Cumnor Parish Neighbourhood Development Plan

Landscape Character Assessment

December 2018

LEPUS CONSULTING
LANDSCAPE, ECOLOGY, PLANNING & URBAN SUSTAINABILITY

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Front cover: View across Cumnor Parish from Eynsham Road south, by Neil Davidson

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Acronyms

ALC	Agricultural Land Class
AOD	Above Ordnance Datum
AQMA	Air Quality Management Area
CA	Conservation Area
CPC	Cumnor Parish Council
DC	District Council
GI	Green Infrastructure
km	Kilometre
kn	Kilonewton
LCA	Landscape Character Area
LT	Landscape Type
LWS	Local Wildlife Site
m	Metres
NCA	National Character Area
NPPF	National Planning Policy Framework
OWLS	Oxfordshire Wildlife and Landscape Study
PRoW	Public Rights of Way
SAC	Special Areas of Conservation
SSSI	Site of Special Scientific Interest
TVERC	Thames Valley Environmental Records Centre
VoWH	Vale of White Horse

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Executive Summary

E1. Lepus Consulting have been commissioned by Cumnor Parish Council to undertake a Landscape Character Assessment of the Parish as part of the Cumnor Neighbourhood Development Plan (NDP). Landscape Character Assessments provide a better understanding of landscapes, including their distinctiveness and sensitivity to change. The aim of the assessment is to identify important landscape features within the Parish and recommend possible protection and enhancement measures. The report is to be used as part of the evidence base for the NDP.

E2. This Landscape Character Assessment is written considering the latest and best guidance for conducting a Landscape Character Assessment. The methodology for this study has been derived from aspects of:

- Guidelines for Visual and Landscape Impact Assessment 3 (2013) [1];
- The Countryside Agency Topic Paper 6 (2002): Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity[2]; and
- Natural England (2014) An Approach to Landscape Character Assessment[3].

E3. The main stages involved with the assessment process include desktop research and a field study. These were undertaken in June and July 2018 and can be found in Chapter 3 and 4 of this report. This report divides the NDP area into Landscape Character Areas (LCAs). The report is structured around the 14 LCAs in which recommendations to plan, manage and protect distinctiveness are based.

E4. The information included in this Landscape Character Assessment is for the use of a variety of stakeholders including planning applicants, developers, development management officers and neighbourhood development plan groups.

[1] Landscape Institute and Institute of Environmental Management & Assessment (2013) Guidelines for Landscape and Visual Impact Assessment (Third Edition) Abingdon: Routledge

[2] The Countryside Agency (2002) Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity. Available at: http://publications.naturalengland.org.uk/publication/5601625141936128

[3] Natural England (2014) An Approach to Landscape Character Assessment. Available at: https://www.gov.uk/government/publications/landscape-character-assessments-identify-and-describe-landscape-types

E5. This Landscape Character Assessment should be used to understand the distinctive landscape qualities of an area to give context to future development proposals. The prevailing character of the landscape will help to shape the design and layout of development.

1 Introduction

1.1 Appointment and scope of work

1.1.1 Lepus Consulting Ltd has been appointed by Cumnor Parish Council (CPC) to undertake a Landscape Character Assessment in the Neighbourhood Development Plan (NDP) area. A copy of the scope of work is presented in **Appendix A**.

1.2 Purpose of this report

1.2.1 This report presents a Landscape Character Assessment of Cumnor Parish. It characterises areas of common landscape features across the Parish such that they may be categorised or grouped into a common landscape area known as a Landscape Character Areas, distinguishing features are used to recognise heterogeneity and sometimes define the boundary of a Landscape Character Area.

1.2.2 CPC have undertaken an NDP to help plan for future development within the Parish. No housing allocations have currently been allocated to the Parish through the Local Plan. However, the NDP aims to ensure the protection and enhancement of the area's character in anticipation of future in-fill development. The LCA will be used by CPC to help evidence landscape and character policies created in the NDP to help preserve the unique character of Cumnor.

