vast arable fields, perhaps even as late as 1539; for a survey of that year speaks only of Town and Contard Fields. By the middle of the 17th Century there were three fields (Ham, Middle and Contard); during the 18th century there was a change to a four field system.

4. Analysis

Introduction

The enclosure Award of 1813 mentions four fields: 1. Contard - forming a triangle between the main highway and Thame Lane and ending in the east at Culham Heath, 2. Ham - south of the main highway, from the Clifton boundary to a point perhaps half way between the Wagon and Horses and the boundary, 3. South Middle Field - the remainder of the arable area south of the main highway, 4. North Middle Field - mostly north of the main highway between the Wagon and Horses and Culham Bridge, and also north of Thame Lane for a short distance at its western end.

The exact boundaries of the fields are hard to trace. They comprised altogether some 700 acres. Apart from the arable land there were before enclosure a number of hedged meadows and pastures: these were to be found on Andersey, on both sides of Swift Ditch and in the north of the parish. In addition, Culham Heath was a large tract of land in the north east of the parish south of Nuneham Park and reaching in places the main Abingdon-Dorchester Road. After enclosure much of the heath was drained and brought under cultivation. The 18th century saw the appearance of large farms. Tye, Warren and the Manor Farm were the best known. There were about 40 Houses in the village at this time. The houses lay mostly north and south of the main village street, i.e. the present High Street, though for most of its length the old street was farther north, i.e. nearer to Culham House, than the present High Street. The alteration to the present line was made between 1810 and 1813 at the time of enclosure when the road across Bury Croft was constructed.

Most of the village was rebuilt in 1869 and 1870 and consequently few of the old dwellings survive. Indeed, the only old cottage still in existence is the village store, of 17th century origin and refronted in the 18th century. Not even the inns can claim much antiquity. The parish now has three: the Wagon and Horses, the Lion and the Jolly Porter (formerly the Railway Hotel). The Wagon and Horses can be traced back to 1795, though the building is early 19th century; the Lion (formerly the Sow and Pigs) is a fairly modern building, but it too can be traced back to 1795; the Jolly Porter was built about 1846. In the late 18th century there were half a dozen malthouses in the village.

Image Source: SCLHS

4. Analysis

Introduction

Culham's oldest Building is the Manor House, originally a medieval grange of the Abbots of Abingdon. The house is largely of 15th century date, but in 1610 Thomas Bury rebuilt the north front. Bury's house was much larger than the present one, for an eastern section was demolished during or after the Civil Wars. There is still a room within the house called the Abbot's Chamber which once had heraldic glass depicting the arms of Abbot Coventry, who died in 1512. In the grounds is a dovecote, dated 1685, and bearing the initials of Sir Cecil Bisshopp. It is believed to be one of the three largest in England. When the Bisshopps ceased to bother with Culham, the Manor House began a long period of decline; for many years it was a farmhouse.

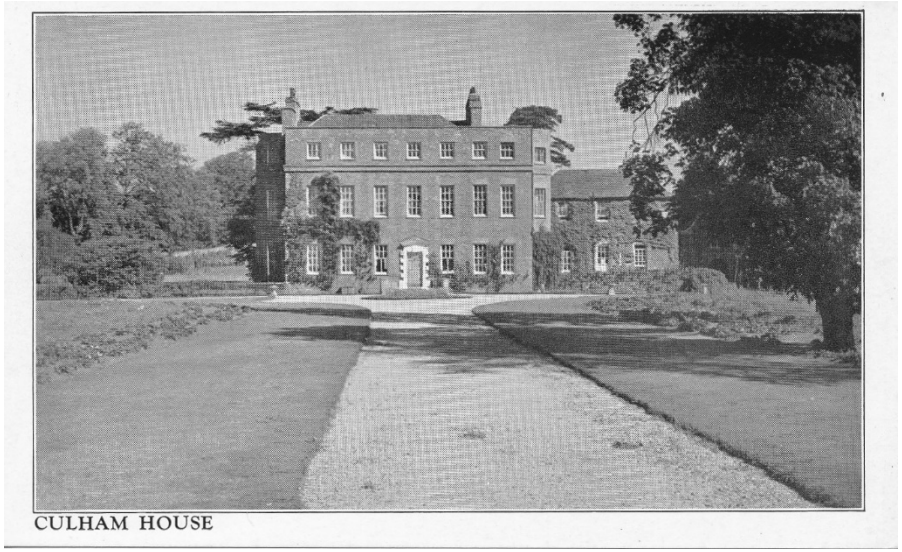


Image Source: SCLHS

Image Source: SCLHS

The largest house in the village is Culham House, built about 1775 by John Phillips, lay rector of the parish. Phillips was a London builder. His ancestors hailed from Hagbourne and became master carpenters to George I and George II. The Phillips family first appeared in Culham about 1736 and were here until 1935. As lay rectors they were entitled to sit in the chancel of the church and were also legally responsible for the chancel's upkeep. Several memorials to members of the family are in the church. John Phillips erected a handsome redbrick building of five bays, with contemporary staircase, overmantles and doorcasis. The house was enlarged about 25 years later to seven bays. It was once noted for its collection of china.

4. Analysis

Introduction

The old Vicarage was built about 1758, probably by Benjamin Kennicott, vicar of Culham 1753-83. It was enlarged by a later vicar, Robert Walker, in 1849. It has now been sold by the church authorities. The only large building beyond the confines of the village is Culham College of Education. The building, erected in 1852 was designed by Joseph Clarke, a minor architect of the Victorian era. Clarke designed the College in the neo-Gothic style which was fashionable at the time. The tower block was opened in 1973 when Teacher Training Colleges were being expanded. Europa School was established in 2012 and took over the school site and pupils fully from the Culham European School in 2017. The European School was located on the site from 1975, in buildings which had previously been the home of Culham College, a Church of England teacher training college from 1853.

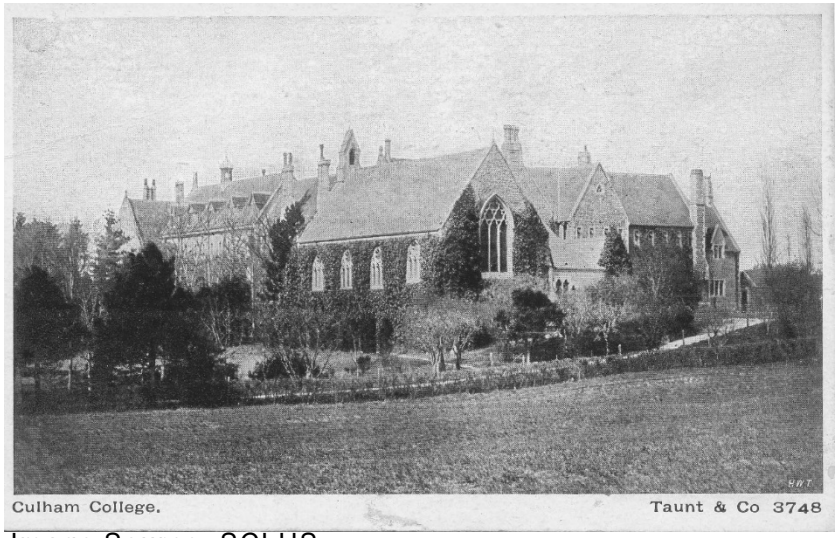


Image Source: SCLHS

There is no sign of any school in the parish before the early 19th century. In 1808 younger children learned to read and write in two small schools, presumably held in cottages; in 1815 a Sunday School was started, its master being paid from the rates. Nevertheless, provision for education was very unsatisfactory until 1850, when the village Church of England School was erected at a cost of £438. Some additions to the premises were made in 1897. Usually a mixed all-age school, it was reorganised in 1924 for infants and girls only, but in 1931 the senior girls were transferred to Dorchester. Temporarily closed in 1948, the school was re-opened in 1951.

St Paul's Church is situated at the end of the village green, opposite the Manor House and gardens. It has a long history and was closely linked in medieval times to Abingdon Abbey. Rebuilt in Victorian times, replacing one of late twelfth century or early thirteenth century origin; the tower is its oldest part, dating back to 1710. The Mediaeval Church was about the same length as the present building but had a narrower nave, In 1852 the mediaeval nave was beyond repair and was rebuilt; the cost was borne partly by a parish rate and partly by donations. The chancel was rebuilt at the expense of the lay rector, John Shawe Phillips. A new parish cemetery bordering the existing churchyard was consecrated by the Bishop of Dorchester in 2004 and the Parochial Church Council received approval from the Home Office for the closure of the churchyard, which is full.

4. Analysis

Introduction

Image Source: SCLHS

The parish is also host to the Culham Brake Site of Special Scientific Interest (SSSI) on the northern edge of the parish boundary, a small area of wet willow woodland with large sedges and wetland wildflowers on the ground. The site is particularly important for the presence of a large population of the nationally scarce Lodden Lily. Other wetland wildflowers found here include meadowsweet, valerian and yellow flag iris.

Culham, in the course of its known history of more than 1,000 years, has seen many changes in the evolution of England and many changes within its own boundaries. Yet it remains a unity despite the economic and social pressures of the 20th century."

4. Analysis

Settlements and Designations

Settlement pattern

The Saxon settlement of Culham was developed just above the Thames floodplain taking advantage of the higher ground and proximity to well-watered river meadows. The small village of Culham was once much larger and was situated to the west of the existing village settlement. The Manor House and St. Paul's Church are the only visible remains of the medieval settlement.

The historic village was established through a dispersed pattern around these remaining buildings, including Culham House, with later gradual linear development concentrated along the High Street (including the cul-de-sac development of The Glebe), Tollgate Road, and Thame Lane.

The linear development of the village continued the open and spacious feel of the historic dispersed pattern of development through either pairs of semi-detached homes or detached homes, set back along a continuous building line with grass verges, front gardens and low level hard boundary treatments. Mature trees and hedgerows throughout the settlement contribute to the parkland characteristics that dominates the area surrounding Culham House.

The Glebe cul-de-sac development follows a similar pattern of semi-detached homes considerable set back from the street, with a continuous building line and large grass verges creating a sense of openness along the street.

Development on Tollgate Road continues the set back building line from the street with front gardens and includes some bungalows. There is no grass verge and some of the front gardens here have been covered by hardstanding. This coupled with the pavement and curbs, gives Tollgate Road a more formalised, suburban character, although the open farmed hills and valleys landscape opposite the built development and mature hedgerows and planting further along the road maintains a rural character. The former Waggon and Horses dating back to the 19th century is located in a prominent position at the entrance to the village where Tollgate Road meets the A415. It is currently boarded up and has become an eyesore in this prominent location.

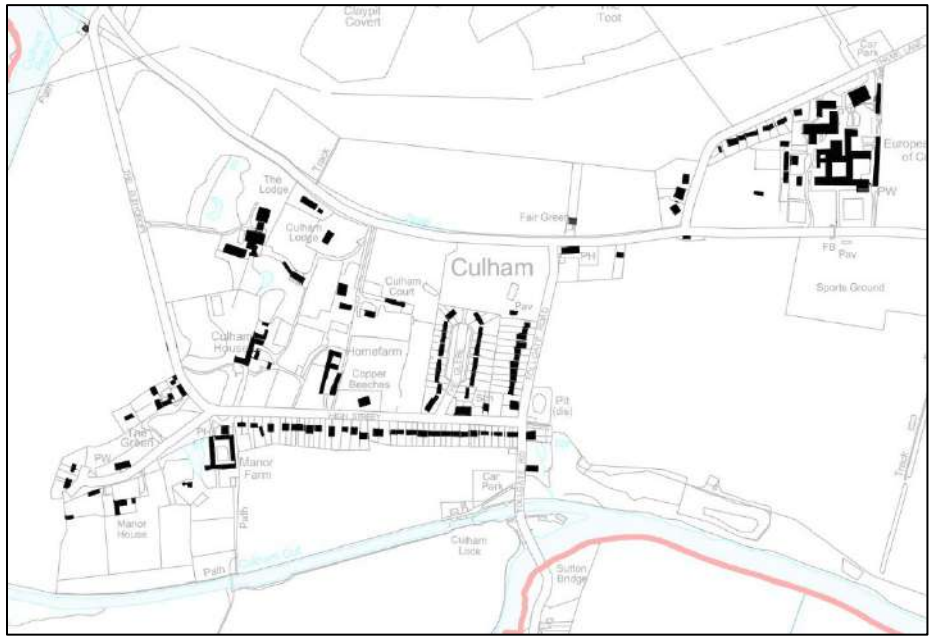


Figure ground diagram of Culham village and Europa school complex

4. Analysis

Settlements and Designations

Local materials

Walls: The majority of the buildings along the High Street has adopted some or all of the elements established by nos. 7-11 The Green, including the use of predominantly red brick, flemish bond with glazed headers, brick feature lintels and quoins.

There remains three excellent arts and crafts buildings in the village, The Lion (former PH) on the High Street sharing a striking resemblance with 22-23 High Street (a pair of symmetrical, semi-detached houses) all dating back to the 19th century and rich in materials and architectural detail including scalloped tile hanging, English bond brickwork, timber frame filled with a combination of straight and herringbone pattern brick.

English and common bond brickwork, tile hanging and brick feature lintels features again at the School House erected in 1850 at the entrance to The Glebe. The use of red brick, including brick feature lintels, is common in later additions at The Glebe and on Tollgate Road. The prominent former Waggon and Horses PH features a mix of stone and rendered walls with red brick quoins.

Outside of the main village settlement of particular note includes Station House near the railway station, with the use of red brick with English bond brickwork, and Tollgate Gottage at Culham Old Bridge, with the use of red brick, flemish bond with glazed headers.

4. Analysis

Settlements and Designations

Local materials

Roofs: The use of plain clay tiles is common throughout the settlement.

Ridge mounted, gable end and centred, chimney stacks are a prominent and distinctive feature of roofscapes in the village although there are some located further down the roof slope.

The arts and crafts buildings include decorative barge boards, pattern crested ridge tiles and ornate brickwork detailing to the chimneys. The School House and prominent former Waggon and Horses PH also includes ornate brickwork detailing to the chimneys.

Plot Boundary: The majority of buildings are set behind grass verges and front gardens creating an open spacious feel.

Low level brick walls and hedges, with the exception of the larger historic buildings in the village where these treatments are high level, are common in front boundary treatments with the occasional use of timber fencing (picket and closeboard).

Mature trees in front gardens are also very common reflecting Culham's sense of greenery and spaciousness.

4. Analysis

Settlements and Designations

Archeology
Archaeology in South Oxfordshire is looked after centrally across the whole county by Oxfordshire County Council who will be consulted as per the Joint Design Guide. The Aerial Archaeology Mapping Explorer created by Historic England illustrates the extensive amount of archaeology that has been identified in Culham.

Listed buildings
There are 17 listed buildings or structures in Culham.

- Culham Station Ticket Office and Waiting Room
- Dovecote west of Culham Manor
- Culham Manor
- Culham Old Bridge

are all Grade II* listed buildings or structures. The remaining buildings or structures are Grade II listed:

- Pound lock on Swift Ditch
- Culham Court
- 36 and 37 High Street
- Church of St Paul
- The Maud Hales Bridge (that part in Culham parish)
- Schola Europa
- Culham House
- 13 The Green
- Sutton Bridge and Causeways (that part in Culham parish)
- Culham Manor
- Sundial north east of Culham Manor
- Culham Old Bridge
- Bridge over Culham Cut
- Culham Station Overbridge
- Thame Lane Bridge
- A small part of the Grade II listed Sutton Courtenay Manor Park and Garden is located in the Parish.

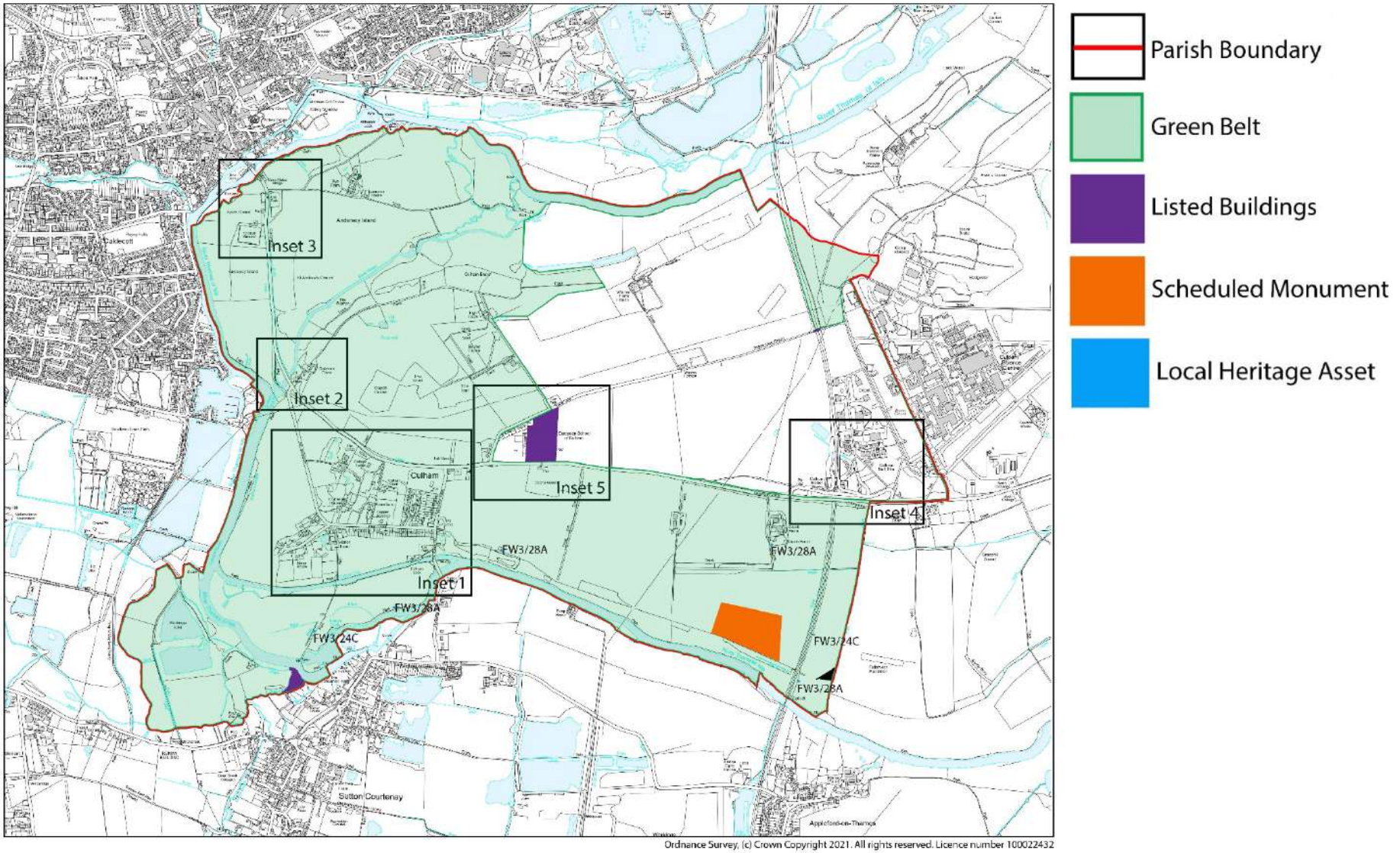
Other historic environment designated heritage assets
There are 3 Scheduled Ancient Monuments in Culham.

- A settlement site north of the Thames
- Culham Bridge
- Dovecote at Culham Manor
- A small part of the round barrow cemetery at Fullamoor Plantation is located in the Parish.
- Part of The Maud Hale's Bridge is located in the Parish.

Conservation Area
Culham Conservation Area was designated on 11 December 1984. Unfortunately, all the South Oxfordshire District Council records concerning the Culham Conservation Area were lost in the 2015 fire. As there is no conservation area appraisal the following maps identify the location of listed buildings and structures, scheduled ancient monuments, special features in the Conservation Area, as well as the Conservation Area boundary, and locally important buildings.

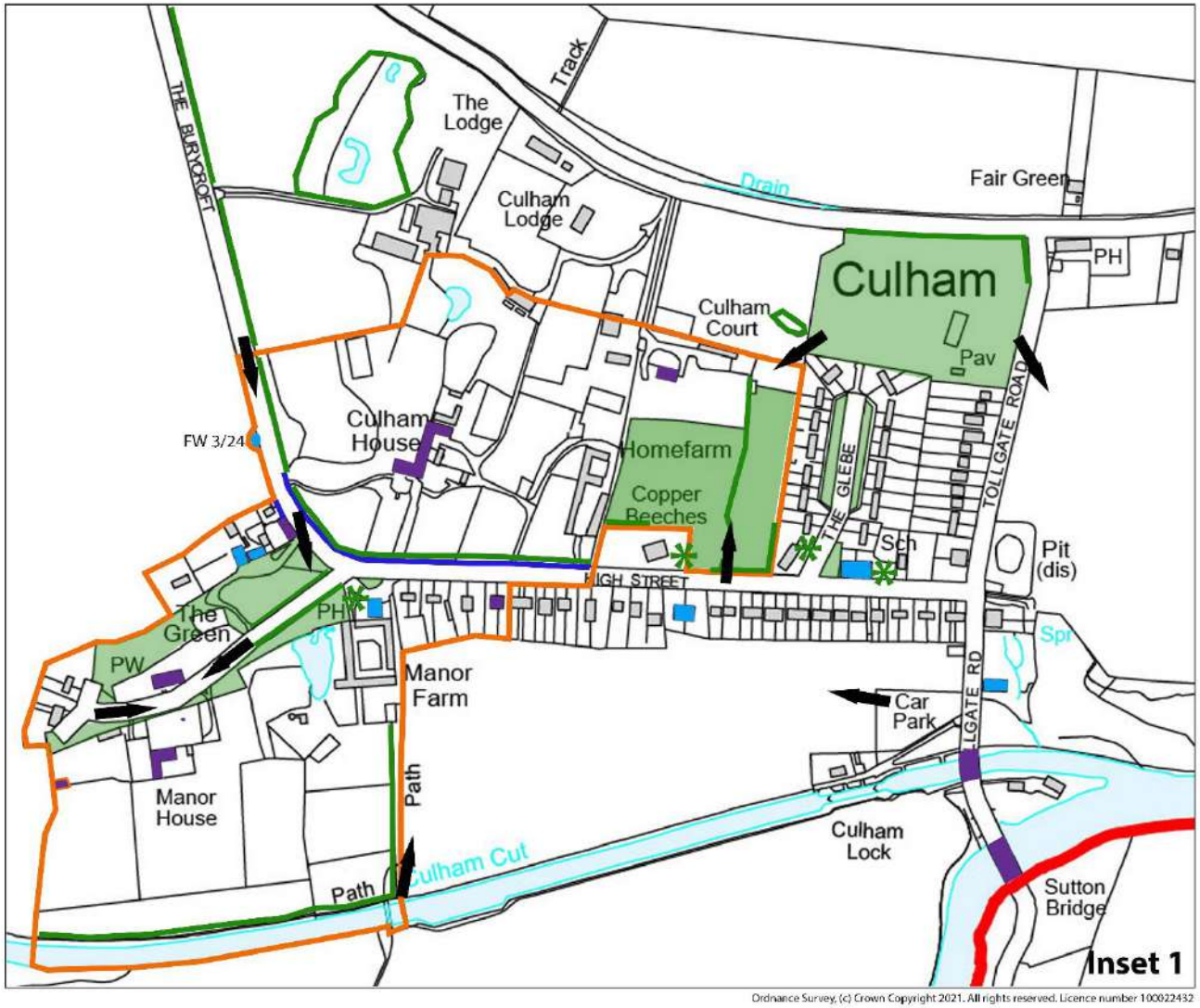
4. Analysis

Settlements and Designations



4. Analysis

Settlements and Designations



Parish Boundary

Conservation Area Boundary

Listed Buildings

Local Heritage Asset

Scheduled Monument

Important Man-made Boundaries

Important Open Space

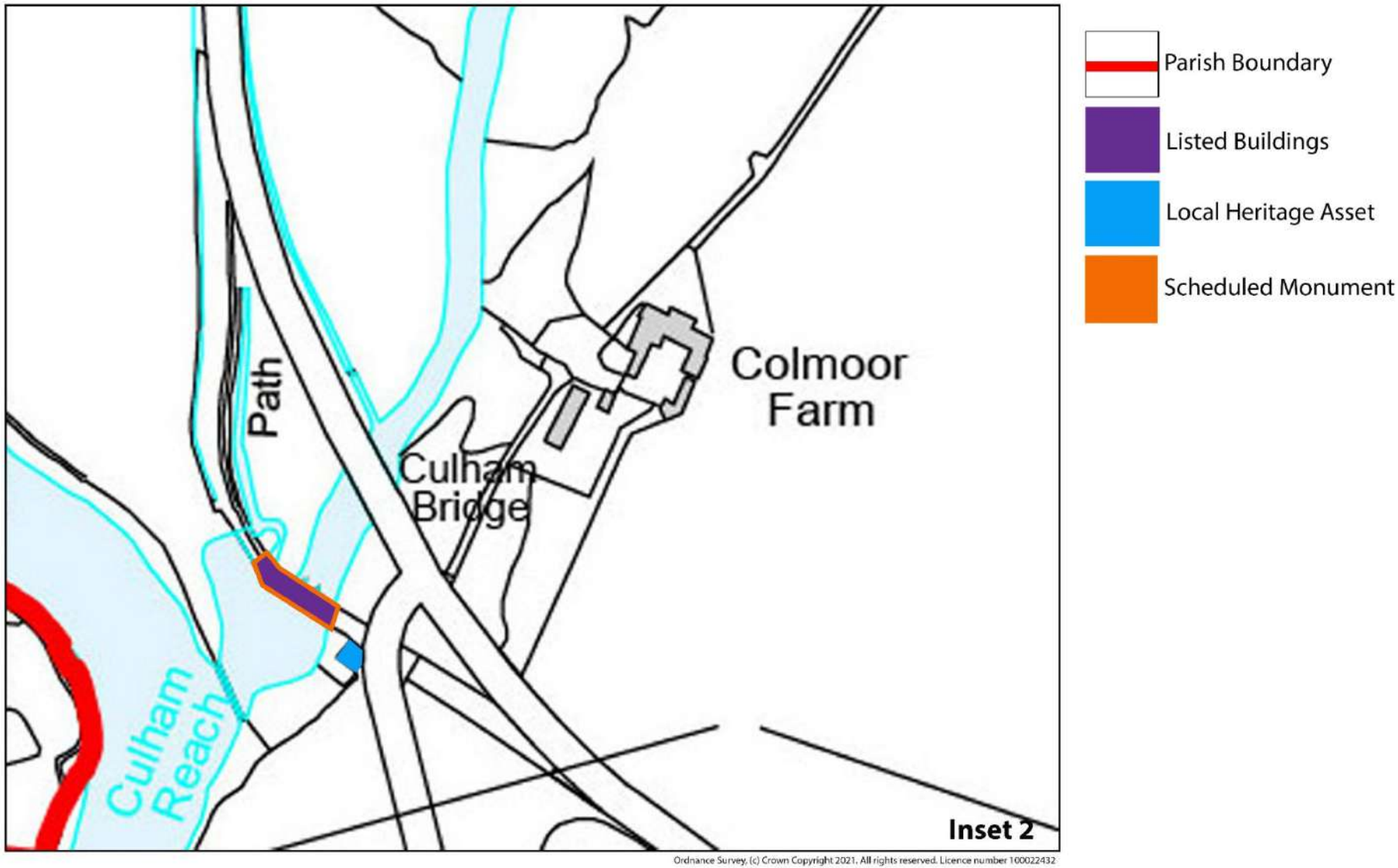
Significant trees/hedgerows (visible from public realm)

Important Views (In and Out)

(the width of the bridleway running through the Green is indicative only)

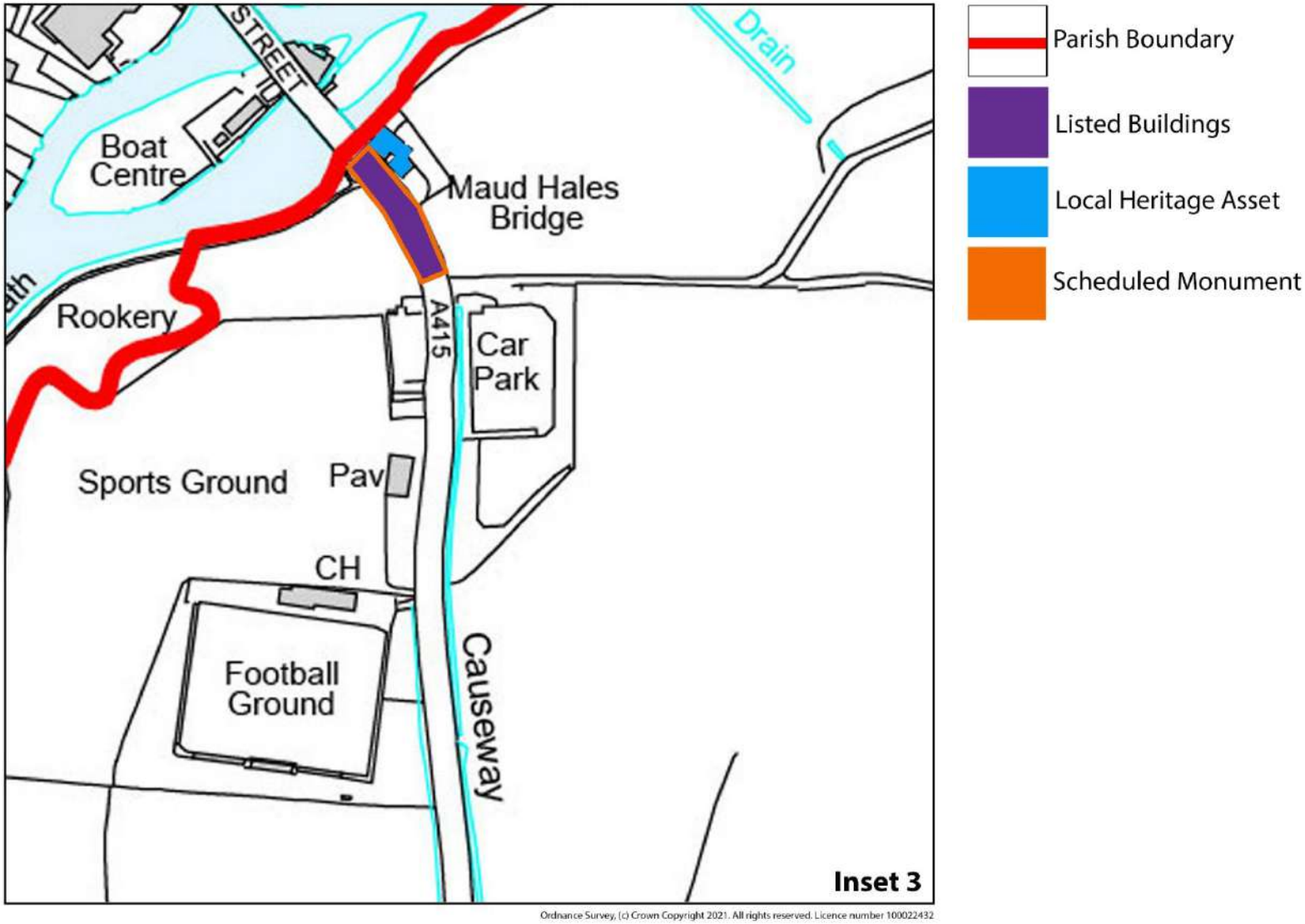
4. Analysis

Settlements and Designations



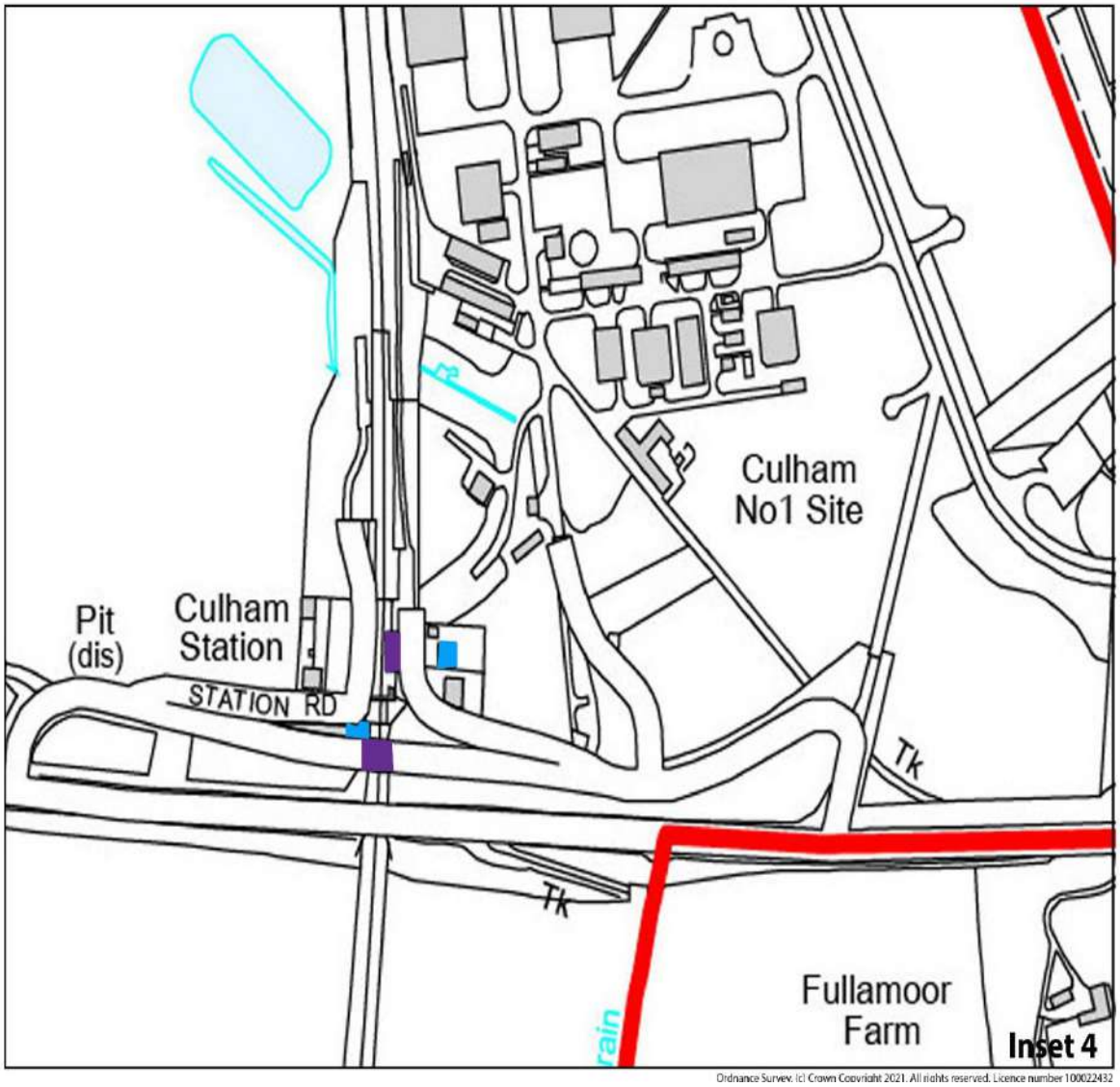
4. Analysis

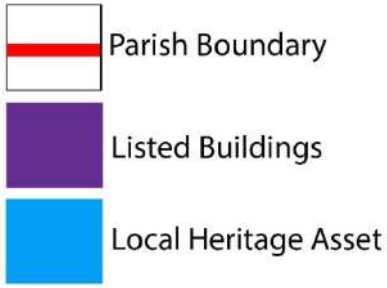
Settlements and Designations



4. Analysis

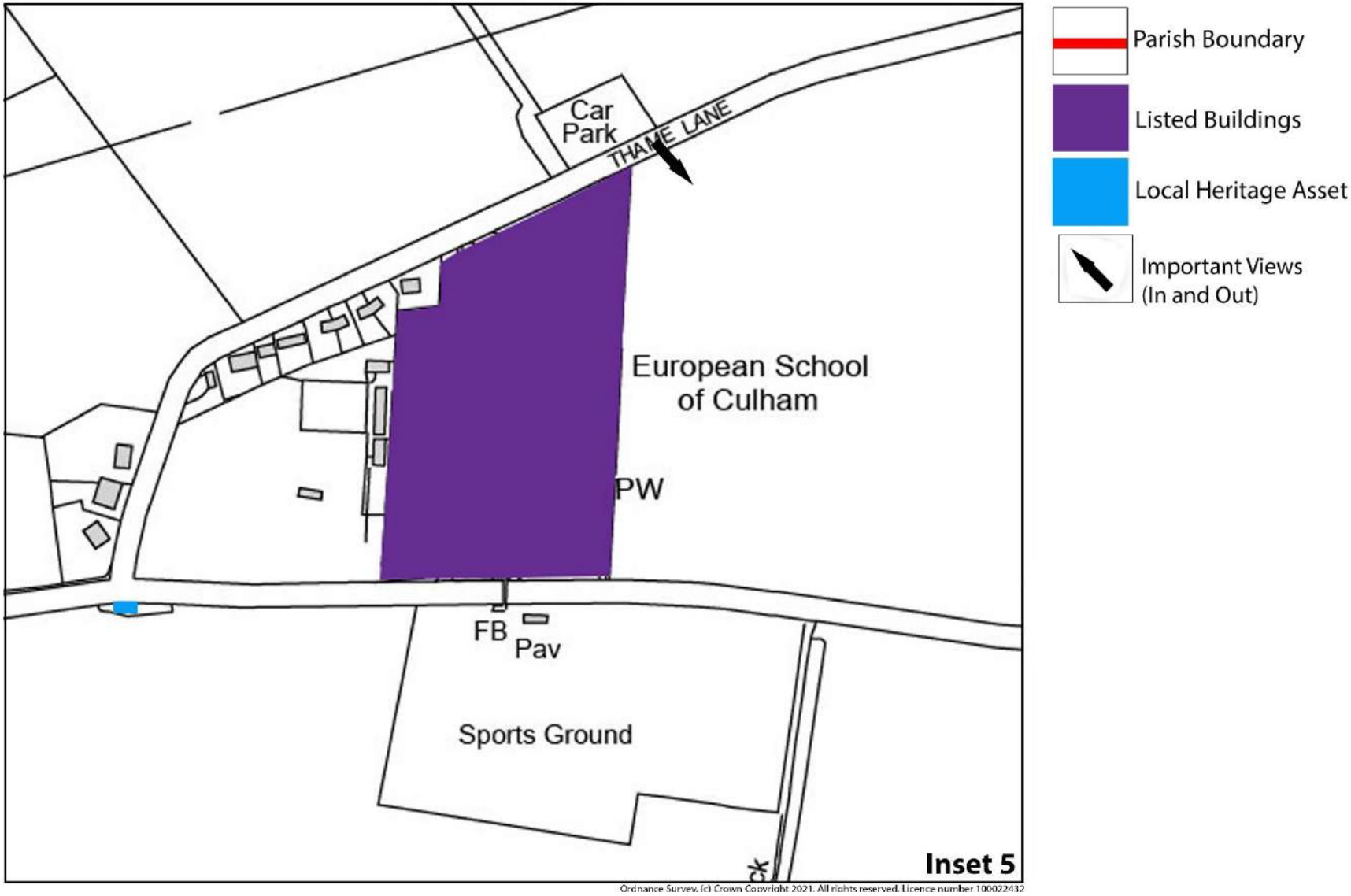
Settlements and Designations





4. Analysis

Settlements and Designations



4. Analysis

Settlements and Designations

Natural environment

The parish is host to the Culham Brake Site of Special Scientific Interest (SSSI) on the northern edge of the parish boundary, a small area of wet willow woodland with large sedges and wetland wildflowers on the ground. The site is particularly important for the presence of a large population of the nationally scarce Lodden Lily. Other wetland wildflowers found here include meadowsweet, valerian and yellow flag iris. Alongside the Culham Brake SSSI, there is a variety of other priority habitat areas in the Parish. The village itself hosts Traditional Orchard habitats as well as Deciduous Woodland. The Culham Neighbourhood Plan has defined a network green and blue infrastructure assets in the Parish as a means of providing environmental support for the community and wildlife.

4. Analysis

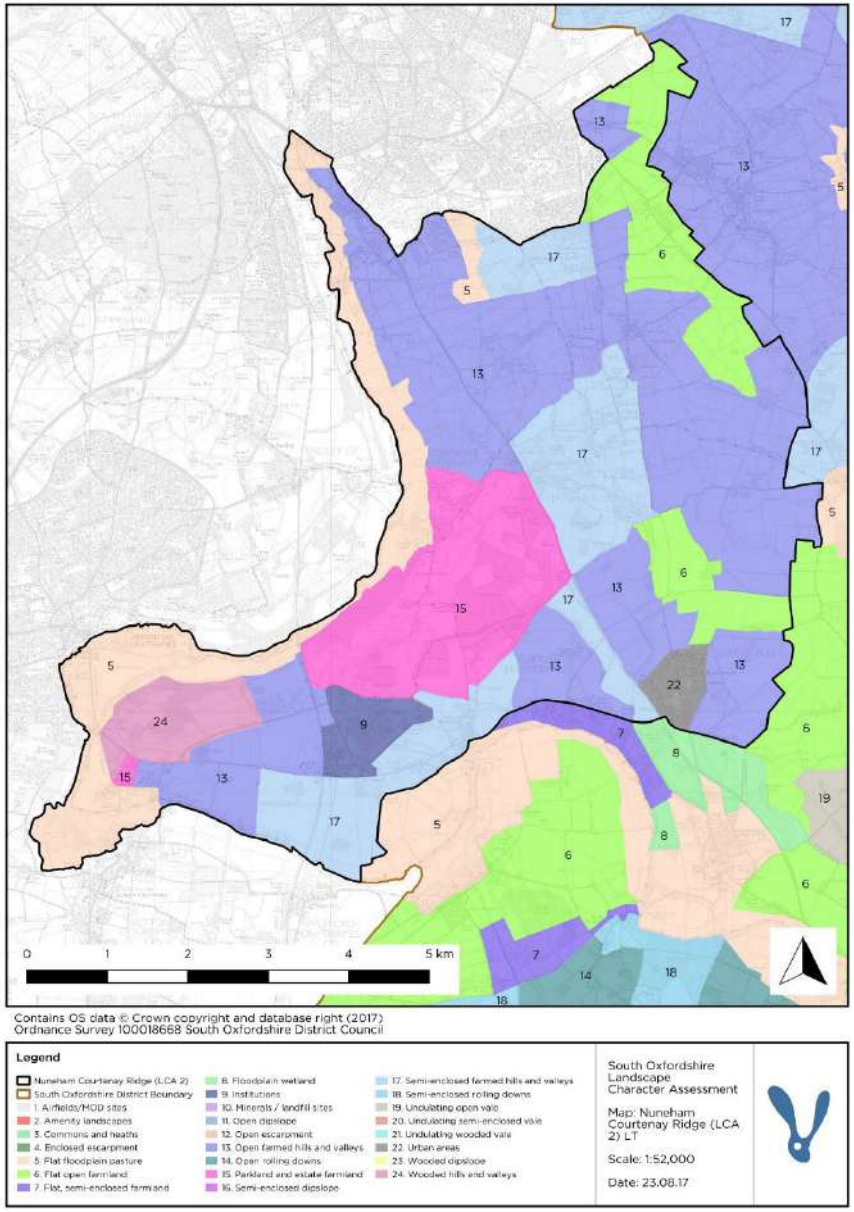
Landscape Character

Landscape character

“At its lowest point, in the south east, the parish is 159 feet above sea level, but almost immediately the land rises sharply to 175 feet, thus forming an escarpment along the river bank. Just east of the backwater the ground rises steadily to form Culham Hill, which at its peak is 250 feet above sea level. From the top of the hill the land descends once more until it meets the Thames again 170 feet above sea level” (British History Online).

The South Oxfordshire Landscape Assessment identifies Culham as lying within the Nuneham Courtenay Ridge Landscape Character Area.

In the wider context the *“landform rises eastwards from the River Thames, creating a dramatic ridge with views over the river towards Abingdon. The northern extent of the ridge to the west of Nuneham Cortenay stretches southwards to Culham Bridge”* (SODC LCA, 2017).