1.3 Geographic context of Cumnor

1.3.1 Cumnor Parish sits in an area of approximately 2,000 hectares and lies 3.5 miles south west of the city of Oxford, in west Oxfordshire. It comprises of Chawley, Dean Court and the outlying settlements of Farmoor, Filchampstead and Swinford. The western perimeter of the parish is formed by the River Thames which meanders towards Oxford. The northern boundary is dominated by Wytham Hill, which rises to 180m above ordnance datum (AOD), most of which is made up of Corallian Limestone. This stratum of limestone lies above a layer of Oxford Clay which forms the lower hillsides and valley floor of the Parish.

1.3.2 The original Parish boundary was established to reflect the land ownership of four tithings. The four wards are Farmoor, Dean Court, Cumnor Hill and Cumnor Village. Approximately three quarters of the Parish is farmland[4]. Farmoor Reservoir to the west of the Parish was built in 1967.

1.3.3 There are approximately 2,700 dwellings within the Parish, housing almost 7,000 residents[5]. Approximately 65% of residents are aged between 16 and 64, with 18% being aged below 15 years and 17% aged over 65 years. There is one primary school in the Parish, several churches, village halls and various sports clubs such as Cumnor Minors football club and Cumnor cricket club.

1.4 Landscape Character Assessment hierarchy

1.4.1 Preparation of landscape character assessment at different scales in an important consideration when preparing development plans or making planning decisions. The landscape character assessment exercise, and how it is approached, is dependent upon the scale and level of detail required as this will influence the level in the national-local hierarchy at which it is being carried out.

1.4.2 The vertical hierarchy of landscape character assessments includes the English National Character Areas, the Regional Landscape Character Areas in Wales, county level Landscape Character Assessments - including the suite of Scottish Landscape Character Assessments - district level assessments, and local landscape character assessments.

1.4.3 Neighbourhood plans sit at a level 'underneath' the district. It is important that the process of Landscape Character Assessment helps to ensure consistency of description across boundaries. The level of detail and cartographic granularity increases in direct proportion to the size of the area being assessed. Smaller study areas will have higher levels of granularity. The same is true of homogenous and heterogeneous attributes; they decrease with size as the boundary of the LCA increases.

[4] John Hanson (1996) A Thousand Years, a study of the interaction between people and environment in the Cumnor, Wytham and North Hinksey area of (former) North Berkshire.

[5] Cumnor Parish Council (2017) Welcome to Cumnor Pariah. Available at: http://cumnorparishcouncil.org.uk/ [Date Accessed: 11/06/18]

1.4.4 The following sections discuss the vertical hierarchy above Cumnor, from the top down: the national character areas, the county level character areas and the district level character areas.

1.5 National Landscape Context

1.5.1 At a national level, Natural England has divided England into areas of similar landscape called National Character Areas (NCAs)[6]. The scale of these is such that they include large swathes of the English countryside and the level of homogeneity amongst landscape features is limited.

1.5.2 The NDP area is located within the Upper Thames Clay Vales NCA (No. 108)[7] and the Midvale Ridge (No. 109)[8] as identified by Natural England (see **Figure 1.3**). The Parish is primarily within the Midvale Ridge NCA which is a "*band of low-lying limestone hills stretching east to west from the Vale of Aylesbury in Buckinghamshire to Swindon*". Further information on these NCAs is presented in **Appendix C**.

1.6 County Landscape Context

1.6.1 The current Landscape Character Assessment for the county of Oxfordshire is the Oxfordshire Wildlife and Landscape Study (OWLS)[9]. The OWLS is an investigation of landscape character and biodiversity across the county and was published in 2004.