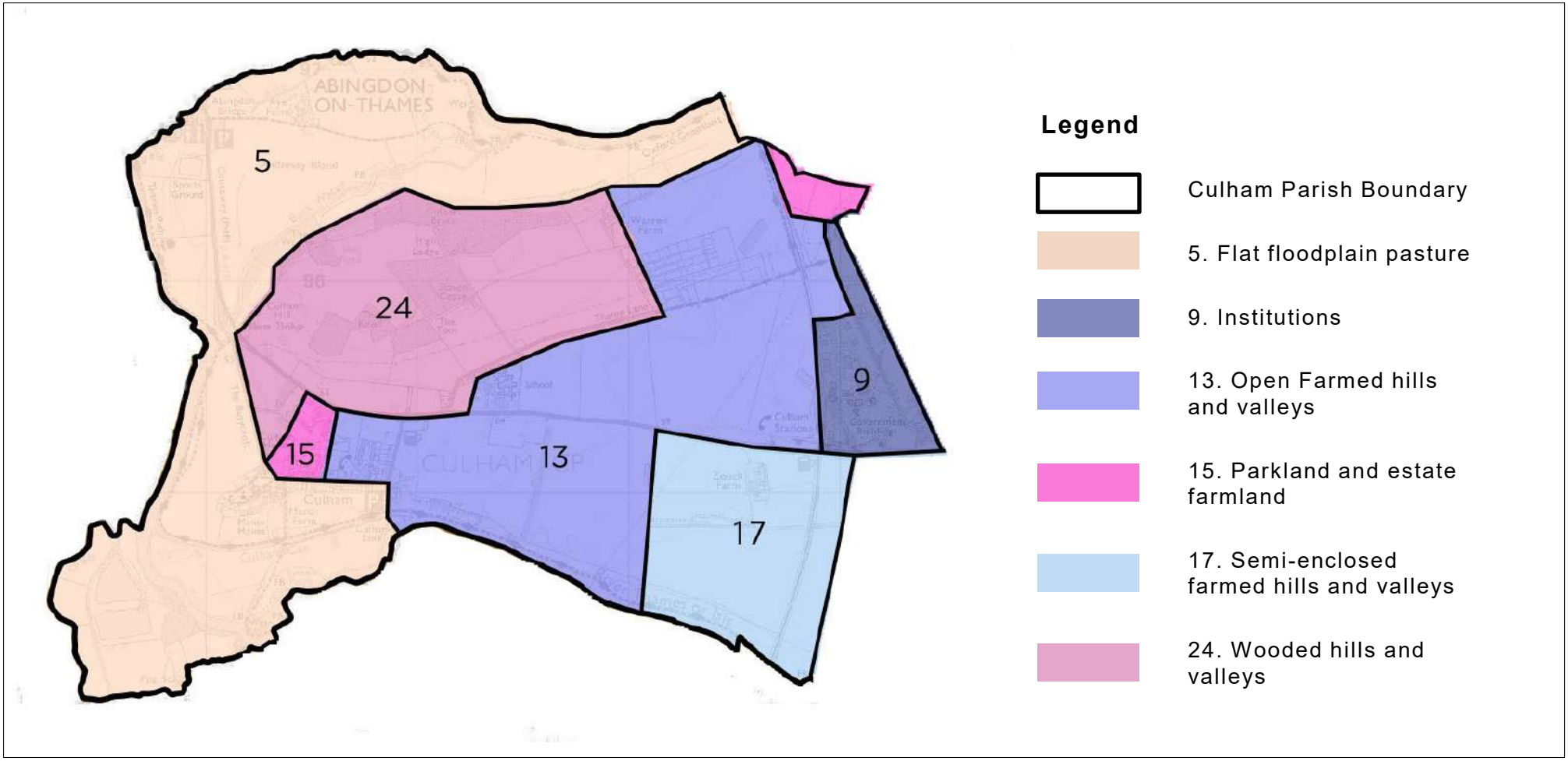


Landscape types in the Nuneham Courtenay Ridge Landscape Character Area, Source: SODC LCA, 2017

4. Analysis

Landscape Character

Culham Parish Landscape Types Source: SODC LCA, 2017



4. Analysis

Landscape Character

LANDSCAPE TYPE	KEY CHARACTERISTICS
5. Flat floodplain pasture	• Flat, low-lying riverside meadows alongside the River Thames, typically dominated by permanent pasture with a distinctively 'wet', riparian character. • Prone to flooding with distinctive network of drainage ditches. • Comparatively strong landscape structure with willows conspicuous along the riverside. • Intimate and pastoral character. • Generally low intervisibility, although views along the valley may be possible in some more sparsely vegetated areas. • Comparative inaccessibility creates a tranquil, remote character with only localised intrusion close to main urban area of Abingdon.
9. Institutions	Culham Laboratories is located within this area and comprises a complex of institutional buildings within landscaped grounds. • Landscaped setting with mature trees and semblance of parkland character but lacking its formal features. • Dispersed complex of buildings, signs and land uses have an urbanising influence on rural context of the site.
13. Open farmed hills and valleys	• Rolling plateau landform. • Large-scale farmland, mostly in arable cultivation. • Large fields, with rectilinear field boundaries, typical of parliamentary enclosures. • Weak structure of tightly clipped or gappy hedgerows, with few hedgerow trees. • Open, denuded and exposed character, with prominent skylines and hillsides and high intervisibility. • Distinctive elevated and expansive character on ridges and higher ground, with dominant sky and long views. • Predominantly rural character but some localised intrusion of main roads (such as the A415), overhead power lines and built development.

Culham Parish Landscape Types Source: SODC LCA, 2017

4. Analysis

Landscape Character

LANDSCAPE TYPE	KEY CHARACTERISTICS
15. Parkland and estate farmland	Small scale area with parkland characteristics associated with Culham House. • Well-managed parkland character with formal features such as avenues and free-standing mature trees in pasture, clumps and blocks of woodland, exotic tree species, formal structures and boundary features.
17. Semi-enclosed farmed hills and valleys	• As per 13., though with a stronger structure of hedgerows and trees which provide clearer definition of field pattern. • Predominantly intensive arable land use and rural character. • Landform and landscape structure create enclosure and reduce intervisibility.
24. Wooded hills and valleys	• Similar to no.17 but with a particularly strong structure of hedgerows, trees and woodlands at the western end of the greensand plateau and steep escarpments of the River Thames. • Strong relief, mixed land use and blocks of woodland create an attractively diverse landscape. • Intervisibility reduced by landform and landscape structure to create a more enclosed and intimate landscape, but long views possible from hillsides and higher ground across Thames valley. • Predominantly rural character with few detracting influences.

Culham Parish Landscape Types Source: SODC LCA, 2017

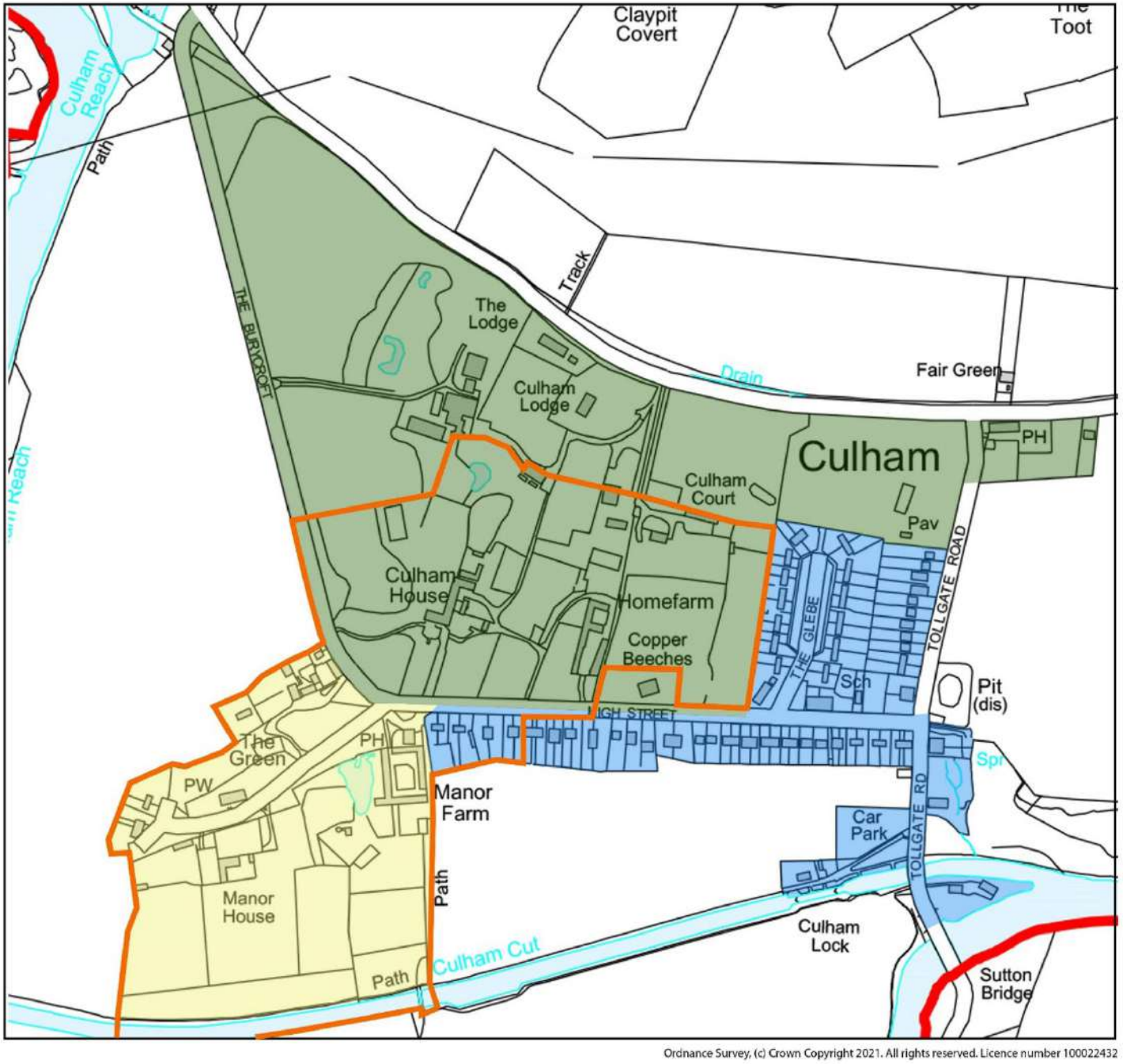
5. Design Codes

The Code establishes the principles of essential design considerations in the residential environment of the main village: dwelling design, boundary design, building materials and landscaping, based on the analysis of local character presented in this report, community consultations and discussions with members of the neighbourhood plan steering group. Beyond these considerations, there remain other design matters where the Code does not need to be prescriptive as there is variation in the existing character.

For the purposes of the Code, the main village settlement has been divided into three main character areas: its dispersed historic core, dispersed historic parkland and its linear extensions (see Plan overleaf). Outside the main village settlement there are also important characteristics which the Code has addressed.

For each area, including the area outside the main village settlement, the Code translates the standards into specific requirements. For ease of reference, the Code numbering matches each area's Code to the relevant section in the Joint Design Guide e.g. Place and Setting 1.0 – 1.9; Built Form 5.0 – 5.14 etc. Throughout the Code, there are local photographs to illustrate the guidance where necessary.

Culham Character Areas



(the width of the bridleway running through the Green is indicative only)

5. Design Codes

Dispersed Historic Core

	Place and Setting
	Joint Design Guide: "Ensure: A contextual analysis including an opportunities and constraints plan (which will inform your design rationale) of the wider and immediate site context has been prepared."
1.0	*A contextual analysis should identify existing networks of natural features, including watercourses, trees, woodland, hedgerows, green spaces, field patterns, habitats and public rights of way (footpaths, bridleways, etc.)*
DHC1.0.1	Proposals should acknowledge the Village Green and its Significant Trees and Hedgerows (identified in this Code Analysis), including the small pond adjacent to the Church of St Paul and the larger pond at the Manor House and the priority habitat of traditional orchard within its grounds, as a valuable historic setting in the character and appearance of the Conservation Area contributing to the tranquillity of rural life and as a haven for wildlife.
1.1	*A contextual analysis should identify the landscape character, natural features and topography highlighting visually prominent areas*
DHC1.1.1	Proposals should acknowledge the key characteristics of the Flat Floodplain Pasture landscape type in the Nuneham Courtenay Ridge Character Area identified in this Code Analysis.
1.2	*A contextual analysis should identify attractive and/or sensitive views (both of and from built and natural features) into, out of and within the site*
DHC1.2.1	Proposals should acknowledge the variety of attractive internal views on the winding roads of The Burycroft and The Green (identified in this Code Analysis).
DHC1.2.2	Proposals should acknowledge the way in which most plots and buildings are hidden by surrounding tree cover with long distance views restricted by tree cover in most parts, reinforcing the attractive skyline of this character area visible from Culham Lock Car Park and along Culham Cut (identified in this Code Analysis).
DHC1.2.3	Proposals should acknowledge the 'secretive' quality of the Grade II listed Church of St Paul and the Grade II* listed Culham Manor which is largely hidden from the public realm by trees and other well-established vegetation 'guarding' the approach to it from the village and avoid harming the Important View from The Green where both buildings are revealed (identified in this Code Analysis).

5. Design Codes

Dispersed Historic Core

The Lion, High Street

Former public house comprising of a two storey detached arts and craft building dating back to the 19th century converted to a single dwelling in 2008. Associated with the Morrell's Brewery who once owned all 39 cottages in the village. A prominent building constructed of high quality materials possessing visual detail and interest which contributes positively to the character of the Conservation Area.

Nos. 7 -11 The Green

Part of the rebuilding of the village in in 1869 and 1870, The majority of the buildings along the High Street has adopted some or all of the elements established by nos. 7-11 The Green, including the use of predominantly red brick, flemish bond with glazed headers, brick feature lintels and quoins, plain clay roof tiles, and ridge mounted gable end chimney stacks.

	Place and Setting
1.3	*A contextual analysis should identify buildings and structures of historical importance including listed buildings, associated setting and historic views, historic landscape pattern and features (historic landscape character), conservation areas, historic parks and gardens and archaeological remains*
DHC1.3.1	Proposals should retain the built form and architectural features of The Lion on the High Street as a local heritage asset and should acknowledge its prominent location in attractive internal views and its positive contribution to the character and significance of the Conservation Area (as identified in this Code Analysis).
DHC1.3.2	Proposals should retain and enhance the built form and architectural features of nos. 7 -11 The Green as local heritage assets and should acknowledge the prominent role the buildings play in setting a pattern for new buildings which defines the character of the local area and their positive contribution to the character and significance of the Conservation Area.
DHC1.3.3	Proposals should acknowledge the special interest of this part of the Culham Conservation Area as highlighted in the Design Codes, including the following characteristics: a. The origins of the main village settlement as a typical Saxon settlement developed just above the Thames floodplain taking advantage of the higher ground and proximity to well-watered river meadows;

5. Design Codes

Dispersed Historic Core

	Place and Setting
DHC1.3.3 (cont)	b. The prominence of the Grade II listed no. 13 The Green as the only old cottage still in existence surviving the rebuilding of most of the village in 1869 and 1870; c. Other significant buildings, including the Grade II listed Church of St Paul and the Grade II* listed Culham Manor and listed structures within its grounds, both of which is less immediately visible from the road, contribute to the character and appearance of the Conservation Area; d. Important Open Spaces include the churchyard and the grounds of Culham Manor in addition to the Village Green identified in this Code Analysis; e. The attractive views along the village streets and lanes in this part of the Conservation Area identified in this Code Analysis; f. Fine groups of mature trees along The Green providing an important sense of arrival at Culham Manor and the Church of St Paul and on the western part of the Village Green north of the Church providing an important sense of enclosure; g. The tranquillity of this part of the Conservation Area is enhanced by the presence of trees and mature vegetation, framing the green space of the irregular shaped Village Green. With the exception of the Burycroft as the main road, there are no pavements or street lights; h. The rural setting and character of this part of the Conservation Area is in danger of being spoiled by light pollution from the adjoining larger centres of Abingdon and Didcot and proposed future growth proposals to the north of the Parish.
1.6	*A contextual analysis should settlement structure of the site and surrounding area: this includes studying the historical development of the settlement, its townscape; structure and hierarchy of streets, spaces, facilities, existing connections (including footpaths and cycle routes), gateways, nodes, density, plot and block sizes. Figure ground diagrams can help explain a settlement structure.*
DHC1.6.1	Infill developments will be required to demonstrate that proposed buildings on infill plots will reinforce local distinctiveness through incorporating open spaces which are characteristic of the dispersed settlement pattern to avoid reducing the open character of the area.
1.8	*A contextual analysis should identify the streets and public spaces surrounding the site, the enclosure of streets and public open spaces, the layout and form of spaces and the public and private interface.*
DHC1.8.1	Proposals should maintain or reinforce formal features such as mature trees, avenues of trees, woods and walls (as identified in the Code Analysis).
1.9	*A contextual analysis should identify built character: the scale, form and massing of the built environment, treatment of building frontages and boundaries, building types and materials. This should all be included in a Character Study.*
DHC1.9.1	Proposals should be no more than two storeys in height.

5. Design Codes

Dispersed Historic Core

	Place and Setting
DHC1.9.2	Proposals may be of either detached or semi-detached house built form only with gabled or cross gabled roof forms and simple rectangular floor plans predominating with the exception of old barn developments, of which Manor Farm is a fine example of adapting traditional farm buildings using high-quality design that makes a positive contribution to the rural context of the area.
DHC1.9.3	Proposals should take into account the common use of red brick, centre or gable-end, ridge mounted chimney stacks.
DHC1.9.4	Proposals should consider the dominance of predominantly red brick, flemish bond with glazed headers, brick feature lintels and quoins, and plain clay tile roofs in building materials and architectural features.
DHC1.9.5	Proposals that comprise an architectural style of the Arts and Crafts tradition will be supported, provided they are consistent with all other relevant parts of the Code.
DHC1.9.6	Proposals should acknowledge the pattern of buildings fronting onto Village Green at its northern boundary.
DHC1.9.7	Proposals should retain and enhance mature planting along front boundaries and behind boundary walls at the southern boundary of the Village Green.

Manor Farm Development as an excellent example of the development of traditional farm buildings.

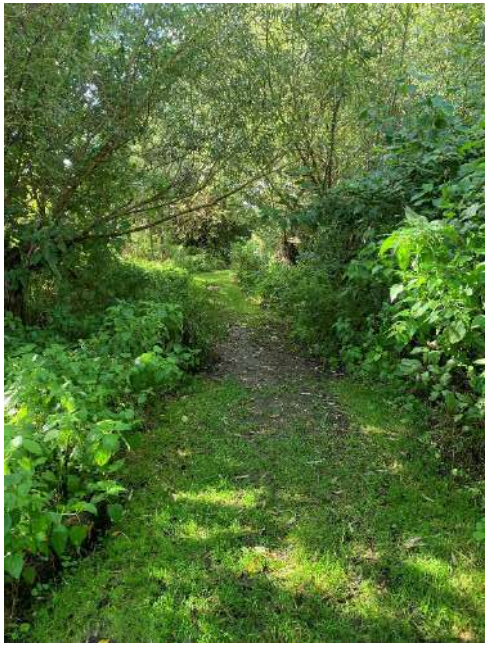
5. Design Codes

Dispersed Historic Core

	Natural Environment
	Joint Design Guide: "The site layout should respect its physical features and those of its adjacent land including its topography, orientation, landform, geology, drainage patterns, field patterns/boundaries and vegetation cover, for example."
2.0	*retains and strengthens the site's landscape features; using the physical features of the site and results of technical studies positively and imaginatively in its design*
DHC2.0.1	All development should contribute to the maintenance and delivery of a high quality multi-functional network of Green and Blue Infrastructure in the Parish to provide long-term benefits for people, places and nature, in ways that reinforce local character **See also Design Codes DHC1.0.1 & DHC1.1.1**
2.3	*implements SuDs (Sustainable Drainage Systems) as an integral part of the development's open space network. SuDs should be designed into the development from the outset with features such as: wetlands, basins, ponds, scrapes, swales, retention planters (rainwater gardens), combined with good landscaping to make a positive contribution to the biodiversity, character and appearance of a development*
DHC2.3.1	Proposals should consider flood resistance and resilience measures such as the use of permeable paving surfaces and green, blue and brown roofs.
2.9	*trees are designed appropriately into the layout. This should be explained in the landscaping strategy*
DHC2.9.1	Proposals to fell any tree having a diameter of 9'' (225mm) or more measured at 2'0'' (600mm) above the ground will not be supported unless it can be demonstrated there is sufficient justification to remove the tree or it is dead, dying, dangerous or diseased.
DHC2.9.2	If it is necessary to remove trees to carry out a development, proposals should make provision for the replacement on a 'one for one' basis or where the existing tree has been identified as Significant in this Code Analysis, on a 'two or more for one' basis, with replacements being of a reasonable size and quality.
2.13	*retains and enhances existing important habitats, creates new habitats and aims to deliver at least 10% Biodiversity Net Gain (Environment Bill 2020)*
DHC2.13.1	Proposals should embed green and blue infrastructure in ways that help support nature recovery and reverse the decline in biodiversity resulting in a 'net gain', including the placement of swift bricks, bat box bricks, insect bricks, house martin nest boxes, 'hedgehog holes' between gardens and the external natural environment avoiding openings onto roads.

5. Design Codes

Dispersed Historic Core





5. Design Codes

Dispersed Historic Core

	Movement and Connectivity
	Joint Design Guide: "A place that is easy to get to and move through for all users."
3.9	*encourages movement by prioritising the needs of pedestrians, people with disabilities, cyclists and public transport users, over the needs of motorists within the design of streets. Applicants should refer to Manual for Streets 1 (2007) and 2 (2010)*
DHC3.9.1	Proposals should ensure that any associated improvements to the highway network, where practicable, avoid urbanising highway infrastructure to preserve the rural character of the area.
3.25	*that lighting features follow the design approach used for other street furniture and avoid causing light pollution in sensitive/darker non-urban rural areas (consider, downward lighting and reduce LUX levels in these areas). Direct glare must be avoided, from any lighting scheme to neighbouring properties*
DHC3.25.1	Proposals should avoid causing light pollution in this sensitive and dark rural area and will be expected to comply with the requirements of Policy CUL10: Light Pollution in the Culham Neighbourhood Plan. Proposals should consider the inclusion of curfew hours* as part of the lighting scheme. **Curfew: The time after which stricter requirements (for the control of obtrusive light) will apply; often a condition of use of lighting applied the local planning department. Depending upon application curfew times often commence between 21:00 to 23:00 and may run until 07:00. However, exact curfew hours should be carefully applied to ensure the reduction of obtrusive light is prioritised within the immediate environment and towards sensitive human as well as fauna and flora receptors.* Source: Institute of Lighting Professionals Guidance Note 01/21
	Space and layout
	Joint Design Guide: "Use an appropriate scale and density to create a place of a human scale."
4.2	*consists of perimeter blocks that respond to the grain of the existing settlements taking cues from block sizes, plot patterns, and the relationship between built and open space*
DHC4.2.1	The characteristic pattern of development in the character area is one where the buildings are set within the landscape; where the landscape is dominant. In this rural character area, an irregular block layout, as guided by this Design Code, is considered to provide a more appropriate 'organic' character and perimeter blocks will therefore be resisted.

5. Design Codes

Dispersed Historic Core

	Built Form
	Joint Design Guide: "Respect the local context whilst striving for excellence in architectural quality and sustainability."
5.4	*incorporates green and/or brown roofs/roof gardens on flat roof buildings and vertical gardens. Building design should seek to integrate biodiversity enhancements wherever possible. These could be through the provision of green walls/roofs, or faunal features (bird/bat boxes). They can be discretely incorporated into structures, or made into focal points, and will contribute to the need for development to deliver biodiversity net gain*
DHC5.4.1	Virtually any type of roof structure can accommodate green and brown roofs and should therefore not be limited for consideration on flat roofs as flat roof forms will not be appropriate in this character area. Green, brown (now also known as biodiverse roofs) and blue roofs should be explored on all roof types as a contribution to nature recovery, surface water flood alleviation and their appearance will contribute to Culham's sense of greenery.
5.25	*maintains established building lines and predominant plot patterns*
DHC5.25.1	Proposals at properties on the northern boundary of the Village Green and on the High Street, must not lead to new buildings or existing buildings extending in front of any building line to the plot frontage that is common to both adjoining buildings.
5.59	*the proposed design must preserve or enhance the original features and/or contribute to its significance*
DHC5.59.1	In addition, the design of proposals should enhance the original features and contribute to the significance of local heritage assets in this Code Analysis.
	Climate and Sustainability
	Joint Design Guide: "Achieve an optimal active design approach."
6.2	*optimises the orientation of buildings to utilise solar gain and shading*
DHC6.2.1	All development must be 'zero carbon ready by design' to minimise the amount of energy needed to heat and cool buildings through landform, layout, building orientation, massing and landscaping.

5. Design Codes

Dispersed Historic Parkland

	Place and Setting
	Joint Design Guide: "Ensure: A contextual analysis including an opportunities and constraints plan (which will inform your design rationale) of the wider and immediate site context has been prepared."
1.0	*A contextual analysis should identify existing networks of natural features, including watercourses, trees, woodland, hedgerows, green spaces, field patterns, habitats and public rights of way (footpaths, bridleways, etc.)*
DHP1.0.1	Proposals should retain the green impression formed by Significant Trees and Hedgerows, Important Open Space (identified in this Code Analysis), fields and gardens as an important element in Culham's character as a historic village in a rural setting and the character and appearance of the Conservation Area.
DHP1.0.2	Proposals should acknowledge Significant Trees and Hedgerows (identified in this Code Analysis), including ponds and priority habitats of traditional orchard and deciduous woodland as a valuable historic setting in the character and appearance of the Conservation Area contributing to the tranquillity of rural life and as a haven for wildlife.
1.1	*A contextual analysis should identify the landscape character, natural features and topography highlighting visually prominent areas*
DHP1.1.1	Proposals should acknowledge, where applicable, the key characteristics of the Open Farmed Hills and Valleys, Parkland and Estate Farmland and Wooded Hills and Valleys landscape types in the Nuneham Courtenay Ridge Character Area identified in this Code.
1.2	*A contextual analysis should identify attractive and/or sensitive views (both of and from built and natural features) into, out of and within the site*
DHP1.2.1	Proposals should avoid obstructing views of surviving areas of permanent pasture (identified in this Code Analysis) reflecting the rural and unspoilt character of the parkland and estate farmland landscape.
DHP1.2.2	Proposals should acknowledge the way in which the well-managed parkland character with formal features has been carved out from the surrounding landscape and how most plots and buildings are hidden by surrounding tree cover and vegetation with long distance views restricted by tree cover, well-established vegetation and formal boundary features, reinforcing its contribution as the backdrop to the attractive skyline of the village visible from Culham Lock Car Park and along Culham Cut (identified in this Code Analysis).

5. Design Codes

Dispersed Historic Parkland







5. Design Codes

Dispersed Historic Parkland

	Place and Setting
1.3	*A contextual analysis should identify buildings and structures of historical importance including listed buildings, associated setting and historic views, historic landscape pattern and features (historic landscape character), conservation areas, historic parks and gardens and archaeological remains*
DHP1.3.1	Proposals should protect, and where appropriate, enhance, or better reveal, the significance of the Pillbox FW3/24 on The Burycroft as a local heritage asset and an integral part of Britain's military history.

Pillbox (Type FW3/24)

A hexagonal pillbox with an internal anti-ricochet wall. The rear wall was lengthened to take two rifle loopholes in addition to the five light machine gun. Both 15in and 42in thick walls are common. Designed by DFW branch 3. Built in 1940 into 1941 for the defence of the United Kingdom against a possible enemy invasion during World War II.

Source: https://heritagedata.org/live/schemes/eh_tmt2/concepts/140521.html

Pillbox on The Burycroft – Source https://www.tracesofwar.com/sights/21891/Where-is-Pillbox-FW3-22-Culham.htm

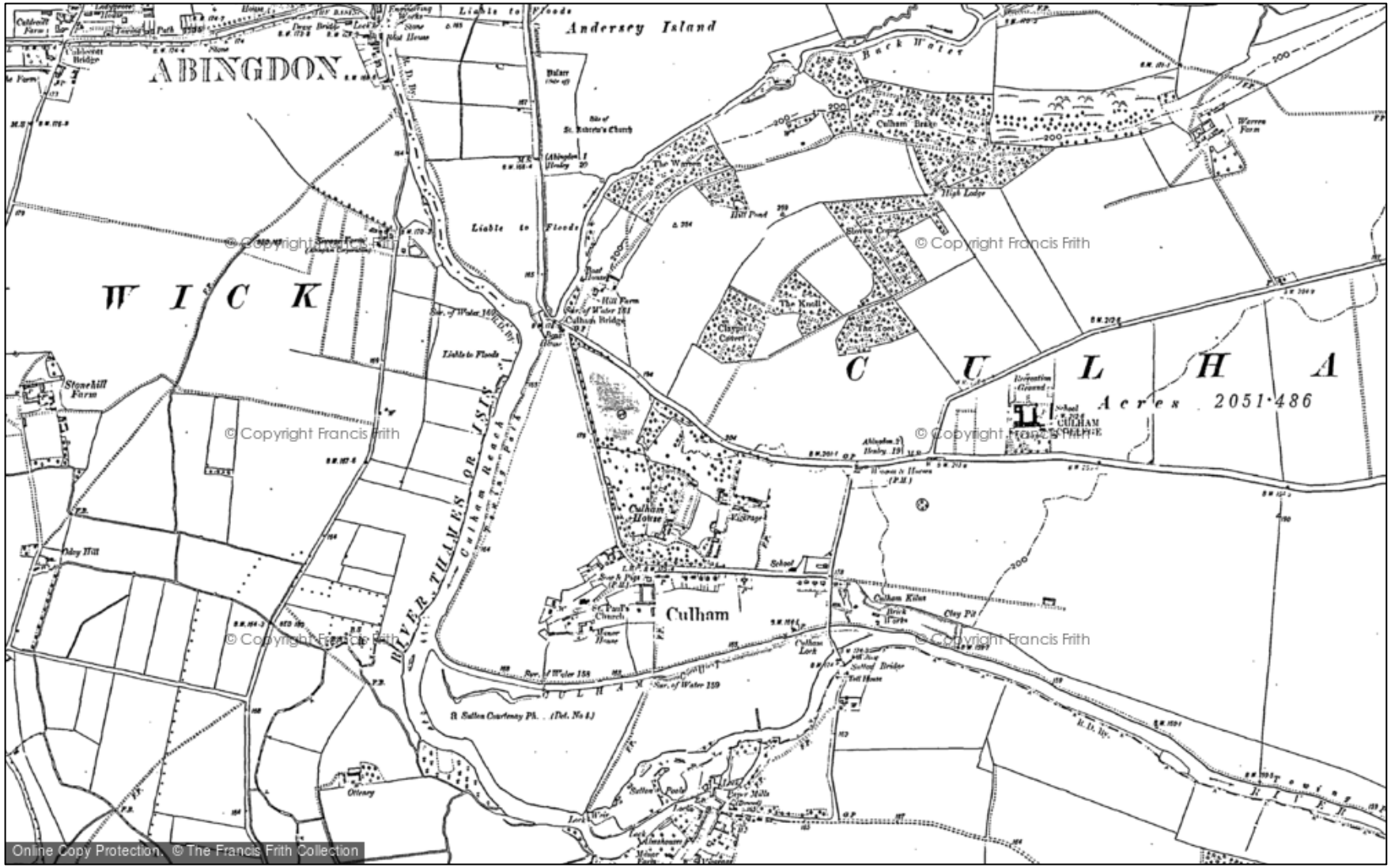
5. Design Codes

Dispersed Historic Parkland

	Place and Setting
DHP1.3.2	Proposals should acknowledge the special interest of this part of the Culham Conservation Area as highlighted in the Design Codes, including the following characteristics: a. The origins of the main village settlement as a typical Saxon settlement developed just above the Thames floodplain taking advantage of the higher ground and proximity to well-watered river meadows; b. The historical significance of the Grade II listed Culham House and Culham Court, both of which is less immediately visible from the road, contribute to the character and appearance of the Conservation Area; c. Important Open Spaces include the grounds of Culham House in addition to the surviving areas of permanent pasture and Culham Recreation Ground identified in this Code Analysis; d. Fine groups of mature trees, avenues of trees, lakes, woods and walls contribute to the generally enclosed character of this part of the Conservation Area. Some of the main groupings of historic trees remain to this day, indicating their planned and purposeful planting more than a century ago; e. The rural and unspoilt chatacter of this part of the Conservation Area is enhanced by the presence of woodland and tree cover. With the exception of the Burycroft and the High Street as the main road, there are no pavements or street lights; f. The rural setting and character of this part of the Conservation Area is in danger of being spoiled by light pollution from the proposed future growth proposals to the north of the Parish with light pollution from Abingdon and Didcot already harming the character.
1.6	*A contextual analysis should settlement structure of the site and surrounding area: this includes studying the historical development of the settlement, its townscape; structure and hierarchy of streets, spaces, facilities, existing connections (including footpaths and cycle routes), gateways, nodes, density, plot and block sizes. Figure ground diagrams can help explain a settlement structure.*
DHP1.6.1	Infill developments will be required to demonstrate that proposed buildings on infill plots will reinforce local distinctiveness through incorporating open spaces which are characteristic of the dispersed settlement pattern to avoid reducing the open character of the area.
DHP1.6.2	Proposals adjacent to the junction of Tollgate Road and the A415 must acknowledge the special prominence of this location as a gateway into the historic village.
1.8	*A contextual analysis should identify the streets and public spaces surrounding the site, the enclosure of streets and public open spaces, the layout and form of spaces and the public and private interface.*
DHP1.8.1	Proposals should maintain or reinforce formal features such as mature trees, avenues of trees, woods and walls (as identified in the Code Analysis).

5. Design Codes

Dispersed Historic Parkland



5. Design Codes

Dispersed Historic Parkland

	Place and Setting
1.9	*A contextual analysis should identify built character: the scale, form and massing of the built environment, treatment of building frontages and boundaries, building types and materials. This should all be included in a Character Study.*
DHP1.9.1	Proposals should be no more than two storeys in height unless there is local precedence for taller buildings in the immediate vicinity.
DHP1.9.2	Proposals should be of a detached house built form only, unless it can be demonstrated that other built forms incorporates open space that will reinforce the local distinctiveness of the dispersed settlement pattern as per Design Code DHP2.1.7 i., with the exception of old barn developments which should respect and enhance the architectural and historic interest, and setting of the buildings minimising loss to significant historic fabric and retaining distinctive features.
DHP1.9.3	Proposals for new buildings should be centralised on the plot and/or providing distance away from boundaries with neighbouring properties to promote openness.
DHP1.9.4	Proposals may adopt a variety of architectural styles in respect of composition of the buildings and of the appearance of its materials.
DHP1.9.5	Proposals should retain or provide hedgerows as common traditional highway boundaries, or in the case of Culham House the high level wall adjacent to the High Street and The Burycroft with mature planting behind such boundary walls, providing enclosure and screening, occasionally allowing views through gates to parkland features.

5. Design Codes

Dispersed Historic Parkland

	Natural Environment
	Joint Design Guide: "The site layout should respect its physical features and those of its adjacent land including its topography, orientation, landform, geology, drainage patterns, field patterns/boundaries and vegetation cover, for example."
2.0	*retains and strengthens the site's landscape features; using the physical features of the site and results of technical studies positively and imaginatively in its design*
DHP2.0.1	All development should contribute to the maintenance and delivery of a high quality multi-functional network of Green and Blue Infrastructure in the Parish to provide long-term benefits for people, places and nature, in ways that reinforce local character. **See also Design Codes DHP1.0.1; DPH1.0.2; & DPH1.1.1.**
2.3	*implements SuDs (Sustainable Drainage Systems) as an integral part of the development's open space network. SuDs should be designed into the development from the outset with features such as: wetlands, basins, ponds, scrapes, swales, retention planters (rainwater gardens), combined with good landscaping to make a positive contribution to the biodiversity, character and appearance of a development*
DHC2.3.1	Proposals should consider flood resistance and resilience measures such as the use of permeable paving surfaces and green, blue and brown roofs.
2.9	*trees are designed appropriately into the layout. This should be explained in the landscaping strategy*
DHP2.9.1	Proposals to fell any tree having a diameter of 9'' (225mm) or more measured at 2'0'' (600mm) above the ground will not be supported unless it can be demonstrated there is sufficient justification to remove the tree or it is dead, dying, dangerous or diseased.
DHP2.9.2	If it is necessary to remove trees to carry out a development, proposals should make provision for the replacement on a 'one for one' basis or where the existing tree has been identified as Significant in this Code Analysis, on a 'two or more for one' basis, with replacements being of a reasonable size and quality.
2.13	*retains and enhances existing important habitats, creates new habitats and aims to deliver at least 10% Biodiversity Net Gain (Environment Bill 2020)*
DHP2.13.1	Proposals should embed green and blue infrastructure in ways that help support nature recovery and reverse the decline in biodiversity resulting in a 'net gain', including the placement of swift bricks, bat box bricks, insect bricks, house martin nest boxes, 'hedgehog holes' between gardens and the external natural environment avoiding openings onto roads.

5. Design Codes

Dispersed Historic Parkland

	Movement and Connectivity
	Joint Design Guide: "A place that is easy to get to and move through for all users."
3.9	*encourages movement by prioritising the needs of pedestrians, people with disabilities, cyclists and public transport users, over the needs of motorists within the design of streets. Applicants should refer to Manual for Streets 1 (2007) and 2 (2010)*
DHP3.9.1	Proposals should acknowledge and respond to the need to enhance pedestrian and cycle connectivity across the A415 Abingdon Road from the existing village settlement and the prominent role the area around the junction of Tollgate Road and the A415 will play in linking together the existing settlement with new development to the north of the A415 whilst retaining the distinct separate identity of the historic rural village.
3.25	*that lighting features follow the design approach used for other street furniture and avoid causing light pollution in sensitive/darker non-urban rural areas (consider, downward lighting and reduce LUX levels in these areas). Direct glare must be avoided, from any lighting scheme to neighbouring properties*
DHP3.25.1	Proposals should avoid causing light pollution in this sensitive and dark rural area and will be expected to comply with the requirements of Policy CUL10: Light Pollution in the Culham Neighbourhood Plan. Proposals should consider the inclusion of curfew hours* as part of the lighting scheme. **Curfew: The time after which stricter requirements (for the control of obtrusive light) will apply; often a condition of use of lighting applied the local planning department. Depending upon application curfew times often commence between 21:00 to 23:00 and may run until 07:00. However, exact curfew hours should be carefully applied to ensure the reduction of obtrusive light is prioritised within the immediate environment and towards sensitive human as well as fauna and flora receptors.* Source: Institute of Lighting Professionals Guidance Note 01/21

5. Design Codes

Dispersed Historic Parkland

	Space and layout
	Joint Design Guide: "Use an appropriate scale and density to create a place of a human scale."
4.2	*consists of perimeter blocks that respond to the grain of the existing settlements taking cues from block sizes, plot patterns, and the relationship between built and open space*
DHP4.2.1	The characteristic pattern of development in the character area is one where the buildings are set within the landscape; where the landscape is dominant. In this rural character area, an irregular block layout, as guided by this Design Code, is considered to provide a more appropriate 'organic' character and perimeter blocks will therefore be resisted.
	Built Form
	Joint Design Guide: "Respect the local context whilst striving for excellence in architectural quality and sustainability."
5.4	*incorporates green and/or brown roofs/roof gardens on flat roof buildings and vertical gardens. Building design should seek to integrate biodiversity enhancements wherever possible. These could be through the provision of green walls/roofs, or faunal features (bird/bat boxes). They can be discretely incorporated into structures, or made into focal points, and will contribute to the need for development to deliver biodiversity net gain*
DHP5.4.1	Virtually any type of roof structure can accommodate green and brown roofs and should therefore not be limited for consideration on flat roofs. Green, brown (now also known as biodiverse roofs) and blue roofs should be explored on all roof types as a contribution to nature recovery, surface water flood alleviation and their appearance will contribute to Culham's sense of greenery.
5.59	*the proposed design must preserve or enhance the original features and/or contribute to its significance*
DHP5.59.1	In addition, the design of proposals should enhance the original features and contribute to the significance of local heritage assets in this Code Analysis.

5. Design Codes

Dispersed Historic Parkland

	Climate and Sustainability
	Joint Design Guide: "Achieve an optimal active design approach."
6.2	*optimises the orientation of buildings to utilise solar gain and shading*
DHP6.2.1	All development must be 'zero carbon ready by design' to minimise the amount of energy needed to heat and cool buildings through landform, layout, building orientation, massing and landscaping.

5. Design Codes

Linear Extensions

	Place and Setting
	Joint Design Guide: "Ensure: A contextual analysis including an opportunities and constraints plan (which will inform your design rationale) of the wider and immediate site context has been prepared."
1.0	*A contextual analysis should identify existing networks of natural features, including watercourses, trees, woodland, hedgerows, green spaces, field patterns, habitats and public rights of way (footpaths, bridleways, etc.)*
LE1.0.1	Proposals should retain and enhance domestic front gardens, grass verges (particularly on the High Street and at The Glebe identified as Important Open Space in this Code Analysis), trees and hedgerows (particularly Significant Trees and Hedgerows identified in this Code Analysis) as an important contribution to the rural and open character of the village and as an opportunity for additional habitat provision.
1.1	*A contextual analysis should identify the landscape character, natural features and topography highlighting visually prominent areas*
LE1.1.1	Proposals should acknowledge, where applicable, the key characteristics of the Flat Floodplain Pasture and Open Farmed Hills and Valleys landscape types in the Nuneham Courtenay Ridge Character Area identified in this Code Analysis.
1.2	*A contextual analysis should identify attractive and/or sensitive views (both of and from built and natural features) into, out of and within the site*
LE1.2.1	Proposals should acknowledge the way in which most plots and buildings are hidden by surrounding tree cover with long distance views restricted by tree cover in most parts, reinforcing the attractive skyline of this character area visible from Culham Lock Car Park and along Culham Cut (identified in this Code Analysis).
LE1.2.2	Proposals on the northern stretch of Tollgate Road should avoid obstructing the dominant sky and long views (identified in this Code Analysis) of the open and exposed character of the landscape to the east of the village.

5. Design Codes

Linear Extensions

	Place and Setting
1.3	*A contextual analysis should identify buildings and structures of historical importance including listed buildings, associated setting and historic views, historic landscape pattern and features (historic landscape character), conservation areas, historic parks and gardens and archaeological remains*
LE1.3.1	Proposals should retain the built form and architectural features of nos. 22-23 High Street as local heritage assets and should acknowledge the role the buildings play as a positive contribution to the street scene.
LE1.3.2	Proposals should retain the built form and architectural features of nos. 22-23 High Street as local heritage assets and should acknowledge the prominent location and role the buildings play as a positive contribution to the street scene.

School House

Erected in 1850 with some additions made in 1897. It was reorganised in 1924 for infants and girls only, but in 1931 operated for infants only. The school temporarily closed in 1948, but was re-opened in 1951 and a single storey extension was added to the existing school building in 1994. The architectural features on the original building has been maintained and makes a positive contribution to the street scene.

22-23 High Street

A pair of symmetrical, semi-detached houses constructed some time between 1883 and 1899. The buildings relate to the Morrell's Brewery associated with the village through the later 19th century and early 20th century and bares a striking resemblance with the former PH The Lion further along the High Street. The buildings are constructed of high quality materials possessing visual detail and interest which contributes positively to the street scene and Culham's skyline where glimpses of the rear elevation of the buildings are visible along the Thames Path on Culham Cut.

5. Design Codes

Linear Extensions

	Place and Setting
1.3	*A contextual analysis should identify buildings and structures of historical importance including listed buildings, associated setting and historic views, historic landscape pattern and features (historic landscape character), conservation areas, historic parks and gardens and archaeological remains*
LE1.3.3	Proposals should retain the built form and architectural features of Kiln Cottage as a local heritage asset and the view of the building should not be obstructed any further.
LE1.3.4	Proposals should acknowledge the special interest of this part of the Culham Conservation Area as highlighted in the Design Codes, including the following characteristics: a. The origins of the main village settlement as a typical Saxon settlement developed just above the Thames floodplain taking advantage of the higher ground and proximity to well-watered river meadows; b. The architectural features of the Grade II listed nos. 36 and 27 High Street contributing to the significance of the Conservation Area; c. The rural setting and character of this part of the Conservation Area is in danger of being spoiled by light pollution from the adjoining larger centres of Abingdon and Didcot and proposed future growth proposals to the north of the Parish.

Kiln Cottage

Associated with the Culham Brick and Lime Works which started operating in about 1850 closing around 1932. The Mouldey family rented Kiln Cottage from the Morrell family and describe Kiln Cottage and the Brickworks as “a package”. Source: Janet Brandon My Childhood in Culham

A detached two storey brick building situated on a generous plot on Tollgate Road. The building is sited perpendicular to Tollgate Road with its principal elevation to the south. The installation of a boundary wall inn 2012 now largely screens the attractive setting of the cottage.

Kiln Cottage prior to the erection of a boundary wall, gates and fencing in 2012 Source: P12/S2231/HH

5. Design Codes

Linear Extensions

	Place and Setting
1.6	*A contextual analysis should settlement structure of the site and surrounding area: this includes studying the historical development of the settlement, its townscape; structure and hierarchy of streets, spaces, facilities, existing connections (including footpaths and cycle routes), gateways, nodes, density, plot and block sizes. Figure ground diagrams can help explain a settlement structure.*
LE1.6.1	Proposals for plot sub-division or for more than one dwelling or change of use within in established plot will not be supported.
LE1.6.2	Proposals should acknowledge the very regular pattern of plot shapes and sizes along every road in this area.
1.8	*A contextual analysis should identify the streets and public spaces surrounding the site, the enclosure of streets and public open spaces, the layout and form of spaces and the public and private interface.*
LE1.8.1	Proposals should retain and enhance the rural and open character of the village created by a combination of front gardens, grass verges and mature trees.
1.9	*A contextual analysis should identify built character: the scale, form and massing of the built environment, treatment of building frontages and boundaries, building types and materials. This should all be included in a Character Study.*
LE1.9.1	Proposals should be no more than two storeys in height.
LE1.9.2	Proposals on the High Street and The Glebe may be either of a detached, semi-detached house or bungalow built form only with gabled or cross gabled roof forms and simple rectangular floor plans predominating.
LE1.9.3	Proposals on Tollgate Road should be either of a detached, semi-detached house or bungalow built form only comprising either an open gable, cross gable, former, hipped, cross-hipped, pyramid hipped or intersecting/overlaid hipped roof form – other roof forms have no precedent in the character area.
LE1.9.4	Proposals should take into account the common use of red brick, centre or gable-end, ridge mounted chimney stacks.
LE1.9.5	Proposals should consider the dominance of predominantly red brick, flemish bond with glazed headers, brick feature lintels and quoins, and plain clay tile roofs in building materials and architectural features.
LE1.9.6	Proposals that comprise an architectural style of the Arts and Crafts tradition will be supported, provided they are consistent with all other relevant parts of the Code.