[6] Natural England (2014) National Character Area profiles: data for local decision making. Available at: https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making [Date Accessed: 12/06/18]

[7] Natural England (2014) NCA Profile:108 Upper Thames Clay Vales (NE570). Available at: http://publications.naturalengland.org.uk/publication/5865554770395136?category=587130 [Date Accessed: 12/06/18]

[8] Natural England (2013) NCA Profile: 109 Midvale Ridge (NE417). Available at: http://publications.naturalengland.org.uk/publication/5431100?map=true&category=587130 [Date Accessed: 12/06/18]

[9] OWLS (2004) Oxfordshire Wildlife & Landscape Study. Available at: http://owls.oxfordshire.gov.uk/wps/wcm/connect/occ/OWLS/Home/ [Date Accessed: 15/06/18]

1.6.2 There are 24 landscape types described across Oxfordshire. These are made up of individual landscape description units and patterns of geology, topography, land use and settlements.

1.6.3 Within Cumnor, there are seven landscape types (LTs):

- Rolling farmland;
- Vale farmland;
- River meadowlands;
- Wooded hills;
- Terrace farmland;
- Wooded farmland; and
- Wooded estatelands.

1.6.4 A map showing the location of these seven LTs within Cumnor Parish is shown in **Figure 1.4**. Further information on the LTs and the twelve landscape character areas are presented in **Appendix D**.