5. Design Codes

Linear Extensions

	Place and Setting (cont)
LE1.9.7	Proposals should acknowledge the very regular patterns of plot orientation and adhere to the strong building lines of every road in this area.
LE1.9.8	Proposals on the High Street and The Glebe should maintain and reinforce wide grass verges and front gardens with low level boundary treatments creating a spacious open character.
LE1.9.9	Proposals on Tollgate Road should retain and provide mature hedgerows and planting as soft boundary treatments and avoid the introduction of suburban features such as hardstanding in front gardens and higher level hard boundary treatments.

5. Design Codes

Linear Extensions

	Natural Environment
	Joint Design Guide: "The site layout should respect its physical features and those of its adjacent land including its topography, orientation, landform, geology, drainage patterns, field patterns/boundaries and vegetation cover, for example."
2.0	*retains and strengthens the site's landscape features; using the physical features of the site and results of technical studies positively and imaginatively in its design*
LE2.0.1	All development should contribute to the maintenance and delivery of a high quality multi-functional network of Green and Blue Infrastructure in the Parish to provide long-term benefits for people, places and nature, in ways that reinforce local character. **See also Design Codes LE1.0.1 & LE1.1.1.**
2.3	*implements SuDs (Sustainable Drainage Systems) as an integral part of the development's open space network. SuDs should be designed into the development from the outset with features such as: wetlands, basins, ponds, scrapes, swales, retention planters (rainwater gardens), combined with good landscaping to make a positive contribution to the biodiversity, character and appearance of a development*
LE2.3.1	Proposals should consider flood resistance and resilience measures such as the use of permeable paving surfaces and green, blue and brown roofs.
2.9	*trees are designed appropriately into the layout. This should be explained in the landscaping strategy*
LE2.9.1	Proposals to fell any tree having a diameter of 9'' (225mm) or more measured at 2'0'' (600mm) above the ground will not be supported unless it can be demonstrated there is sufficient justification to remove the tree or it is dead, dying, dangerous or diseased.
LE2.9.2	If it is necessary to remove trees to carry out a development, proposals should make provision for the replacement on a 'one for one' basis or where the existing tree has been identified as Significant in this Code Analysis, on a 'two or more for one' basis, with replacements being of a reasonable size and quality.
2.13	*retains and enhances existing important habitats, creates new habitats and aims to deliver at least 10% Biodiversity Net Gain (Environment Bill 2020)*
LE2.13.1	Proposals should embed green and blue infrastructure in ways that help support nature recovery and reverse the decline in biodiversity resulting in a 'net gain', including the placement of swift bricks, bat box bricks, insect bricks, house martin nest boxes, 'hedgehog holes' between gardens and the external natural environment avoiding openings onto roads.

5. Design Codes

Linear Extensions

	Movement and Connectivity
	Joint Design Guide: "A place that is easy to get to and move through for all users."
3.9	*encourages movement by prioritising the needs of pedestrians, people with disabilities, cyclists and public transport users, over the needs of motorists within the design of streets. Applicants should refer to Manual for Streets 1 (2007) and 2 (2010)*
LE3.9.1	Proposals should ensure that any associated improvements to the highway network, where practicable, avoid urbanising highway infrastructure to preserve the rural character of the area.
3.25	*that lighting features follow the design approach used for other street furniture and avoid causing light pollution in sensitive/darker non-urban rural areas (consider, downward lighting and reduce LUX levels in these areas). Direct glare must be avoided, from any lighting scheme to neighbouring properties*
LE3.25.1	Proposals should avoid causing light pollution in this sensitive and dark rural area and will be expected to comply with the requirements of Policy CUL10: Light Pollution in the Culham Neighbourhood Plan. Proposals should consider the inclusion of curfew hours* as part of the lighting scheme. **Curfew: The time after which stricter requirements (for the control of obtrusive light) will apply; often a condition of use of lighting applied the local planning department. Depending upon application curfew times often commence between 21:00 to 23:00 and may run until 07:00. However, exact curfew hours should be carefully applied to ensure the reduction of obtrusive light is prioritised within the immediate environment and towards sensitive human as well as fauna and flora receptors.* Source: Institute of Lighting Professionals Guidance Note 01/21

5. Design Codes

Linear Extensions

5. Design Codes

Linear Extensions

	Space and layout
	Joint Design Guide: "Use an appropriate scale and density to create a place of a human scale."
4.2	*consists of perimeter blocks that respond to the grain of the existing settlements taking cues from block sizes, plot patterns, and the relationship between built and open space*
LE4.2.1	The characteristic pattern of development in the character area is one where the buildings are set within the landscape; where the landscape is dominant. In this rural character area, an irregular block layout, as guided by this Design Code, is considered to provide a more appropriate 'organic' character and perimeter blocks will therefore be resisted.
	Built Form
	Joint Design Guide: "Respect the local context whilst striving for excellence in architectural quality and sustainability."
5.4	*incorporates green and/or brown roofs/roof gardens on flat roof buildings and vertical gardens. Building design should seek to integrate biodiversity enhancements wherever possible. These could be through the provision of green walls/roofs, or faunal features (bird/bat boxes). They can be discretely incorporated into structures, or made into focal points, and will contribute to the need for development to deliver biodiversity net gain*
LE5.4.1	Virtually any type of roof structure can accommodate green and brown roofs and should therefore not be limited for consideration on flat roofs as flat roof forms will not be appropriate in this character area. Green, brown (now also known as biodiverse roofs) and blue roofs should be explored on all roof types as a contribution to nature recovery, surface water flood alleviation and their appearance will contribute to Culham's sense of greenery.

Examples of Green and Brown (Biodiverse) Roofs on pitched slopes

5. Design Codes

Linear Extensions

	Built Form
5.25	*maintains established building lines and predominant plot patterns*
LE5.25.1	Proposals must not lead to new buildings or existing buildings extending in front of any building line to the plot frontage that is common to both adjoining buildings.
5.59	*the proposed design must preserve or enhance the original features and/or contribute to its significance*
LE5.59.1	In addition, the design of proposals should enhance the original features and contribute to the significance of local heritage assets in this Code Analysis.
	Climate and Sustainability
	Joint Design Guide: "Achieve an optimal active design approach."
6.2	*optimises the orientation of buildings to utilise solar gain and shading*
LE6.2.1	All development must be 'zero carbon ready by design' to minimise the amount of energy needed to heat and cool buildings through landform, layout, building orientation, massing and landscaping.

5. Design Codes

Outside the main village settlement

	Place and Setting
	Joint Design Guide: "Ensure: A contextual analysis including an opportunities and constraints plan (which will inform your design rationale) of the wider and immediate site context has been prepared."
1.0	*A contextual analysis should identify existing networks of natural features, including watercourses, trees, woodland, hedgerows, green spaces, field patterns, habitats and public rights of way (footpaths, bridleways, etc.)*
OVS1.0.1	Proposals on Thame Lane should acknowledge the dominant sky and long views (identified in this Code Analysis) of the open and exposed character of the landscape, in particular maintaining key views to the important landmarks of Wittenham Clumps and the colling towers and chimney at Didcot Power Station.
1.3	*A contextual analysis should identify buildings and structures of historical importance including listed buildings, associated setting and historic views, historic landscape pattern and features (historic landscape character), conservation areas, historic parks and gardens and archaeological remains*
OVS1.3.1	Proposals should respect the setting of the Grade II listed "Schola Europea" a neo-Gothic style building erected in 1852 and designed by Joseph Clarke, a minor architect of the Victorian era.
OVS1.3.2	Proposals should respect the historical functional relationship and preserve and enhance the setting of the Grade II* listed Culham Station Ticket Office and Waiting Room, the Grade II listed Culham Station Overbridge, and that of Station House and The Railway Inn as local heritage assets.
OCS1.3.3	Proposals should retain the built form and architectural features of Tollgate Cottage and 60 Abingdon Road as local heritage assets and their role in marking the historic significance of the Dorchester turnpike road.
OCS1.3.4	Proposals should retain the built form and architectural features of Maud Hales Terrace as local heritage assets and should acknowledge the prominent role the buildings play in the setting of the Grade II listed and Scheduled Ancient Monument of Maud Hales Bridge.
OCS1.3.5	Proposals should limit the impact of light pollution on the character of the Culham Conservation Area in accordance with Design Code OVS2.5.34 i.
OCS1.3.6	Proposals should protect, and where appropriate, enhance, or better reveal, the significance of the Pillboxes; Pillbox Type FW3/24C (Appleford Bridge); Pillbox Type FW3/28A (Appleford Bridge); Pillbox Type FW3/28A (Sutton Bridge); Type FW3/24C (Sutton Pools); Type FW3/28A (Zouch Farm); Type FW3/28A (Tollgate Road) as local heritage assets and an integral part of Britain's military history.

5. Design Codes

Outside the main village settlement – Local Heritage Assets

Station House

Built in 1898 and often referred to as the Station Master's House. Some believe it was designed by Brunel, but there is no real evidence to support this. The house was once separated from the station yard by a large wooden double gate, but all that remains of this is and old, substantial fence post hidden in the hedge opposite the ticket office.

Charles Lewis is though to be the first resident of the property. The 1901 census records the then Station Master, George William Townsend and his wide Louise, as boarding with Charles Lewis and family at 'Station House'.

The Railway Inn

Opening as The Railway Hotel in 1846, operating as the Jolly Porter for a short period in the past, and now the Railway Inn, the property has a had a long and close association with Culham Station which opened just two years earlier. The Railway Hotel was regularly used for inquests in the 19th century and has operated as a licensed premises throughout its history, with the exception of about four years.

The Grade II* listed Culham Station Ticket Office and Waiting Room, the Grade II listed Culham Station Overbridge, and local heritage assets Station House and The Railway Inn and their setting.

5. Design Codes

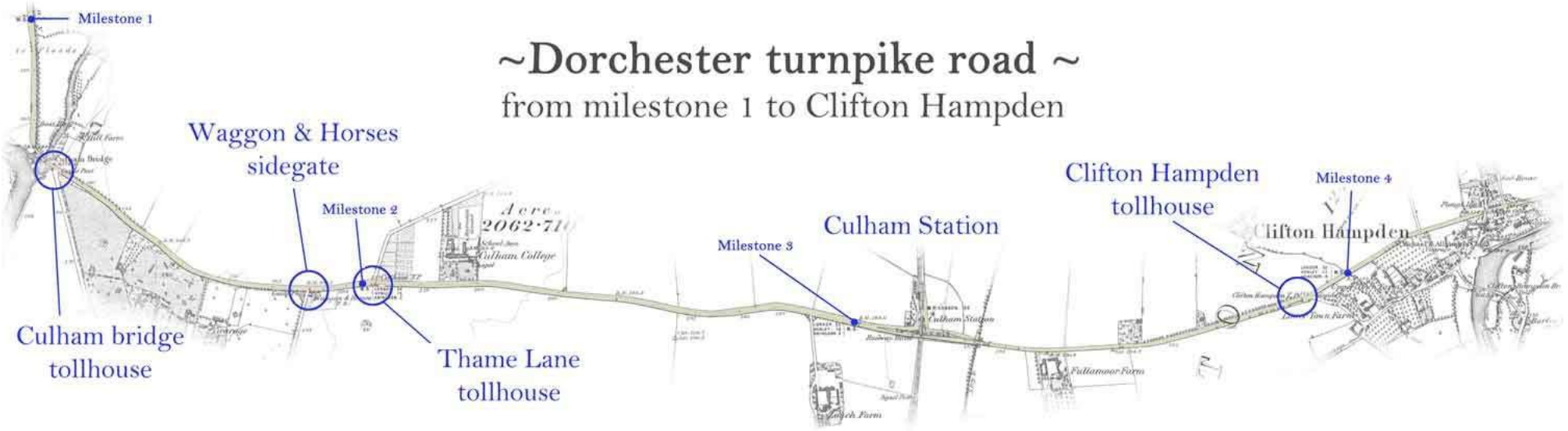
Outside the main village settlement – Local Heritage Assets

Tollgate Cottage

A former toll house at Culham Bridge, now the private residence Tollgate Cottage. The principal structure is thought to have been built for the Henley and Dorchester Turnpike Trust in 1809 in the form of a small vernacular cottage with a front porch. There are a number of additions and alterations to the original tollhouse structure, however the eastern end of the property retains original remains. The property was sold to the Morrell family estate in 1844/45 when it ceased to be a tollhouse. The brick tollhouse was probably erected here when Sutton Courtenay Bridge was built in 1809; the old foundations of a hermitage may have been incorporated into this. Source: Old Ticket Office at Culham

60 Abingdon Road

A former small and simple brick toll house opposite the end of Thame Lane built towards the end of 1844. Whilst the original tollgate across the turnpike road and sidegate across Thame Lane was removed in the early 1870s, the originaltoll house structure still stands today and is used as a private residence. Source: Old Ticket Office at Culham



5. Design Codes

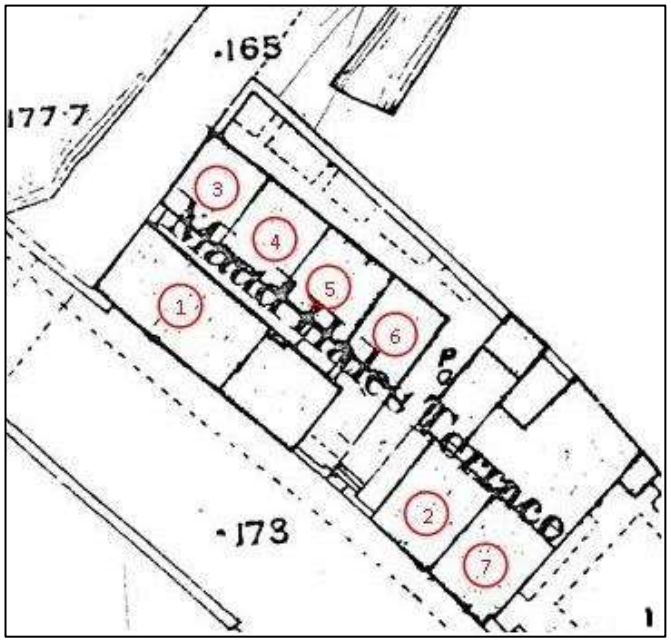
Outside the main village settlement – Local Heritage Assets

Maud Hales Terrace, Abingdon Bridge

In 1429 Maud Hales, widow of William, a mercer, funded an extension of the main bridge at Abingdon – called Burford Bridge – by adding the three arches at the south end, which although rebuilt in 1929 are still known as Maud Hales' Bridge. A stone plaque on the pair of houses at the south end – Maud Hales Terrace 1753 – is enigmatic, however. There is no evidence that the terrace had this name in the eighteenth century, and the houses on which it is placed date from the second half of the nineteenth century! The land was owned by Christ's Hospital, whose predecessors, the Fraternity of the Holy Cross, had built the bridge in 1416, and was a garden in the 1650s when the first house – No. 1, the twin gabled cottage painted pink – was built. About a century later another house was built to the south, part of which survives behind the pair with the datestone. In the 1830s George Keates, a barge-owner, built the tall row of four narrow houses (Nos. 3-6) at the rear of the plot overlooking the meadows of Andersey Island. Although small, they had a degree of architectural flourish, some of which survives in the window dressings.

Later in the nineteenth century a semi-detached pair of houses (Nos. 2 and 7) was built on to the front of the southern house, which at some stage was divided and each part incorporated into the new building at the front. Christ's Hospital sold the freehold of the entire property in 1922. In the late twentieth century the small terraced houses gained northward ground floor extensions; the owners of Nos. 2 and 7 jointly extended their houses to the rear in 1991. The first recorded lessees were carpenters and fishermen, but in the eighteenth century it was home to a number of boat-owning families, including the Gleeds and the Crawfords who were related by marriage. One Gleed barge, called 'The Abingdon' was very large (130 tons) and had a crew of six. In the nineteenth century the rear terrace was let to labourers and workers in local factories, and outworkers including 'slop makers' – of cheap (sloppy) clothes.

Maud Hales Terrace thus survives as a testament to the prosperity of the local barge-owners and as a microcosm of local history since the mid seventeenth century.



Annotated extract from 1st edition Ordnance Survey map


Name and date stone © D Clark 2016

Acknowledgement: This article is derived in part from notes left by the late Reverend Michael Hambleton, and the authors thank Mrs Stella Hambleton for access to them.

5. Design Codes

Outside the main village settlement – Local Heritage Assets

Pillbox (Type FW3/24C) (Appleford Bridge)

A hexagonal pillbox with an internal anti-ricochet wall. The rear wall was lengthened to take two rifle loopholes in addition to the five light machine gun. Both 15in and 42in thick walls are common. Designed by DFW branch 3. Built in 1940 into 1941 for the defence of the United Kingdom against a possible enemy invasion during World War II.

Source:
https://heritagedata.org/live/schemes/eh_tmt2/concepts/140521.html

Pillbox FW3/24C – Source
https://www.tracesofwar.com/sights/22405/Pillbox-FW3-22-Culham.htm

Pillbox (Type FW3/28A) (Appleford Bridge)

Anti Tank Gun Emplacement. A large, rectangular pillbox based on the FW3/28 with the addition of a small infantry chamber to one side of the main gun chamber. Built in 1940 into 1941 for the defence of the United Kingdom against a possible enemy invasion during World War II.

Source:
https://heritagedata.org/live/schemes/eh_tmt2/concepts/140521.html

5. Design Codes

Outside the main village settlement – Local Heritage Assets

Pillbox (Type FW3/28A) (Sutton Bridge)

Anti Tank Gun Emplacement. A large, rectangular pillbox based on the FW3/28 with the addition of a small infantry chamber to one side of the main gun chamber. Built in 1940 into 1941 for the defence of the United Kingdom against a possible enemy invasion during World War II.

Source:
https://heritagedata.org/live/schemes/eh_tmt2/concepts/140521.html

Pillbox FW3/28A – Source
https://www.tracesofwar.com/sights/22364/Pillbox-FW3-28A-Culham.htm

Pillbox (Type FW3/24C) (Sutton Pools)

A hexagonal pillbox with an internal anti-ricochet wall. The rear wall was lengthened to take two rifle loopholes in addition to the five light machine gun. Both 15in and 42in thick walls are common. Designed by DFW branch 3. Built in 1940 into 1941 for the defence of the United Kingdom against a possible enemy invasion during World War II.

Source:
https://heritagedata.org/live/schemes/eh_tmt2/concepts/140521.html

Pillbox FW3/24C – Source
https://www.tracesofwar.com/sights/22396/Pillbox-FW3-22-Culham.htm

5. Design Codes

Outside the main village settlement – Local Heritage Assets

Pillbox (Type FW3/28A) (Zouch Farm)

Anti Tank Gun Emplacement. A large, rectangular pillbox based on the FW3/28 with the addition of a small infantry chamber to one side of the main gun chamber. Built in 1940 into 1941 for the defence of the United Kingdom against a possible enemy invasion during World War II.

Source:
https://heritagedata.org/live/schemes/eh_tmt2/concepts/140521.html

Pillbox FW3/28A – Source
https://www.tracesofwar.com/sights/22222/Pillbox-FW3-28A-Culham.htm

Pillbox (Type FW3/28A) (Tollgate Road)

Anti Tank Gun Emplacement. A large, rectangular pillbox based on the FW3/28 with the addition of a small infantry chamber to one side of the main gun chamber. Built in 1940 into 1941 for the defence of the United Kingdom against a possible enemy invasion during World War II.

Source:
https://heritagedata.org/live/schemes/eh_tmt2/concepts/140521.html

Pillbox FW3/24C – Source
https://www.tracesofwar.com/sights/22363/Pillbox-FW3-28A-Culham.htm

5. Design Codes

Outside the main village settlement

	The Natural Environment
	Joint Design Guide: "The site layout should respect its physical features and those of its adjacent land including its topography, orientation, landform, geology, drainage patterns, field patterns/boundaries and vegetation cover, for example."
2.0	*retains and strengthens the site's landscape features; using the physical features of the site and results of technical studies positively and imaginatively in its design*
OVS2.0.1	All development should contribute to the maintenance and delivery of a high quality multi-functional network of Green and Blue Infrastructure in the Parish to provide long-term benefits for people, places and nature, in ways that reinforce local character.
2.3	*implements SuDs (Sustainable Drainage Systems) as an integral part of the development's open space network. SuDs should be designed into the development from the outset with features such as: wetlands, basins, ponds, scrapes, swales, retention planters (rainwater gardens), combined with good landscaping to make a positive contribution to the biodiversity, character and appearance of a development*
OVS2.3.1	Proposals should consider flood resistance and resilience measures such as the use of permeable paving surfaces and green, blue and brown roofs.
2.13	*retains and enhances existing important habitats, creates new habitats and aims to deliver at least 10% Biodiversity Net Gain (Environment Bill 2020)*
OVS2.13.1	Proposals should embed green and blue infrastructure in ways that help support nature recovery and reverse the decline in biodiversity resulting in a 'net gain', including the placement of swift bricks, bat box bricks, insect bricks, house martin nest boxes, 'hedgehog holes' between gardens and the external natural environment avoiding openings onto roads.