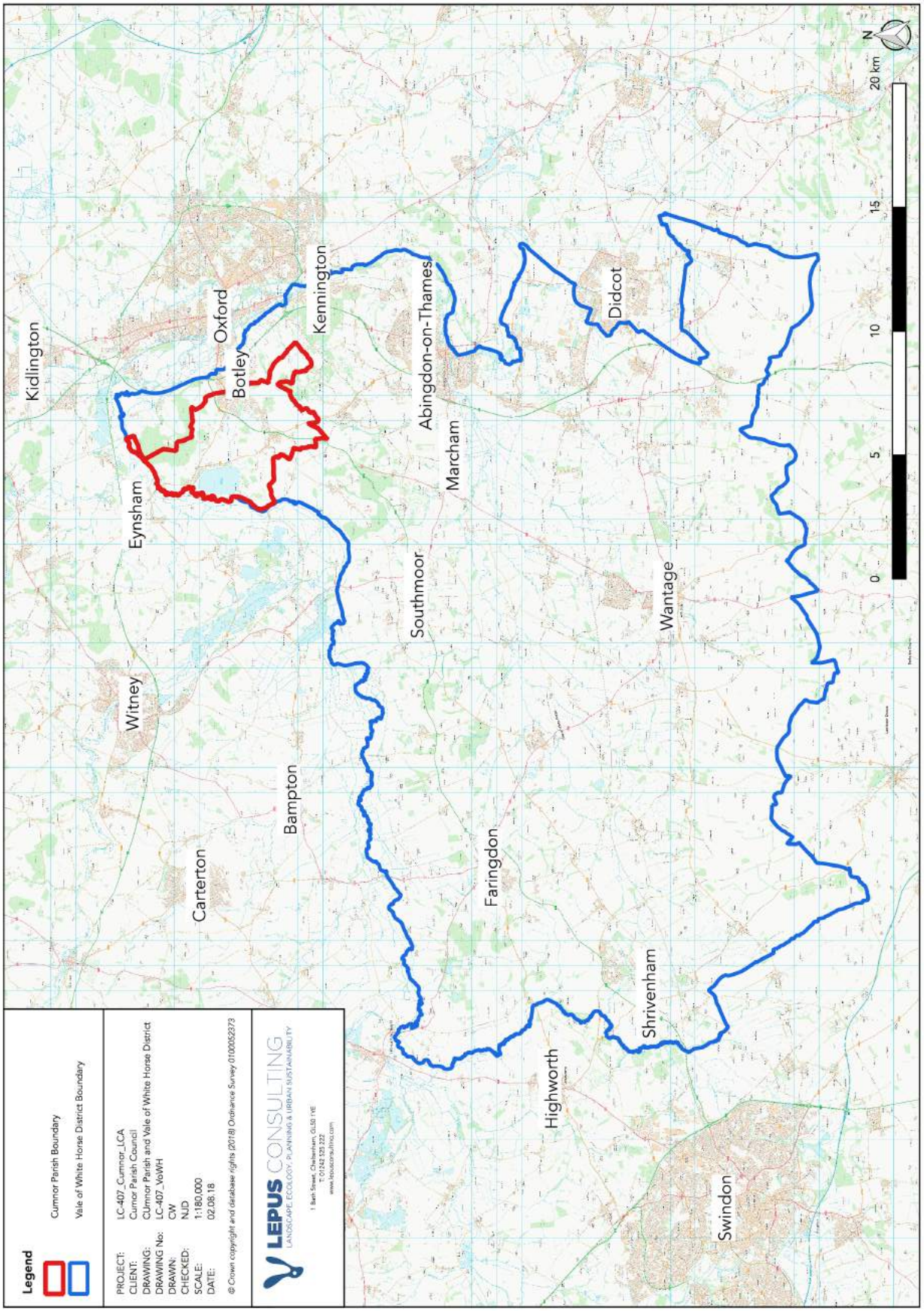


Figure 1.1: *Location of Cumnor Parish in relation to the Vale of White Horse District.*

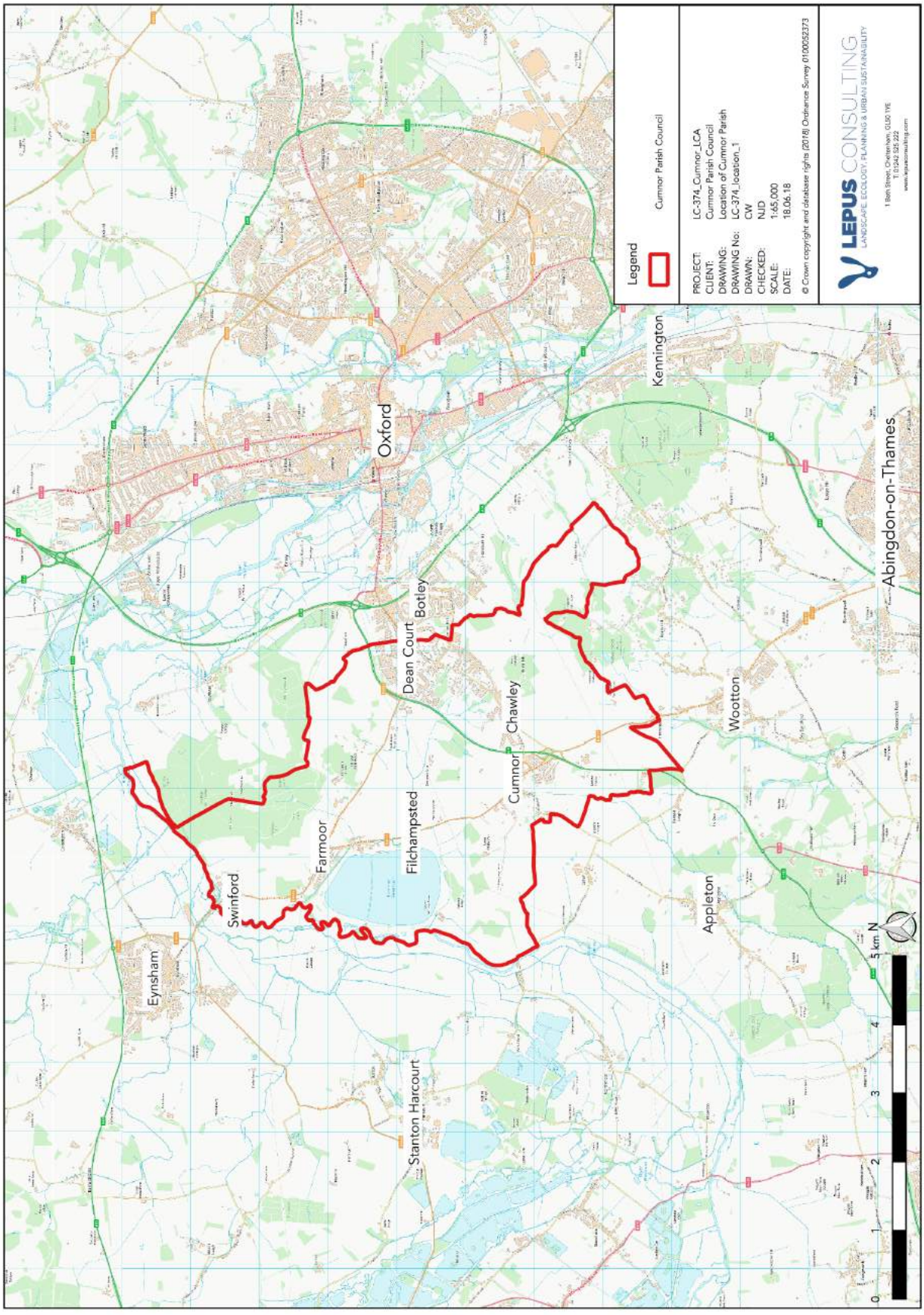


Figure 1.2: *Cumnor Parish in relation to nearby towns and villages.*

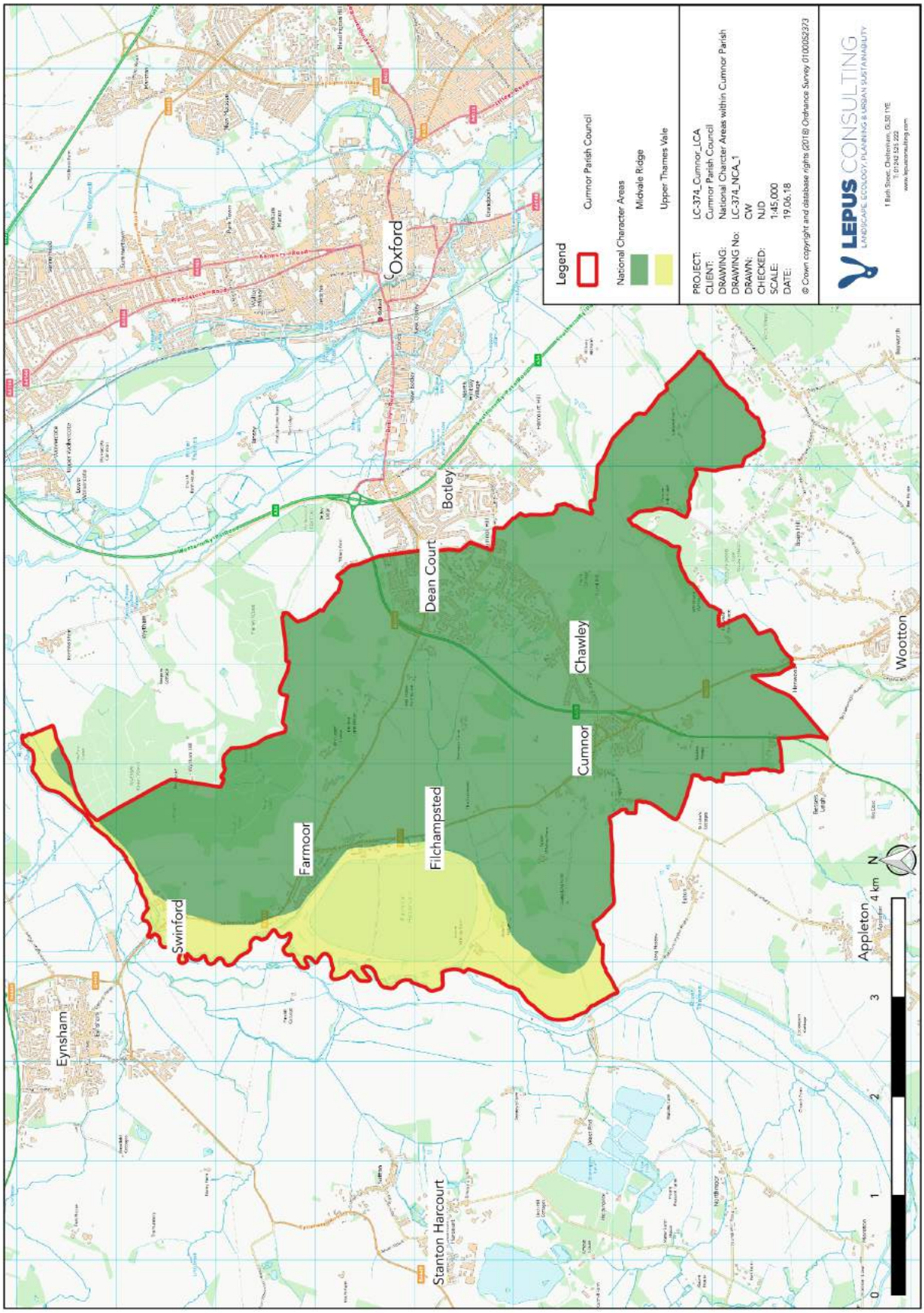


Figure 1.3: *Upper Thames Clay Vale and Midvale Ridge NCA's in Cumnor Parish.*

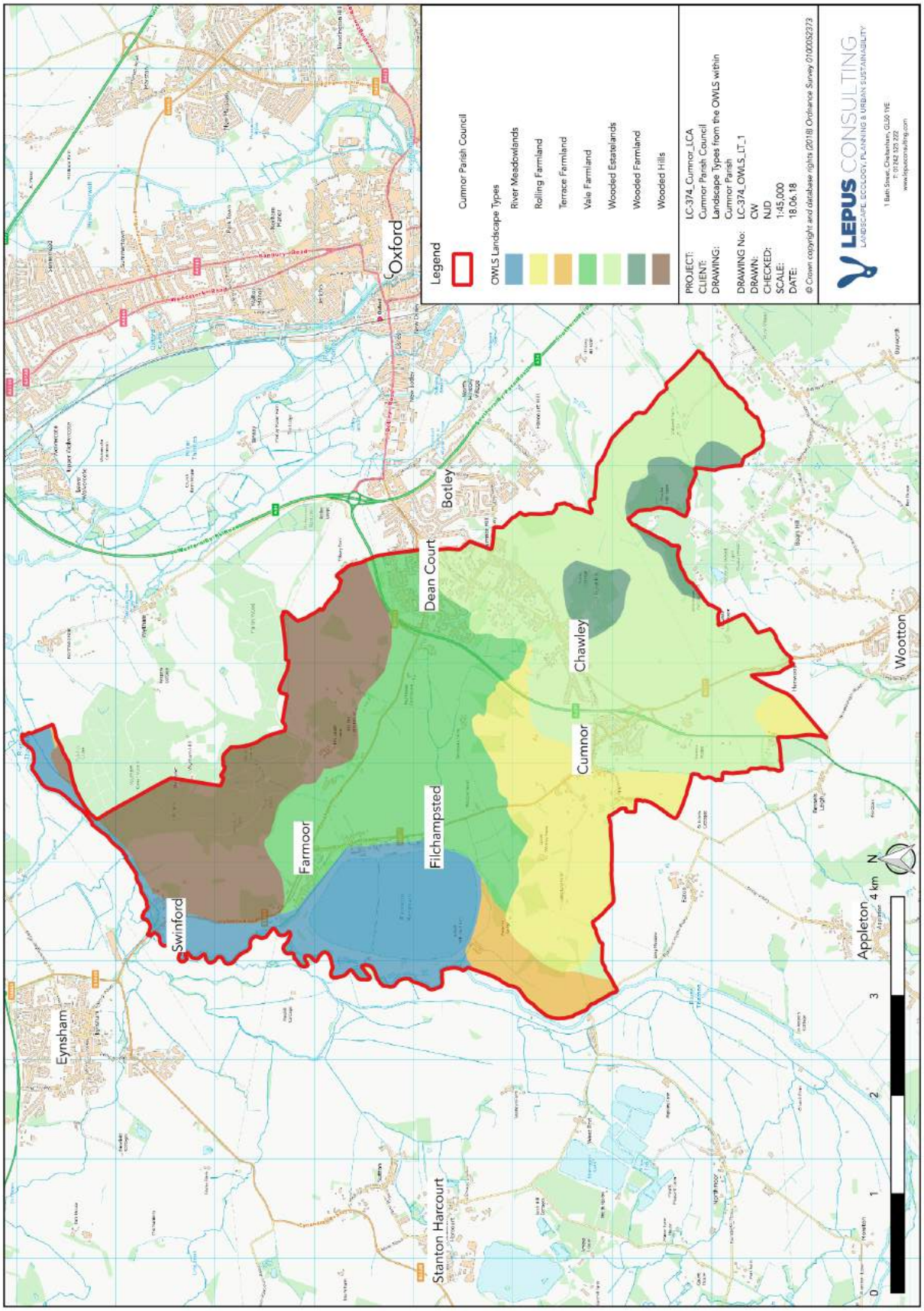


Figure 1.4: *The seven Landscape Types within Cumnor Parish as identified in the Oxfordshire Wildlife and Landscape Study (OWLS).*

1.7 District Landscape Context

1.7.1 The Vale of White Horse (VoWH) Landscape Character Assessment was published in September 2017[10]. The study identifies twelve Landscape Types (LTs) which are further sub-divided into Landscape Character Areas (LCAs).

1.7.2 The LTs are characterised to reflect the dominant influences on landscape character, displaying a common pattern across the area. The study defines LTs as: *"generic, often extensive areas of landscape that share common combinations of geology, topography, vegetation and human influences, e.g. 'Downs Scarp' or 'Lower Vale Farmland'"*.