5. Design Codes

Outside the main village settlement










5. Design Codes

Outside the main village settlement

	Movement and Connectivity
	Joint Design Guide: "A place that is easy to get to and move through for all users."
3.9	*encourages movement by prioritising the needs of pedestrians, people with disabilities, cyclists and public transport users, over the needs of motorists within the design of streets. Applicants should refer to Manual for Streets 1 (2007) and 2 (2010)*
OVS3.9.1	Proposals should acknowledge and respond to the need to enhance pedestrian and cycle connectivity across the A415 Abingdon Road from the existing village settlement and the prominent role the area around the junction of Tollgate Road and the A415 will play in linking together the existing settlement with new development to the north of the A415 whilst retaining the distinct separate identity of the historic rural village. Improvements to the crossing at the junction of Tollgate Road and the A415 and improvements to the existing shared pedestrian and cycleway on the A415 will be expected to form part of the provision of sustainable transport facilities required by Policy STRAT9 of the adopted South Oxfordshire Local Plan.
OVS3.9.2	Proposals should acknowledge and respond to the need to enhance pedestrian and cycle connectivity alongside the railway to Oxford via Radley joining Sustrans Cycle Route 5 including a river crossing.
3.25	*that lighting features follow the design approach used for other street furniture and avoid causing light pollution in sensitive/darker non-urban rural areas (consider, downward lighting and reduce LUX levels in these areas). Direct glare must be avoided, from any lighting scheme to neighbouring properties*
OVS3.25.1	Proposals should avoid causing light pollution in this sensitive and dark rural area and will be expected to comply with the requirements of Policy CUL10: Light Pollution in the Culham Neighbourhood Plan. Proposals should consider the inclusion of curfew hours* as part of the lighting scheme. **Curfew: The time after which stricter requirements (for the control of obtrusive light) will apply; often a condition of use of lighting applied the local planning department. Depending upon application curfew times often commence between 21:00 to 23:00 and may run until 07:00. However, exact curfew hours should be carefully applied to ensure the reduction of obtrusive light is prioritised within the immediate environment and towards sensitive human as well as fauna and flora receptors.* Source: Institute of Lighting Professionals Guidance Note 01/21

5. Design Codes

Outside the main village settlement

	Built Form
	Joint Design Guide: "Respect the local context whilst striving for excellence in architectural quality and sustainability."
5.4	*incorporates green and/or brown roofs/roof gardens on flat roof buildings and vertical gardens. Building design should seek to integrate biodiversity enhancements wherever possible. These could be through the provision of green walls/roofs, or faunal features (bird/bat boxes). They can be discretely incorporated into structures, or made into focal points, and will contribute to the need for development to deliver biodiversity net gain*
OVS5.4.1	Virtually any type of roof structure can accommodate green and brown roofs and should therefore not be limited for consideration on flat roofs. Green, brown (now also known as biodiverse roofs) and blue roofs should be explored on all roof types as a contribution to nature recovery, surface water flood alleviation and their appearance will contribute to Culham's sense of greenery.
	Climate and Sustainability
	Joint Design Guide: "Achieve an optimal active design approach."
6.2	*optimises the orientation of buildings to utilise solar gain and shading*
OVS6.2.1	All development must be 'zero carbon ready by design' to minimise the amount of energy needed to heat and cool buildings through landform, layout, building orientation, massing and landscaping.

Prepared by

oneill homer

planning for good

APPENDIX 3

The Planning Inspectorate

Appeal Decision

Site visit made on 22 November 2023

by H Wilkinson BSc (Hons) MSc MRTPI

an Inspector appointed by the Secretary of State

Decision date: 22nd January 2024

Appeal Ref: APP/P3040/W/23/3324608
Land at Barton in Fabis, Nottingham, NG11 0HA

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by NZED ProjectCo 1 Ltd against the decision of Rushcliffe Borough Council.
- The application Ref 22/01832/FUL, dated 21 September 2022, was refused by notice dated 7 March 2023.
- The development proposed is an energy storage facility, together with associated equipment, infrastructure, and ancillary works.

Decision

1. The appeal is dismissed.

Preliminary Matter

2. A revised version of the National Planning Policy Framework (the Framework) was published in December 2023. However, the amendments therein do not alter the consideration of the main issues in this appeal.

Main Issues

3. Section 13 of the Framework establishes the national policy objective to protect the Green Belt. Inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances. It continues that very special circumstances will only exist if the harm to the Green Belt by its inappropriateness, and any other harm, would be clearly outweighed by other considerations.

4. Paragraphs 154 and 155 thereafter define different types of development that would not be inappropriate development in the Green Belt. Policy 21 of the Rushcliffe Local Plan Part 2: Land and Planning Policies 2019 (the Local Plan) deals specifically with development in the Green Belt and is broadly consistent with the provisions of the Framework. Policy 4 of the Rushcliffe Local Plan Part 1: Core Strategy 2014 (the Core Strategy) sets out the extent of the Green Belt boundary. Whilst reference is made to 'exceptional circumstances' therein, this is in relation to alterations to the boundaries meaning that this policy is not determinative to this appeal.

5. It is uncontested by the main parties that the appeal development would fail to comply with the exceptions set out within the Framework and the development plan. Based on the evidence before me, I have no reason to disagree with this conclusion. Consequently, the proposed development would be inappropriate development in the Green Belt. Accordingly, the main issues in this appeal are:

- the effect of the proposed development on the openness of, and purposes of including land within, the Green Belt;
- the effect of the proposed development on the character and appearance of the area; and,
- whether the harm by reason of inappropriateness, and any other harm, would be clearly outweighed by other considerations so as to amount to the very special circumstances required to justify the proposal.

Reasons

Green Belt – openness and purposes

6. The appeal site lies adjacent to Nottingham Road which connects the villages of Gotham and Clifton. This stretch of highway is predominantly characterised by agricultural fields on either side of the road which are typically free of built form. The site relates to part of a large, relatively flat field which is defined around the perimeter by low level vegetation and is crossed by overhead power lines. A public right of way travels from the south-eastern boundary to the north-east of the appeal site. Vehicular access to the site is via an existing vehicular entrance off the highway.

7. The proposed Battery Energy Storage System (BESS) would comprise of a variety of buildings and structures which would be set within a compound, enclosed by a weldmesh fence. The submitted plans indicate that some 660 modules would be positioned in the northern part of the appeal site and would be laid out into 15 strings across the site, each consisting of 44 battery modules, 2 inverters and 1 transformer. Other built development would include a metering substation compound and building, auxiliary transformer, a control/office building, switch gear container, lighting columns, storage building, connection mast and hardstanding, the height and scale of which vary.

8. The fundamental aim of the Green Belt policy is to prevent urban sprawl and keep land permanently open; the essential characteristics of Green Belts are their openness and their permanence. Openness can have both spatial and visual aspects and is the counterpart to urban sprawl. Assessing the impact of a proposal on the openness of the Green Belt requires a judgement based on the circumstances of the case[1].

9. In spatial terms, the introduction of industrial features including extensive areas of hardstanding set within an enclosed compound would undoubtedly erode the open, undeveloped nature of the appeal site. In so doing, it would result in the loss of openness.

10. The Landscape and Visual Assessment[2] (LVA) supplied by the appellant does not explicitly state the effect of the proposed development on the openness of the Green Belt from a visual perspective. It does however indicate that intervisibility of the proposed BESS and the surrounding countryside would be largely concentrated to the north, northeast and east of the appeal site. The greatest level of visual effects would be relatively localised and experienced predominantly by users of the highway and the adjacent public right of way.

[1] Planning Practice Guidance - Paragraph: 001 Reference ID: 64-001-20190722 Revision date 22 07 2019
[2] Nottingham BESSS Landscape and Visual Assessment dated September 2022

Despite the large part of the development being relatively modest in height, the development would nevertheless be highly visible to these receptors and would alter the rural appearance of the site. Based on the evidence, I am in no doubt that the considerable change from an open, agricultural field into an industrial style setting would harm the openness of the Green Belt in this regard.

11. Paragraph 143 of the Framework defines the five key purposes of the Green Belt. These are to check unrestricted sprawl of large built-up areas, prevent neighbouring towns merging into one another, safeguard the countryside from encroachment, preserve the setting of historic towns and assist in urban regeneration (by encouraging the recycling of derelict and other urban land). The proposal would introduce a range of industrial plant within a fenced compound into an area of countryside which is devoid of built form. For these reasons, and in contradiction in of a Green Belt purpose, the development would fail to safeguard the countryside from encroachment.

12. In coming to this view, I have had regard to the case law[3] presented by the appellant. The referenced case related to an extension to an existing quarry within the Green Belt. Although there are some similarities, the quarry extension did not introduce development into an area of a scale considered to conflict with the aim of preserving the openness of the Green Belt. It therefore differs to the appeal proposal.

13. The appeal proposal, being inappropriate development would, by definition harm the Green Belt. The spatial and visual effects combined would result in the loss of openness whilst the proposal would also result in the encroachment into the countryside. All harm to the Green Belt carries substantial weight.

Character and appearance

14. For the purpose of the East Midlands Region Landscape Character Assessment 2010, the appeal site lies within the Unwooded Vales Landscape Charter Type (LCT), which is characterised as a low-lying rural landscape with limited woodland cover but with shelter belts and hedgerows. A regular pattern of medium sized fields are typically enclosed by low and generally well-maintained hedgerows and ditches.

15. The appeal site occupies a prominent location adjacent to the main road which connects the nearest settlements and extends to approximately 2.4 hectares of agricultural land, the topography of which is generally flat. Large, open fields with few hedgerows and small blocks of woodland surround the appeal site. Whilst it may be the case that the appeal site does not show any rare, unusual, or distinctive features that differentiate it from other areas of land in the arable landscape, the site together with its immediate surroundings nevertheless exhibits some of the typical landscape characteristics of the Unwooded Vales LCT, and positively contributes to the overall rural character of the locality.

16. The LVA was conducted in accordance with best practice guidance and is supported by a scheme of native species landscaping. The accompanying photographs have recorded winter views when deciduous trees are not in leaf and thus it has been put to me that this represents the worst-case scenario in terms of visual screening. Having visited the site at a similar time of the year,

[3] R (on the application of Samuel Smith Old Brewery (Tadcaster) and others) (Respondents) v North Yorkshire County Council (Appellant) [2020]

my observations were also made when the natural screening was at its least favourable. The findings of the LVA suggest that the landscape of the site and its immediate surroundings is of a 'community value' and overall, has a medium susceptibility to change. Having regard to the evidence before me and my own assessment on site, I do not disagree with this conclusion.

17. Beyond a radius of 2km, and notwithstanding higher ground to the east, the proposed development would not have a discernible effect on landscape character or visual amenity. The topography, including the landform of Gotham Hill, greatly reduces the extent of intervisibility and influence on the south and west and from more distant locations, the development would be largely filtered by intervening vegetation. As such, I am satisfied that the proposal would not result in substantial harm to the wider landscape character.

18. However, the attractive, open qualities of the appeal site would be replaced by regimented rows of industrial style modules together with ancillary buildings. The homogenous and general geometric form of the proposal combined with its industrial appearance would erode the rural character of the appeal site and its immediate surroundings, diminishing its contribution to the key landscape characteristics of the Unwooded Vales LCT. Whilst these effects would be localised, the proposal would nevertheless read as a highly obtrusive and discordant form of development and would result in significant harm to the landscape as result.

19. Due to the exposed and plateaued nature of the surrounding landscape and relatively low-lying vegetation, there are far reaching open views across the area in which the appeal development would be appreciated. The appeal proposal, by virtue of its prominent location and overall scale would be readily perceived by road users when approaching the site from Gotham and Clifton and users of the adjacent public right of way as demonstrated by the respective viewpoints. Instead of viewing pleasant, open fields and panoramic views of the countryside, these receptors would experience row upon row of utilitarian, industrial structures which would be at odds with the undeveloped nature of the site and its rural surroundings.

20. The submitted evidence indicates that a species rich, native hedgerow would be planted along the eastern site boundary in addition to a native tree and scrub mix across the site. The LVA indicates that at Year 1, the overall effect on the identified receptors would be 'major adverse', however, following the establishment of the proposed mitigation planting, the long-term visual effects would be 'moderate or minor adverse' when viewed from a localised geographic area. Whilst these green buffers would indeed filter the views of the proposal to some extent and soften the adverse visual effects, given the overall scale of the development and the time needed for the landscaping to establish, I do not consider that the planting would adequately mitigate the harm identified, particularly during the winter months when the leaves have fallen.

21. In coming to this view, I acknowledge that there is a pylon supporting an overhead line running through the north-eastern corner of the site. However, the combination of its set back from the road and the distribution of the other pylons means that this infrastructure is not unduly dominant in the landscape, nor does it significantly erode the pastoral nature of the area.

22. Accordingly, for the above reasons, I find that the proposed development would significantly harm the character and appearance of the area. It would

therefore conflict with Policy 2 of the Core Strategy and Policies 1 and 16 of the Local Plan. Amongst other objectives, these policies seek to ensure that development is sympathetic to the character and appearance of the surrounding area. It would also be inconsistent with the design objectives of the Framework where they seek to safeguard the intrinsic character and beauty of the countryside.

23. The Council's reason for refusal alleges conflict with Policies 1 and 4 of the Core Strategy together with Local Plan Policy 21. These policies, in turn relate to the presumption in favour of sustainable development, Green Belt boundaries and development in the Green Belt. However, my attention has not been drawn to any wording therein which relate to character and appearance. As such, these policies are not determinative to this main issue.

Other considerations

24. The Framework outlines policy support for the delivery of renewable and low carbon energy and associated infrastructure to mitigate climate change. Whilst not a renewable energy project per se, battery energy storage systems are regarded as one of the key solutions to effectively integrate high shares of solar and wind renewables into the National Grid and play an important role in contributing to energy reliability and security. Furthermore, such schemes actively support the UK Government's 2050 net zero target. The proposal would also support the Council's commitment to delivering carbon neutral services and renewable energy projects whilst also stimulating investment in new jobs and businesses.

25. As the UK moves towards a cleaner electricity generation in line with net zero targets, there has been an increased deployment of renewables onto the electricity grid including wind and solar energy. However, by their very nature, these sources intermittently generate energy and thus can be unstable and unpredictable. Storage facilities maximise the usable output from intermittent low carbon generation and reduce the total amount of generation capacity needed on the system. The proposed BESS would facilitate the storage of some 100 megawatts of surplus electrical energy which would be exported back to the National Grid during times of peak demand.

26. There is strong national policy support from the National Policy Statement EN-1[4] and the Government's Energy White Paper[5] for the development of battery energy storage facilities which aid the absorption and storage of surplus energy and speed up the transition to a low carbon economy. Storage is necessary to reduce the costs of electricity, reduce emissions and aid the transition to increased dependency on renewable energy. Consequently, the energy storage benefit of the proposal must be accorded substantial weight.

27. The limitation to the number of alternatives sites available on the Nottingham-East and Ratcliffe-on-Soar 132kV network are acknowledged as are the reasons for discounting the Ratcliffe on Soar Power Station. It is clear that a viable grid connection is a determinative factor in the filtering of feasible sites, and I recognise that the scale of land necessary to provide such infrastructure often necessitates a countryside location. Nevertheless, as the assessment focuses solely on the Nottingham-East and Ratcliffe-on-Soar 132kV network as the

[4] Overarching National Policy Statement for Energy (EN-1) (2011)
[5] Energy White Paper: Powering our net-zero future (2020)

agreed point of connection and in the absence of any substantive evidence to indicate why any other sites in the operational area of the provider where discounted, I cannot be certain that there are no alternative sites located in other areas of the district, outside of the Green Belt. Consequently, whilst having had regard to the Alternative Sites Assessment, and mindful that this is not a policy requirement, the evidence does not persuade me that the proposed BESS could not be provided in a less harmful location elsewhere in the locality.

28. I have had regard to the appeal decisions[6] referenced by the appellant and acknowledge that the associated environmental benefits amounted to the very special circumstances necessary to justify the development in the Green Belt. Whilst there is limited detail before me, it appears to me that these schemes by virtue of their form, scale, and site context where materially different to the appeal proposal.

Other Matters

29. My attention has also been drawn to recent planning permissions granted by the Council for renewable energy projects in the surrounding area[7]. As I do not have the benefit of detailed information in relation to the location and scale of the respective proposals, I cannot make any informed comparisons. That said, it is noted that no unacceptable harm was identified by Officers. This is not the case in this instance. Even so, assessing the impact of a proposal on the openness of the Green Belt requires a judgement based on the circumstances of the case. Accordingly, I do not agree that the consenting of these schemes indicates that such development is acceptable in the locality.

30. The site is located within Flood Zone 1 and therefore is at low risk of flooding. Further, the site does not lie within a designated landscape, heritage, or ecological area or within or adjacent to an Air Management Area. These however are neutral factors and neither weigh in favour or against the proposal.

Green Belt Balance and Conclusion

31. I have concluded that the appeal scheme would result in harm to the Green Belt from inappropriateness and through the encroachment of the countryside and the loss of openness. Consistent with Paragraph 153 of the Framework, I attribute substantial weight to the harm identified. Further, for the reasons outlined, the proposal would harm the character and appearance of the area.

32. Paragraph 156 of the Framework advises that very special circumstances will need to be demonstrated if renewable energy projects are to proceed in the Green Belt. It states that very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources. The proposed development would contribute to reducing greenhouse gas emissions, increase reliability and maximise output from renewable energy sources which would be regarded as a wider environmental benefit. This factor attracts substantial weight.

33. The policy support given for renewable energy projects in the Framework is caveated by the need for the impacts to be acceptable, or capable of being

[6] APP/C3430/W/22/3292837, APP/W1525/W/22/3300222 and APP/K0425/W/22/3294722
[7] 22/00319/FUL and 23/00254/FUL

made so. Despite the implementation of additional landscaping and the temporary nature of the proposal, by virtue of the scale of the development proposed and it is siting, this would not be the case.

34. The BESS would be in place for a temporary period of 40-year period, after which time, it would be decommissioned, and the land returned to its former condition. Although the development would not be permanent and the land would be reinstated to its former, open character, in the context of the level of harm identified, the adverse effects would be experienced over a significant period of time.

35. Accordingly, for these reasons, I find that the environmental benefits of the proposal are not sufficient to clearly outweigh the harm to the Green Belt. Therefore, the very special circumstances necessary to justify the proposal do not exist. As such, the proposal would not accord with Policy 21 of the Local Plan and the national Green Belt objectives set out within the Framework. The appeal is therefore dismissed.

H Wilkinson

INSPECTOR

Planning Inspectorate

Appeal Decision

Hearing held on 27 February 2025

Site visits made on 26 February and 27 February 2025

by L N Hughes BA (Hons) MSc MRTPI

an Inspector appointed by the Secretary of State

Decision date: 19 March 2025

Appeal Ref: APP/R1038/W/24/3353898
Land to the west of Dyche Lane and to the south of New Leaf Plant Centre, Coal Aston S18 3AA

- The appeal is made under section 78 of the Town and Country Planning Act 1990 (as amended) against a refusal to grant planning permission.
- The appeal is made by Ylem Energy Ltd against the decision of North East Derbyshire District Council.
- The application Ref is 24/00035/FL.
- The development proposed is the construction and operation of a battery energy storage system (BESS) and ancillary infrastructure, including creation of new access.

Decision

1. The appeal is dismissed.

Preliminary Matters

2. I have taken the site address from the application form, but amended 'Batemoor' to 'Coal Aston' as this reflects the decision notice, appeal form, and the address of the adjacent New Leaf Plant Centre. The application form description does not reference the creation of a new access, but as this addition was agreed between the parties and provides more clarity, I have included it within the header description above.

3. A revised version of the Site Location Plan[1] was submitted for the appeal. Although identified as 'Rev 5', it is otherwise identical to the 'Rev 4' version before the Council for its decision, which had not been given an updated revision reference following changes relating to the visibility splays.

4. At the start of the hearing the Compound Elevations Plan[2] was identified as inaccurate regarding the position of the 4.0m high acoustic fence. The fence would not be sited on the existing ground level, but would be on the ground level of the new cut and fill compound area. I have assessed the proposal on this basis, albeit it was agreed to remove this plan from the list of approved drawings, were I to allow the appeal. The hearing discussion also identified calculation errors in the Biodiversity Gain Plan and its conclusions. I subsequently accepted a revised version 3.2 and associated Metric which clarified a lower Biodiversity Net Gain (BNG) figure.

5. The Planning Practice Guidance was updated on the day of the hearing, on which the parties subsequently had the chance to make comment.

[1] DYCH-BESS-001.4 Rev 4 dated 20/11/23
[2] DYCH-BESS-001.4 Rev 5 dated 14/10/24

Main Issues

6. The appeal site is located within the Green Belt, as identified by the North East Derbyshire Local Plan 2014-2034 (NEDLP) and its Policies Map. The parties have agreed that the proposal would represent inappropriate development in the Green Belt, under the terms of the National Planning Policy Framework ('the Framework') (2024) paragraphs 154 and 155, and the NEDLP Policy SS10. I concur with this position. The Framework paragraph 153 states that inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances.

7. The main issues are therefore:

- the effect of the proposal on the openness of the Green Belt and the purposes of including land within it;
- the effect of the proposal on the character and appearance of the area*;*
- the effect of the proposal on agricultural land; and
- whether any harm by reason of inappropriateness, and any other harm, would be clearly outweighed by other considerations, so as to amount to the very special circumstances necessary to justify the proposal.

Reasons

Green Belt Openness and Purposes

8. The site comprises part of a steeply sloping larger agricultural field to the west of Dyche Lane. The field is bound by a combination of drystone walling and a hedgerow with trees along Dyche Lane, and hedgerows with trees to the other sides. It lies in between Dronfield to the south, and Batemoor to the north, which forms the southernmost urban extent of Sheffield in this area.

9. The proposal is to construct and operate a 45MW battery energy storage system (BESS) site, for a temporary period of 30 years. In terms of individual and generational experience, 30 years is around the limits of what could reasonably be described as temporary. However, the concept of temporary infers different things in different contexts. The Planning Practice Guidance (PPG) confirms that factors that can be taken into account when considering the potential impact of development on the openness of the Green Belt, include the duration of a development, and its remediability[3]. Conditions would be imposed to require reinstatement of the site to its original condition after decommissioning.

10. This matter has also been considered by numerous other Inspectors in considering a range of renewable energy projects, with a broad consensus that the temporary nature of such timescales does act to mitigate any harm caused to varying extents. I am therefore satisfied that the proposal is temporary, albeit with longstanding impacts, and have made my determination accordingly.

11. The proposal would comprise a cut and fill compound surrounded by a 4.0m high acoustic fence. It would include 37 battery containers of 2.9m height, a 4.4m high switch room, 7 transformers, a sub-station and site welfare building/switch room, site supply transformer, security columns, and 2 fire water storage tanks. The access would be a new route across the field, starting at the current field access

[3] Paragraph: 013 Reference ID: 64-013-20250225

off Dyche Lane. The works would require a cut into the slope of almost 4.0m at its deepest, and the current lowest part of the site in the northwestern area would be raised up by a similar extent. It would be surrounded by a new mixed native landscaping belt.

12. The Framework paragraph 142 identifies that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence. Policy ENV1 of the Dronfield Neighbourhood Plan (DNP) reiterates the Framework guidance, in that there will be a strong presumption against development that would conflict with the purposes of the Green Belt, or adversely affect its open character.

13. Openness has spatial and visual aspects, and is a matter of planning judgement. The openness of the Green Belt is evident around the appeal site and the countryside on both sides of Dyche Lane. The BESS would insert relatively significant additional volumetric massing in spatial terms into this openness, notwithstanding the proposed landscaping. The acoustic fence would also contribute to this massing as an enclosing feature.

14. Visually, I find there would be no impact from the public right of way (PROW) on Cross Lane, and PROW viewpoints more distant to the site already have limited intervisibility due to existing vegetation and topography screening. The drop in levels from Dyche Lane means that at present views from it are across and above the site into the middle distance, rather than down into the site. Travelling south along Dyche Lane these views are generally of rising fields, and travelling north views encompass the stacked urban form of the New Leaf Plant Centre and the dwellings beyond.

15. Notwithstanding this, the compound would be visible from along Dyche Lane, including in filtered views travelling south when the vegetation is subject to leaf drop, as for my site visit. Although the more open and wide views would not be blocked, it would still be apparent that there was an industrial insertion into the Green Belt framed within these views.