1.7.3 The study defines LCAs as: *"unique, discrete geographical areas of the Landscape Type, e.g. 'Idstone to Chilton Downs Scarp' or 'Appleford Lower Vale Farmland', which exhibit all, or the majority of, the recognisable characteristics of the Type, depending on the location of the Character Area"*.

1.7.4 For each LCA, information is provided regarding location and boundaries and key characteristics. For each LT, information is provided regarding location and boundaries, key characteristics, key positive landscape attributes, forces for change/sensitivities/pressures, landscape strategy, land management and built development.

1.7.5 The NDP area is located within three LTs. These are:

- Wooded Corallian Limestone Ridge;
- Corallian Limestone Ridge with Woodland; and
- River Floodplain.

1.7.6 A summary of the evaluation and guidance of each LT in the Plan area is presented in **Table 1.1** below.

[10] Vale of White Horse District Council (2017) Landscape Character Assessment. Available at: http://www.whitehorsedc.gov.uk/java/support/Main.jsp?MODULE=FolderView&ID=789122104&CODE=498F5A0A897C751630F233DEB1E72432&NAME=19.+Landscape+Character+Assessment&REF=Local%20Plan%202031%20Part%202:%20Publication%20Version%20Publicity%20Period [Date Accessed: 15/06/18]

1.7.7 Each LT is sub-divided into LCAs, which present more detailed information on the landscape. There are nine sub-divisions in Cumnor Parish. Full details for each LT and LCA found within the Plan area is presented in **Appendix E.**

1.8 25 Year Environment Plan

1.8.1 The document: 'A Green Future: Our 25 Year Plan to Improve the Environment' was published in January 2018 by the Department for Environment, Food & Rural Affairs (DEFRA)[11]. A description of this plan is as follows:

"This 25 Year Environment Plan sets out government action to help the natural world regain and retain good health. It aims to deliver cleaner air and water in our cities and rural landscapes, protect threatened species and provide richer wildlife habitats. It calls for an approach to agriculture, forestry, land use and fishing that puts the environment first."