16. Its initial visual impact would be mitigated and softened as the landscaping matures over a number of years, albeit less effectively during periods of leaf drop. This screening would be assisted by the generally enclosed nature of the site and the landscape in which it sits, with a lower ground level of the compound and the structures within and around it, compared to the height of this boundary vegetation screening. However, the comparative elevation of Dyche Lane would also allow for filtered views down into and across the site, and its overall size to be apparent.

17. Furthermore, the site junction onto Dyche Lane and the access track across the field, would remain as an engineered feature without any screening, and one significantly more visually impactful than the existing field access. This would also act to draw the eyeline down to the compound and highlight its visibility, further extending the proposal's impact on the openness. In cumulation, the proposal would have a harmful effect on openness, both spatially and visually.

18. The Framework also identifies 5 essential purposes of the Green Belt at paragraph 143. The appellant considers the proposal would not conflict strongly with these. This is because it would not be permanent, would lack the bulky massing of other forms of development, and would be contained within landscaping. It is not a form

of development that would be an extension of the settlement, and so overall its nature and function would be different to that when normally considering Green Belt development against 143(a) general unrestricted sprawl of large built-up areas, and (c) safeguarding the countryside from encroachment.

19. The appellant also acknowledges that although the wider parcel of land itself makes a strong contribution to purpose (b) in the prevention of merger of Sheffield and Dronfield, the site itself is a very small proportion of this land. They consider a significant proportion of it would remain, and there would still be a sense of moving between the settlements.

20. However, although the topography allows for long range views over and through the Green Belt into the gap, as identified above this also means that the proximity of the Sheffield built form is evident when facing north. The Council and interested parties identify this as the narrowest part of the Green Belt separating Sheffield and Dronfield. It is approximately 800m in extent, but already encompasses the New Leaf Plant Centre and the garden centre to the north of Dronfield, such that the area without built form and with significant openness is much less. I thus find that the cumulation of these factors would result in significant conflict with the Framework paragraph 143 purposes (a), (b), and (c).

21. Overall, the proposal would result in significant harmful inappropriate development in the Green Belt, including considerable harm to its openness and to its purposes on a temporary but long term basis. The proposal would thus conflict with the NEDLP Policy SS10, the DNP Policy ENV1, and the Framework Section 13.

Character and Appearance

22. The site lies within the Wooded Hills and Valleys landscape character type (LCT), within the Nottinghamshire, Derbyshire and Yorkshire Coalfield national character area (NCA). This LCT wraps around the north and east edges of Dronfield, and incorporates the Moss Valley Conservation Area (CA) on the eastern side of Dyche Lane. The area has remained essentially rural and intact. This landscape is characterised by undulating topography, large fields enclosed by hedgerow, mixed farming, woodland bands along stream valleys, scattered woodland, healthy vegetation around road verges and occasional dry stone walls, all overlaid by a network of small irregular lanes and connections. Individually, the appeal site relates to these key characteristics by lying within a field enclosed by hedgerows and scattered mature hedgerow trees, with an undulating landform.

23. Similarly to the visual impact on the Green Belt, I find that from viewpoint 2 on Cross Lane the proposal would not break the skyline, or be especially perceptible in the context of the topography, vegetation screening, and the built form beyond. There would also be no substantial harm to the wider landscape character from more distant views.

24. The appellant identifies that site visits made in relation to this proposal are actively looking for the site, whereas in reality Dyche Lane pedestrians would be using it as a means to get somewhere, with primary focus on the functional aspect of walking rather than for enjoyment. Indeed, this is the reason why the GLVIA3[4] identifies that walkers on a road have medium sensitivity to visual change, compared to high

[4]Guidelines on Landscape and Visual Impact, 3rd Edition

sensitivity for those on a PROW. As such, their eye would be drawn over the site to the more expansive views beyond.

25. However, as identified above, experientially when walking in both directions the vista does pleasingly unfold, despite the urban form of the New Leaf Plant Centre and dwellings beyond. This was highlighted by interested parties, including that the route is very well used and enjoyed, and that it provides a sense of wellbeing on walking commutes and school journeys. Dyche Lane only has a footpath to that one side, pushing all pedestrians adjacent to the appeal site.

26. The proposal would draw the eye as an unusual feature within the field, especially with the access track cutting across much of the immediate view. Those regularly traveling the route would get used to it over time, but would be aware of its presence as a visual intrusion especially in the earlier years. Furthermore, the elevated height of Dyche Lane would allow looking down upon and into it, as well as across and over.

27. The Council further considers that the site comprises part of a valued landscape under the Framework Paragraph 187(a): "*planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes… (in a manner commensurate with their statutory status or identified quality in the development plan)*." The PPG also identifies that where landscapes have a particular local value, it is important for policies to identify their special characteristics and be supported by proportionate evidence[5]. The Framework and the PPG do not define 'valued landscape', or differentiate between designated or non-designated local landscapes in terms of value.

28. The appellant disagrees, considering that the site has no demonstrable physical attribute that makes it different from the norm[6]. I accept that a site can be strongly valued by people but still not be a valued landscape under paragraph 187(a).

29. However, in this instance this area of land is within a primary Area of Multiple Environmental Sensitivity (AMES), which is an area most likely to be negatively affected by change or development. The land is further valued for its specific function as forming the narrowest part of the open countryside and Green Belt gap between the settlements. Although in itself the site 'only' has the characteristics of an agricultural field, it is clearly part of a wider local landscape cherished by many residents. This identified quality is specified within the DNP, as required by paragraph 187(a). As such, the DNP evidences a strong common consensus.

30. The local Councillor representative rehearsed this at the hearing, whereby the DNP is founded on multiple studies identifying this area as the most important Green Belt extent in the whole of North East Derbyshire, with nothing more that could be done to attempt to identify its value at the local scale. I note the Landscape and Visual Appraisal (LVA)[7] identifies that receptors of high visual sensitivity include communities where the development results in changes in valued views enjoyed by the local community.

31. This does not indicate that the whole of this extent of the Green Belt is or is not a valued landscape, but due to the proximity of the well-used road, this specific extent encompassing the appeal site is particularly visible and experientially

[5]Paragraph: 036 Reference ID: 8-036-20190721
[6]Ouseley J in Stroud DC v SSCLG [2015] EWHC 488 (Admin)
[7] LVIA Ltd, November 2023

tangible, and valued on that basis as evident relief between the urban areas. Notwithstanding that the appeal site only comprises some of the key characteristics of its LCT, I therefore do find that it forms a valued landscape for the purposes of the Framework paragraph 187(a).

32. At year 1, the visual effects from Dyche Lane would be of a large magnitude and prominence, due to their proximity. The LVA identifies this to form a major/moderate effect, but for the reasons described above I find it would be of a more severe effect.

33. The proposed landscaping would clearly provide beneficial mitigation screening, and would align in principle with the requirements of the NEDLP Policy DC12(d). Trees planted at a height of 2.0-3.0m would form a relatively high visual barrier, with native species growing roughly 0.4-0.5m a year. However, I am unconvinced that the size of the compound within the topography would allow for its full screening, and trees would also be subject to leaf drop for months of the year. The access junction and road would not be screened, and again would indicate the presence of the development beyond, surrounded by regimented planting, even were it not itself visible after 15 years in a best case scenario. There would be intrinsic harm to landscape character.

34. Therefore again, although the LVA concludes that following screening mitigation the proposal would have a moderate visual impact and a minor landscape character impact, I find the impact would be more severe. The type of development would be out of character within the receiving landscape.

35. Section 16 of the Framework also requires great weight to be given to the conservation of designated heritage assets, and so I am required to consider the impact upon the Moss Valley CA, the boundary of which runs along Dyche Lane. Its significance is drawn from how it reflects that of the wider landscape character as described above, including the relics of former industries along the valley bottom, the network of lanes and connections that served them, and the surrounding farmland and, scattered historic farmsteads along the valley sides.

36. Although Dyche Lane provides a clear CA boundary and thus a level of separation between it and the appeal site field, when travelling along Dyche Lane both sides of the road are experienced together as an area of countryside, and as a gap between the settlements. As such, the appeal site forms part of its setting, as do the Dyche Lane boundary treatments. For the reasons above relating to impact on the character of the countryside, I therefore concur with the main parties that the proposal would cause less than substantial harm to the significance of the CA as a designated heritage asset, to which the Framework paragraph 212 requires that I give great weight. Paragraph 215 requires this to be weighed against the public benefits of the proposal, and so I address this matter within my planning balance.

37. Many interested parties objected on the grounds of the visual impact from the New Leaf Plant Centre. The acoustic fence and some of the structures would be visible, but the impact on private views is not a material consideration. I also note that although the café and outdoor terrace benefit from the openness of the adjacent field in terms of general setting, they are not laid out to directly overlook it or have it as a main point of focus. Intervening, there is boundary vegetation, an internal access road, and two large tanks, as well as the surrounding built environment of

the Plant Centre itself. The same principle applies to views from Whitethorn House to the north-east, being the closest residential property.

38. Overall, the proposal would cause significant harm to the character and appearance of the area. It would conflict with the NEDLP Policies SS9, SDC3, and SDC12, and the DNP Policy ENV2. Together and amongst other matters, these aim for proposals to enhance local distinctiveness and a sense of place, and protect and/or enhance the character, quality, and diversity of the District's local landscapes. The form, scale, and character of these landscapes must be respected through careful siting, scale, design, and use of materials. Proposals for new development will only be permitted where they would not cause significant harm to the character, quality, distinctiveness or sensitivity of the landscape, or to important features or views, or other perceptual qualities. Development proposals should also be sympathetic to distinctive landscape areas and the Areas of Multiple Environmental Sensitivity.

39. The proposal would also conflict with the Framework paragraph 187, regarding the need to protect and enhance valued landscapes, and to recognise the intrinsic character and beauty of the countryside.

Agricultural land

40. The second reason for refusal included a lack of clarity as to whether the land is best and most versatile agricultural land Grade 3a or 3b. The Agricultural Land Classification Report submitted for the appeal indicates that the site can be considered equivalent to Grade 4 (poor) quality, due to its soil conditions. The Council does not dispute this, and no longer seeks to defend this reason for refusal. The proposal would not result in an irreversible loss or degradation of agricultural land due to its temporary status. Although the land has produced arable crops, the manner in which land is farmed is not subject to planning control. An alternative agricultural use could be put in place in any event. Overall therefore, the loss of agricultural land would be harmful, but only to a very minor extent.

Other Matters

Flood Risk

41. The Council's refusal included that part of the site lay within Flood Zone 2. Following updated flood risk evidence submitted to the Environment Agency, the Agency confirmed the site should be entirely removed from Zone 2. Online mapping is to be updated in Spring 2025, with an interim static version provided. The updated Flood Risk Assessment and Flood Risk Sequential Test thus now indicate a low level of risk. The Council is therefore no longer defending this reason for refusal, as drainage and flood risk matters could be addressed through the imposition of relevant conditions. On the evidence before me, I make the same conclusion. I am satisfied that were I to allow the appeal, conditions would appropriately address necessary matters, including the interested party concerns.

Noise Disturbance

42. Based on the submitted Noise Impact Assessment, the Council raised no objection relating to noise. This Assessment identifies currently expected noise levels plus an acoustic fence as mitigation. The Assessment models a worst case scenario based on levels for when the BESS facility is fully discharging energy to the grid at peak demand, which in practice would occur for only a short period normally during daytimes.

43. Any new noise is predicted to be below the representative background sound levels for both day and night at receptors, including internal levels with open windows at the closest dwelling. The New Leaf Plant Centre was not specifically referenced as a sensitive receptor, but the Noise Impact Assessment similarly indicates that noise levels at its outdoor and indoor cafe area would be below representative daytime background sound levels. I note interested party objections that it relies on the tranquillity of its surroundings to draw customers, but a café does in any event itself generate internal noise, further masking any effect. Also, relevant conditions would require a further noise assessment to be approved following confirmation of the final equipment specification. Overall, I am satisfied that the proposal would not result in harmful noise levels.

Fire Safety

44. Many residents and the New Leaf Plant Centre objected on grounds relating to fire safety. This was discussed in detail at the hearing, because in the eventuality of a fire occurring, it is clearly essential that it can be addressed and stopped as quickly as possible, with no health or other impacts caused. However, it is also important to be mindful of the probability of a fire igniting in the first place, and thus the very low magnitude of the overall risk due to fire detection systems, and use of components which comply with all relevant legislation.

45. The Derbyshire Fire and Rescue Service raised no objection, referring to the National Fire Chiefs Council (NFCC) and other relevant guidance, albeit noting that its role is advisory at this stage as BESS sites fall outside the scope of the Building Regulations. Once operational, the site would be encompassed within the scope of other fire safety legislation, giving the Fire Service a direct role.

46. The appellant's written and verbal evidence including the Outline Battery Safety Management Plan[8], explains how the scheme has taken fire safety matters into account. This includes that design and future operation has taken account of the relevant guidance, and that equipment would require appropriate safety certification. I note the BESS fire examples put before me, but also acknowledge that lessons have been learnt in response.

47. The final iteration of all the fire safety elements cannot be determined at this stage, until permission is gained and final product specification confirmed. It is therefore commonplace for BESS approvals to include a condition to require a further Detailed Battery Safety Management Plan. This would require additional detailed information relating to design, operation, and methods for responses in emergency scenarios, and would provide additional assurance and direct consultation with relevant parties. The condition would not be discharged if at that point, the Derbyshire Fire and Rescue Service was not fully content with the scheme design and operational methodology.

48. If at installation stage any matters such as access, water supply, or separation distances, required substantial layout or other amendments for fire safety reasons, then the appellant would have to address this through the planning system. However, I do not find the evidence at this stage so compelling or certain that that would be the case, that the imposition of a fire safety condition would nullify the permission.

[8] Abbott Risk Consulting Limited, ARC-1223-001-R4, February 2024.

49. The Council considers that sufficient comfort at this planning stage has been provided that safety risks are identified and can be satisfactorily managed. On the evidence before me I make the same conclusion, whereby all currently foreseeable hazards associated with the equipment have been identified, and would be actively managed throughout the scheme lifetime. As such, I am satisfied that fire safety matters have been satisfactorily addressed.

Other Considerations

Renewable Energy

50. Battery Energy Storage Systems are cited in the PPG as enabling the use of energy more flexibly and de-carbonising the energy system cost-effectively.[9] They store excess electrical power from renewable generators which would otherwise be lost, and release this back into the grid during periods of high demand, or when renewable energy generation conditions are less favourable. This in turn means that they allow balancing of demand without resorting to additional generation from non-renewable energy sources. They have a key role in maintaining lower energy prices, and providing energy resilience and security. These are important nationally, but can also be felt locally.

51. The appellant identifies that the proposed 45MW BESS would have the ability to power 90,000 homes for 4 hours. It has a secured grid connection point to the National Grid Jordanthorpe substation approximately 1.4km to the north-east, and would connect prior to 2030 if the appeal were allowed.

52. This would help reduce CO2 emissions in line with the Government's well publicised net zero by 2050 ambitions and targets. Numerous appeal decisions have consistently referenced the significant benefits of renewable energy and BESS proposals, and how they are linked to the Government's strategies in this regard. Relevant reports and objectives include but are not limited to, the Energy White Paper 2020, the British Energy Strategy (2022), the Net Zero Strategy: Build Back Greener (2021), and the more recent Clean Power 2030 Action Plan (2024).

53. These outline the Government's encouragement for all forms of energy flexibility, to ensure sufficient electricity storage to balance the overall system, and the need to take action to ensure that the shift to a clean power system by 2030 forms the backbone of the transition to net zero. National Grid's Future Energy Scenarios Report (2022) also forecasts significant increased electricity storage need to support decarbonisation, with estimates of twelve-fold increase in capacity and seven-fold increase in volume needed from 2021 to 2050 to meet net zero.

54. The 2024 Framework revisions strengthened the stated need for, and support to, renewable and low carbon energy. Paragraph 161 identifies that the planning system should support the transition to net zero by 2050, and support renewable and low carbon energy and associated infrastructure. A BESS would be such associated infrastructure. Paragraph 163 requires planning applications to consider the need to mitigate and adapt to climate change. Paragraph 87(a) also requires making provision for new, expanded or upgraded facilities and infrastructure that are needed to support the growth of data-driven and high technology industries, including data centres and grid connections. BESS facilities enable economic growth in these sectors.

[9] Paragraph: 032 Reference ID: 5-032-20230814

55. The NEDLP Policy SDC10 also supports renewable and low carbon energy generation schemes in principle, and Policy SSS1(l) identifies that development proposals will play a positive role in adapting to and mitigating the effects of climate change. Overall, the proposal would clearly contribute to the achievement of these national and local ambitions. I give significant weight to the proposal's benefits associated with renewable and low carbon energy generation and its contribution to a net zero future prior to 2030, as required by the Framework paragraph 168.

Alternative Sites

56. I have assessed the proposal before me on its own merits. The consideration of alternatives or a form of sequential test for BESS site selection are not mandated by the PPG or the Framework. The Bramley court judgement[10] and numerous appeal examples have confirmed this approach, as conceded by the Council.

57. Nevertheless, it is possible for site selection matters to contribute to being very special circumstances. The Alternative Site Assessment identifies that the only other possible sites using the same grid connection point would also require Green Belt land, on the basis of separation distances required from dwellings. Only one other site was identified as more preferable in landscape terms, but did not have landowner agreement so could not be taken forwards.

58. However, as I have found the appeal site would cause significant conflict with the openness and purposes of the Green Belt, I am unconvinced on the evidence before me that none of the other presented possible sites would cause less harm. Landowner willingness is obviously necessary, but there is very limited evidence of these discussions. Furthermore, the appeal site lies within a wider landholding, which may allow a less harmful positioning, notwithstanding that it would not be the landowner's preference. Therefore, while acknowledging that consideration of alternative sites is not required in isolation in justification of the proposal, these issues do direct me to give only limited weight to its specific locational need.

Biodiversity

59. Although interested parties raised concerns about potential impacts on wildlife and ecology, on the basis of the evidence before me and the ability to impose suitable conditions, I concur with the Council in finding no harm on this basis.

60. The proposal was submitted prior to the statutory minimum 10% BNG provision coming into force. However, more general biodiversity improvements are required by the ERLP Policy SDC4(b), the DNP Policy ENV4, and the Framework paragraphs 187(d) and 193(d). The proposal would avoid any effects on hedgerow and water course habitat units, in recognition of their existing ecological value. The BNG Report and Metric identify that the proposal would result in 28.98% BNG delivery of on-site habitat units, although this does not take full account of its access road, which suggests the BNG figure should be slightly lower.

61. To some extent the value of this uplift is due to the low distinctiveness ecological value of the existing arable land, with the absolute size increase of 1.57 habitat units being relatively low. However, the proposal would introduce new habitat types of mixed scrub and individual trees, which would be of medium distinctiveness, as well as creating low distinctiveness modified grassland. It would

[10] Bramley Solar Farm Residents Group v Secretary of State for Levelling Up, Housing and Communities, Bramley Solar Limited & Basingstoke and Deane Borough Council & Others [2023] EWHC 2842 [Admin]

add to the green infrastructure network of the area. Favourable effects of the landscaping could also be retained at the point of decommissioning. Overall, I give these biodiversity benefits minor weight in favour.

Economic benefits

62. The proposal would enable job creation during the construction phase. It would generate £250,000 per year to business rates. The appellant also suggests a public benefit from fibreoptic cable upgrades of £200,000. I give minor weight cumulatively to these benefits.

Planning Balance and Conclusion

63. The great weight to which I give the proposal's less than substantial harm to the CA, would be outweighed by its public benefits. However, the proposal would also cause significant harm to the character and appearance of the area, including due to its status as a valued landscape, and being within a primary Area of Multiple Environmental Sensitivity. Although tempered because the proposal would not be permanent, I give this harm significant weight.

64. The proposal would reduce the openness of the Green Belt, and would conflict with multiple purposes of including land within it. It would therefore conflict with the NEDLP Policies SS1 and SS10, and with the Framework. It would be inappropriate development in the Green Belt, which is harmful by definition, and to which I attach substantial weight as required by the Framework paragraph 153.

65. The DNP Policy ENV1 suggests further weight to this extent of Green Belt harm in this location. Although the policy wording itself does not expand on that within the Framework and the NEDLP, it is hard to understand the rational for developing a neighbourhood plan and including such a policy within it, if no additional level of protection is provided for that which local people have identified as most valuable.

66. The PPG identifies that neighbourhood planning enables communities to play a much stronger role in shaping the areas in which they live and work, and that they can put in place planning policies that will help deliver that vision[11]. The strongly communicated vision includes protection for this area of countryside. I find similarly for the DNP Policy ENV2 relating to landscape character harm. Interested parties at the hearing summarised the large amount of work and public involvement in creating the DNP, and its very strong level of support at referendum. There would be a very significant level of harm in this regard, despite the temporary nature of the proposal.

67. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations. Against the totality of the harm I have identified, I give significant weight to the main other consideration advanced by the appellant in support, being the proposal's contribution to net zero and mitigating climate change. I also give limited weight to the evidence which suggests a lack of local alternative sites, and minor weight in favour to its biodiversity and economic benefits.

[11] Paragraph: 003 Reference ID: 41-003-20190509

68. I acknowledge that many relevant BESS appeal decisions share a consistent outcome of very special circumstances outweighing all other harm. However, I have assessed the proposal before me on its own merits.

69. In this instance, I find overall that the benefits of the proposal are cumulatively insufficient to clearly outweigh the extent of the harm to the Green Belt and the other harm I have identified. Consequently, the very special circumstances necessary to justify the development do not exist.

70. As such, the proposed development would therefore conflict with the development plan and the Framework taken as a whole. With no other material considerations indicating otherwise, for the reasons given above I conclude that the appeal is dismissed.

L N Hughes

INSPECTOR

APPEARANCES

FOR THE APPELLANTS:

Mr Joe Bennett	Principal Planning Consultant, RCA Regeneration
Ms Sian Griffiths	Director, RCA Regeneration
Miss Francesca Saberton	Senior Planning Manager, YLEM Energy
Miss Sarah Lightfoot	Head of Development, YLEM Energy
Mr John-Paul Friend	Director, LVIA Ltd
Mrs Kirsten de Savary	Owner, Amber Planning Flood Risk & Hydrology

FOR THE LOCAL PLANNING AUTHORITY:

Miss Kerry Hallam	Senior Planning Officer
Ms Susan Wraith	Planning Consultant, 4Planning Delivery Ltd
Mr Adrian Kirkham	Development Management Planning Manager

INTERESTED PERSONS:

Mr John Pople	New Leaf Plant Centre
Cllr Mark Foster	Dronfield Town Council, North East Derbyshire District Council – Coal Aston Ward
Mrs Sarah Alkins	Local resident
Miss Rebecca Hall	Local resident
Mr Charles Hall	Local resident
Mr Martin Hanrahan	Local resident
Mrs Shelley Hinson	Local resident
Ms Nary McNulty	Local resident
Mr Paul Reaney	Local resident
Mr Tim Vaughan	Local resident
Mr Richard Watson	Local resident

DOCUMENTS SUBMITTED AT AND AFTER THE HEARING

1.	Appellant	Appeal reference APP/V4630/W/24/3347424, Land off Chapel Lane, Great Barr, Walsall
2.	Resident	Appeal reference APP/P3040/W/24/3352048, Land off West Leake Lane, Ratcliffe, Nottingham
3.	Meadowhead School and Sixth Form	Late email representation received 26 February 2025
4.	Resident	Scaled drawings of visibility splays, received 28 February 2025
3.	Appellant	Biodiversity Gain Plan V3.2 07/03/25 and Biodiversity Metric

APPENDIX 5

The Planning Inspectorate

Appeal Decision

Site visit made on 12 March 2019

by Rachael A Bust BSc (Hons) MA MSc LLM MInstLM MCMI MIEnvSci MRTPI

an Inspector appointed by the Secretary of State

Decision date: 02 April 2019

Appeal Ref: APP/X0415/W/18/3212793
Land south of substation, Lycrome Road, Lye Green HP5 3LD

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by Harmony Energy Storage Ltd against the decision of Chiltern District Council.
- The application Ref PL/18/2421/FA, dated 21 June 2018, was refused by notice dated 24 August 2018.
- The development proposed is energy storage facility to provide energy balancing services to the National Grid.

Decision

1. The appeal is dismissed.

Preliminary and Procedural Matters

2. An updated revised National Planning Policy Framework (the Framework) was published on 19 February 2019. I have had regard to the updated revised Framework. However, as the amendments are not directly relevant to this appeal proposal, I have not re-consulted the main parties.

Main Issues

3. The main parties have agreed that the appeal proposal would constitute inappropriate development in the Green Belt. Having regard to Saved Policy GB2 of the Chiltern District Local Plan[1] (LP) and the Framework I see no reason to disagree with the main parties on this point. Accordingly, the main issues are:

    - The effect of the proposal on the openness of the Green Belt;
    - The effect of the proposal on the character and appearance of the surrounding area; and
    - Whether the harm to the Green Belt by way of inappropriateness and any other harm, would be clearly outweighed by other considerations so as to amount to the very special circumstances necessary to justify it.

[1] The Chiltern District Local Plan Adopted 1 September 1997 (including alterations adopted 29 May 2001) Consolidated September 2007 and November 2011

Reasons

Openness

4. The parties agree that the proposal constitutes inappropriate development in the Green Belt. Paragraph 133 of the Framework states that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open. The essential characteristics of Green Belts are their openness and their permanence. In considering openness an assessment of both a spatial and a visual aspect is needed.

5. The appeal site is part of an undeveloped grassed field and is currently used for grazing horses. From Lycrome Road this area provides a sense of openness which flows through the dispersed settlement pattern of Lye Green.

6. The proposed development comprises 38 banks of battery energy storage units together with associated supporting infrastructure. The battery containers themselves would be a stated 2.2m high and the tallest element of the scheme would be the 33kV metering house which would be a stated 4.045m high. Notwithstanding this represents a reduction in the bulk and scale from the previous scheme[2] on a nearby site. However, it would still introduce substantial built development where there is currently none and this is a fact that is recognised by the appellants.

7. It would be seen in a variety of public viewpoints. The predominant viewpoint would be from the public right of way (CHS/66/1) which aligns with the proposed access road for the site, heading north-west. This right of way also provides longer range views through the appeal site and beyond to the north-east. These longer views have been somewhat eroded with the introduction of the existing electricity sub-station. Consequently, the appeal development, together with the proposed landscaping (which I note would take approximately 15 years to mature according to the appellants Landscape and Visual Appraisal), would diminish these long-range views still further.

8. Therefore, I find that the spatial and visual presence of the proposed development would harm the openness of the Green Belt.

Character and appearance

9. The appeal site set within a larger field does have a degree of enclosure; however, the undeveloped nature and rural use of field does make a positive contribution to the rural character and appearance of Lye Green. As such the introduction of further industrial style utilitarian development would represent an erosion of the positive contribution that the site as part of the wider field makes to the rural character and appearance of the dispersed settlement pattern of Lye Green. I find therefore that it would harm the character and appearance of the surrounding area and conflict with Saved Policies GC1 and GB30 of the LP which both aim to ensure development respects its surroundings.

[2] Appeal decision APP/X0415/W/17/3174634

Other considerations and the Green Belt balance

10. Given that it is not disputed that the appeal proposal constitutes inappropriate development in the Green Belt, paragraph 143 of the Framework states that inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances. Substantial weight should be given to any harm to the Green Belt. Consequently, very special circumstances will not exist unless the harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations. I now turn to these other considerations.

11. It is recognised that as part of the transition to a low carbon economy National Grid needs to balance the supply and demand for electricity. As such battery storage represents one solution to the balancing process. The batteries would be charged solely from the intermittent renewable energy sources (predominantly wind and solar energy) during low network demand and then released into the National Grid when required to balance electricity demand and ensure a constant supply of power. Whilst I recognise National Grid's approach to the planning system, I do note that they are agnostic about the proposed technology.

12. I acknowledge that for battery storage projects to be developed their connection to the Grid has to be both financially and technically viable. The appellants contend that because the appeal site is within close proximity of a strategic substation with available capacity it is therefore both financially and technically viable. I recognise that the majority of the search area surrounding this particular substation is within the Green Belt.

13. The relevant distribution company covers a wide area including London, the South East and East of England. Given the appellants' focus on the chosen substation at Lye Green, I have insufficient evidence presented to me which would help me to understand whether this is the only strategic substation with available capacity in the overall geographical area covered by the distribution company. I note the response from the distribution company indicates that there are very few substations within their network with available capacity. However, I am not satisfied that this represents substantive evidence relating to this point.

14. Even if I were to accept that this substation is the only one with available capacity within the whole of the distribution company's area, there is no detailed evidence before me that demonstrates what other options have been explored to justify the very special circumstances that would enable the development to be permitted in this particular Green Belt location. For example, siting the battery storage within the confines of the existing strategic substation compound. Given that this appeal proposal also involves a different scale of proposal and incorporates different batteries to those proposed in the previous scheme, it would suggest that there is some flexibility in the choice of technology and therefore the scale of the development.

15. I note that the appellants indicate that the previous Inspector accepted the locational constraints and there were no other suitable sites. Be that as it may, I must determine this appeal on the evidence presented to me and as such I do not have the benefit of seeing the evidence that was before the other Inspector.

16. It is acknowledged that the appellants have sought to respond to concerns of both the Council and the Inspector in relation to the previous scheme. Paragraph 3.22 of the Planning Statement indicates that the scheme would have an energy storage capacity of 25 megawatts. However, this figure is not set in a context in order to demonstrate what contribution this storage facility would make to the Grid as a whole. This type of energy storage would make a positive contribution to the process of decarbonising the energy supply and as such it carries moderate weight.

17. The appellants have made reference to the potential removal of land from the Green Belt[3]. However, any changes to the Green Belt boundaries are a strategic matter to be determined through the Local Plan process and not an individual planning application or appeal. In addition to comments regarding the Green Belt as covered above, interested parties have also raised concerns regarding the implications of the proposed development for human health and noise. I have no substantive evidence before me regarding the health point. A Noise Impact Assessment was submitted with the application. Whilst I recognise concerns about noise measurements at night, the Council's Environmental Health Officer did not share these concerns and indicated that the proposed acoustic fence should be subject to a planning condition if planning permission were acceptable in all other respects. I have no alternative evidence to persuade me otherwise and therefore I agree with the Council in relation to noise.

18. Paragraph 147 of the Framework indicates the wider environmental benefits may constitute very special circumstances to facilitate renewable energy projects. The ability to store energy generated from renewable sources could assist in the production of more energy from renewable sources. However, there is no proven direct link demonstrated that would be the case in this scheme.

Conclusion

19. Taking into account all of the points raised, including the landowners' support, I find that the other considerations in this case do not clearly outweigh the harm I have identified. Consequently, the very circumstances necessary to justify the appeal proposal do not exist. The adverse impacts of the proposal significantly and demonstrably outweigh the benefits when assessed against the development plan and the Framework taken as a whole.

20. For the reasons set out above, having regard to all matters raised, the appeal should be dismissed.

Rachael A Bust

INSPECTOR

[3] Chiltern and South Bucks District Councils Emerging Local Plan - Green Belt Development Options Appraisal, published November 2017

APPENDIX 6

The Planning Inspectorate

Appeal Decision

Site visit made on 9 October 2018

by Graeme Robbie BA(Hons) BPl MRTPI

an Inspector appointed by the Secretary of State

Decision date: 23 November 2018

Appeal Ref: APP/P4415/W/18/3206823
land adjacent to Thurcroft Substation, off Moat Lane, Wickersley S66 1DZ

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by Mr Torsten Frost (EDF Energy Renewables) against the decision of Rotherham Metropolitan Borough Council.
- The application Ref RB2017/1717, dated 16 November 2017, was refused by notice dated 15 January 2018.
- The development proposed is development of an energy storage facility and associated ancillary equipment and components.

Decision

1. The appeal is dismissed.

Procedural Matters

2. A revised version of the National Planning Policy Framework (the Framework) was published on 24 July 2018. The parties have had the opportunity to acknowledge and comment upon the revised Framework during the course of the appeal and I have considered the appeal on the basis of the current Framework.

Main Issues

3. Policy CS4 of the Rotherham Local Plan Core Strategy (2013-2028) (CS) states that land within the Rotherham Green Belt will be protected from inappropriate development as set out in national planning policy. The main parties agree that the proposed development would be inappropriate development in the Green Belt as defined by the Framework. I agree. Therefore, the main issues are the effect of the proposal on:

   - The openness of the Green Belt and the purpose of including land within it;
   - Highway safety and users of Green Lane and Moat Lane;
   - The character and appearance of the surrounding area;
   - Whether the harm by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations so as to amount to the very special circumstances necessary to justify the development.

Reasons

Openness and green belt purpose

4. The Framework states[1] that inappropriate development is, by definition, harmful to the Green Belt (GB) and should not be approved except in very special circumstances. It goes on to state[2] that substantial weight should be given to any harm, and that 'very special circumstances' will not exist unless the potential harm to the GB by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations. The Framework also sets out the fundamental aim of GBs[3]; to prevent urban sprawl by keeping land permanently open, and that their essential characteristics are their openness and their permanence.

5. The proposal would see a total of twenty containerised battery storage units, a control room and switch room building, externally sited switchgear and a transformer compound located within a broadly rectangular-shaped site to the northeast of the existing Thurcroft substation. Although relatively close to the existing substation, the proposed energy storage facility (ESF) would stand apart from it, separated from it by Moat Lane (an unmade track), an unkempt but relatively dense hedgerow on the southern side of Moat Lane, and landscaped areas within the substation grounds.

6. The regimented ranks of storage containers would appear as an incongruous feature in the expansive rolling countryside to the north of Moat Lane whilst the control and switch room building would be a substantial building in the context of the open field in which the site lies. So too, the various switchgear equipment and, significantly, the transformer compound, which, like the control and switch room building, would be of substantial height and bulk.

7. Moat Lane is not a public footpath. However, it is not a gated track and access does not appear to be discouraged along its length. Indeed, whilst it terminates close to the motorway cutting a short distance beyond the appeal site, it nonetheless presents a pleasant route along which to experience the expansive countryside and views to the north of the lane. Whilst Moat Lane runs alongside the substation's existing boundary, the tree planting within the substation grounds and hedgerow alongside Moat Lane provide the substation with an effective visual screen. As such, whilst its presence is still felt, it does not define the character of the appeal site of the wider countryside beyond Moat Lane. Nor do the overhead transmission lines, which converge around the substation alter the perception of openness and expansiveness in views to the north from Moat Lane.

8. The broadly rectangular site would not reflect existing field boundaries or the wider field pattern. The site's boundaries are currently unmarked, the site forming part of a much larger open field. Its long axis would project into the field, broadly diagonally away from the field entrance and would appear as an incongruous intrusion into the expansive, rolling open landscape that lies to the north of Moat Lane. Other than the entrance to the site from Moat Lane, which would be taken through an existing opening into the field, and a short length of

[1] Paragraph 143
[2] Paragraph 144
[3] Paragraph 133

frontage to Moat Lane, the site bears little resemblance to the existing field pattern and expansive landscape within which it would lie.

9. The above factors lead me to the conclusion that the ESF, comprising of a building and walled compound of not inconsiderable height and the regimented and industrialised ranks of containerised battery storage units, would lead to a loss of openness, which the Framework identifies as one of the essential characteristics of the GB. Furthermore, the development of the appeal site for the proposed ESF would result in an incongruous form of development visually and spatially detached from not just the existing substation and approved ESF, but also the loose grouping of buildings to the south of the substation complex.

10. Thus, the proposal would conflict with one of the five purposes of the GB, set out in paragraph 134, of safeguarding the countryside from encroachment. I acknowledge that the proposal would be for a temporary period of 25 years, after which time, the appellant states, the structures and buildings would be removed and the land reinstated. However, 25 years is a not inconsequential period of time for the impact on openness and the encroachment into the countryside to be felt, and therefore the harm that I have identified would be experienced over a lengthy period of time.

11. The submission refers to 'potential green infrastructure enhancement' around the perimeter of the ESF site. However, other than a reference to a perimeter fence there is no other indication of the means of enclosure of the site on the plans before me and, at present, there is no infrastructure, green or otherwise, to enhance. Even if the perimeter of the proposed ESF were to be enhanced with landscape planting, the result would nonetheless be an incongruous form of enclosure in the context of the surrounding field and field boundary patterns. Nor would the landscaping adequately mitigate the intrusive industrial appearance of the proposed ESF in this location in the short to medium term of the proposal's presence on the site.

12. The wider area around the appeal site is criss-crossed by a number of transmission lines leading to Thurcroft substation. The substation is also a significant visual local landmark, albeit more so from some angles than others. Indeed, the vegetation and landscaping around it is such that the lower level buildings, plant and equipment particularly are visually contained when viewed from Green Lane and Moat Lane to the northwest and north of the site. Views into the site open up somewhat further south along Green Lane, and here the substation and site of the approved ESF are seen more in the context of the scattering of surrounding buildings rather than the expansive rising farmland that is characteristic of the land to the north of Moat Lane.

13. The proposed ESF would not be seen directly in this context despite its relative proximity to the wider substation site compound. However, a lack of visibility does not reduce the spatial impact of harm to openness. Moreover, in the context of the countryside beyond the northern limits of the substation and Moat Lane, the proposal would represent substantial harm to openness and harmful encroachment.

14. I accept that the proposed ESF would not be viewed together with the approved ESF except perhaps from an aerial perspective, and therefore, in visual terms, the cumulative impact on openness would be limited. However, this is not to underestimate the effect of the proposed ESF on openness or the resulting countryside encroachment in its own right, or the cumulative spatial

impact on openness that would result and which I consider to be of substantial harm to the GB. Moreover, the approved ESF site is more closely related visually and spatially to the substation, the broad extent of which is neatly constrained by the alignment of Moat Lane and Green Lane. The appeal site, despite its relative proximity to the substation, nonetheless stands apart from this and this adds weight to my conclusions regarding the degree to which the proposal would affect openness and encroach into the countryside, and thus the harm to openness that would result.

Highway and pedestrian safety

15. The appeal site is described in the reason for refusal as having an inferior access compared to that at Green Lane. The reference to Green Lane is, presumably, taken to be the approved ESF adjacent to the Thurcroft substation referred to by both parties throughout their submissions.

16. However, the Council's Statement of Case (SofC) makes no reference to matters of access or the effect of the proposal on users of either Green Lane or Moat Lane. Nor did the Council's planning officer report set out any concerns in this respect, concluding that the appellant's tracking exercise demonstrated that the site could be adequately accessed by construction vehicles.

17. I saw that both Green Lane and Moat Lane were single track lanes with occasional parking places. From the north, Moat Lane initially passes through a residential setting before heading towards the appeal site. However, the exiting substation is accessed from Green Lane, from the south, and that is from where the appellant has demonstrated the access arrangements to the proposed ESF.

18. Moat Lane, beyond its junction with Green Lane, deteriorates from a metalled lane to an unmade track that provides access to fields (including the appeal site) before terminating short of the nearby motorway cutting. Although I am advised that this continuation of Moat Lane is not a public right of way, access to it is not physically restricted and it is described by Wickersley Parish Council as an informal dog walking route.

19. The appellant anticipates that during the operation of the site access to it would not be intensive and it would be managed remotely. During the construction phase, vehicle movements would be more likely. However, I am satisfied that the appellant has adequately demonstrated that it would be physically possible to access the site, by way of the tracking submissions, and could be adequately controlled by way of a construction traffic management plan and suitable details therein (such as a banksman to accompany heavy vehicle movements.

20. No evidence has been put forward by the Council to substantiate the access element of their refusal reason and no policy reference to support it. Although Moat Lane is narrow and is used as an informal walking route, its truncated nature is such that it is unlikely to be heavily used by walkers. I am not persuaded that the proposal would present a material risk of conflict with users, be they on foot, cycle or motor vehicle and I am satisfied that the site could be accessed in a safe manner by larger and smaller vehicles alike. In the absence of a development plan reference, I am satisfied that the proposal would not result in the severe impacts on the highways network that the Framework seeks to avoid.

Character and appearance

21. The appellant contends that the Council's refusal reason does not directly address matters relating to the effect of the proposal on character and appearance and that, in the absence of specific reference, this matter is not one of contention. Whilst not considered at length or in any particular depth, I consider that the Council's conclusions in respect of the proposal's effect on openness and encroachment into the countryside are reflective, in part at least, of an assessment of the proposal in the context of the character and appearance of the surrounding area. Nonetheless, it is not ultimately a matter of dispute between the main parties that the proposal would cause harm to the character and appearance of the surrounding area, per se, and other than my conclusions in respect of the interaction between these factors and openness and countryside encroachment, I have not considered this matter further.

Other considerations

22. The Framework states[4] that the planning system should support the transition to a low carbon future. However, it also recognises[5] that elements of many renewable energy schemes will comprise inappropriate development and that 'very special circumstances' will need to be demonstrated if projects are to proceed. Such circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources. This proposal would, the appellant argues, contribute to that aim.

23. The achievement Government's target, set out within the Climate Change Act 2008, of reducing carbon emissions by 80% below 1990 levels by 2050 is, the appellant states, increasingly reliant on the use of renewable energy sources. These can be somewhat intermittent sources of energy generation in comparison with fossil-fuel based energy generation. As a consequence, such inconsistencies can contribute to fluctuations in grid load, grid stability and security of energy supply.

24. The appellant draws support for the proposal from a range of sources, including the 'Upgrading our Energy System: Smart Systems and Flexibility Plan'[6] and the 'Clean Growth Plan'[7]. Both recognise that smart and flexible energy facilities, such as storage, are an integral part of the energy system and in ensuring secure, affordable and clean power.

25. The proposed ESF would contribute towards enabling a balanced network supply by storing energy when renewable sources are producing at their peak, and releasing the energy back into the grid when energy demand reaches its peaks. However, the two do not necessarily coincide, and so the proposal would assist in ensuring that intermittently produced renewable energy is not wasted.

26. The proposed ESF would not generate electricity, nor would it be directly linked to a renewable energy source. Indeed, at this stage, the technology supplier has not been confirmed by the appellant and so the details set out in the submitted drawings are, in the appellant's words, 'based upon the worst case maximum design parameters that may be required'. Nonetheless, the storage

[4] Paragraph 148
[5] Paragraph 147
[6] HM Government: Department for Business, Energy and Industrial Strategy and ofgem, July 2017
[7] HM Government: Department for Business, Energy and Industrial Strategy, October 2017

and release capabilities of the proposed ESF would allow almost instantaneous operation providing a responsive and reliable electricity supply to a significant number of homes. It would also support more broadly an increasing role for renewable energy technology in the supply of energy to the grid at times when it is required, and not just when those sources are at their most productive. Together, these factors weigh moderately in support of the proposal

27. The Council do not dispute that the appellant has employed a robust site search and selection process and, clearly, the locations of existing substations are a finite resource both locally and further afield. However, it is noted that permission has recently been approved[8] for an ESF on land to the south of the Thurcroft substation. That site lies only a short distance away from this site, just to the south of the substation. The appellant considers the two proposals to be identical and, because very special circumstances were held to exist by the Council in that instance, then the same circumstances should hold true in this instance.

28. Whilst I do not have the full details of that proposal before me, I was able to draw comparison between the location of the respective proposals and the context in which they sit. I do not consider them to be identical however, for the simple reason that the nature of their surroundings and relationship with the substation, although perhaps equally close in terms of distance, is materially different. The Council may have considered that these other considerations clearly outweighed the harm by reason of inappropriateness, and any other harm, in that instance and therefore very special circumstances existed. However, I do not consider the schemes to be directly comparable and I give this matter limited weight

29. I have also been referred to another case[9] where the Inspector gave significant weight to the purpose of a battery storage facility. However, although I do not have the full details of that proposal before me, it is evident from what I have read[10] that that scheme was not in the Green Belt. Whilst noting the Inspector's conclusions I do not consider that that proposal is directly comparable to the proposal before me and I give it limited weight.

Planning Balance and Overall Conclusion

30. The proposed ESF would be inappropriate development in the GB, would have a harmful impact on the openness of the GB and would be in conflict with one of the five purposes of GBs, which is to safeguard the countryside from encroachment. Paragraph 143 of the Framework states that inappropriate development is harmful to the GB whilst paragraph 144 states that substantial weight should be given to any harm to the GB.

31. I acknowledge the benefits that the proposal, and the proposed technology behind it, afford to the development of renewable energy and the balancing of the energy supply grid even if the proposal would not directly relate to an increase in renewable energy production. I acknowledge, too, that the Council's refusal reason is not expressed in terms of harm to the character and appearance of the area and that the Council's concerns regarding access to the site have not been sustained in their appeal submissions. Nonetheless, I

[8] LPA Ref No: RB2017/1426
[9] APP/N1730/W/17/3167123
[10] Appeal decision letter

consider that the degree to which the proposal would encroach into the countryside and would cause harm in terms of openness is a function, in part at least, of the proposal's effect on the character and appearance of the area. Whilst I do not find harm in this respect in isolation, it adds weight to my conclusions regarding openness and encroachment, and the weight that I give to that harm. The absence of harm in terms of access is a neutral factor in my considerations.

32. Thus, the weight of these other considerations do not, as they are required to do so by the Framework to constitute very special circumstances, clearly outweigh the harm by reason of inappropriateness, and other harm, to the Green Belt. As CS policy CS4 requires that the GB around Rotherham will be protected from inappropriate development as set out in national planning policy, I consider that the proposal would be in conflict with CS policy CS4. For the reasons I have set out therefore, there are no very special circumstances to justify the proposal and for this reason, and having considered all other matters raised, I conclude that the appeal should be dismissed.

Graeme Robbie

INSPECTOR