1.8.2 The plan identifies six key areas around which action will be focused, this includes the policy; 'recovering nature, and enhancing the beauty of landscapes'. An action identified within this policy relevant to this LCA is as follows:

"Identifying opportunities for environmental enhancement in all of England's 159 National Character Areas and monitoring indicators of our landscape's character and quality to improve landscapes for people, places and nature."

1.8.3 The 25 Year Plan recognizes that; "*Our landscapes – our hills, valleys and plains – were created by age-old geological processes but the way our rural and urban environment looks now owes as much to the work of people as nature. Down the centuries, we have shaped and adapted our rural and urban landscape to suit our purpose, not always aware of the lasting effects of our actions – for good or ill – on the appearance and health of the environment*".

[11] Department for Environment, Food and Rural Affairs (2018) 25 Year Environment Plan. Available at: https://www.gov.uk/government/publications/25-year-environment-plan [Date Accessed: 15/06/18]

Table 1.1: *A summary of the evaluation and guidance each Landscape Type within the Plan area according to the Vale of White Horse Landscape Character Assessment.*

	Wooded Corallian Limestone Ridge LT	Corallian Limestone Ridge with Woodland LT	River Floodplain LT
Key positive landscape attributes	• Extensive tracts of woodland, including significant areas of ancient woodland; • Pockets of open land within the woodland, including meadows, commons and parkland, enclosed by tree cover; • Areas of dense tree cover result in enclosed spaces with a sense of intimacy; • Distinctive carpets of bluebells provide interest in spring time; • Areas with very limited settlement, which have a keen sense of peace and tranquillity; • Distant views out from the ridge, from elevated locations and the edges of woodland, including history views of the 'dreaming spires' of Oxford to the east; • Provides a rural wooded backdrop and treed skyline in views from the low lying Vale to the south, in views from the river Thames, and views west from Oxford; • Several parts of the woodland designated as Sites of Special Scientific Interest (SSSI); • Areas of woodland preserved by St John's College Oxford since 1557, and other woodland and meadow areas now managed by the Oxford Preservation Trust.	• Steep north facing slopes prominent in views across the low-lying landscape associated with the Thames to the north; • Named high points within the wider ridge feature which are prominent in the local landscape; • Blocks of woodland, including ancient woodland, which provided a wooded backdrop in views; • A more intact network of hedgerows and mature hedgerow trees, than in other parts of the District; • Rare semi-natural habitats including areas of fen, wet woodland, and calcareous grass heaths; • Meandering streams, edged with riparian vegetation, which flow down the ridge slopes; • Rural settlement, including small nucleated villages and traditional market towns; • A network of public rights of way providing public access across most parts of the ridge; • A number of conservation areas; • Areas of historic parkland; • Views to the 'dreaming spires' of Oxford to the east; and	• Pastoral, largely peaceful landscapes, along the meandering watercourses of the Thames, Ock, and their tributaries; • Open water bodies; • Varying widths of low-lying river floodplains; • Sparsely settled, with a limited number of roads and small groups of traditional dwellings located at river crossings. Elsewhere, the River Floodplain provides a setting to built-up areas; • Riparian vegetation and land use, such as waterside meadows, wet woodland, and occasional marsh and fen habitats; • A network of ditches with ditch line willows and alder; • Sites of Special Scientific Interest (SSSI), including Frilford Heath and Cothill Fen; • Historic river crossings, including listed bridges; • Waterborne recreation, with added interest at locks; and • Waterside access along the Thames Path National Trail.

	Wooded Corallian Limestone Ridge LT	Corallian Limestone Ridge with Woodland LT	River Floodplain LT
		• Provides a rural backdrop and skyline in views from the low lying Vale to the south, in views from the river Thames, and views west from Oxford.	
Forces for change/ sensitivities/ pressures	• Woodland fragmentation due to farming and residential development; • Increase in low density dwellings which sprawl along roads; • Loss of historic views due to lack of vegetation management; • Busy roads, including the A34 dual carriageway and the A420 cut through the woodland; and • Limited public rights of way, with access to privately owned woodland requiring permits.	• Loss or poor management of woodland, hedgerows and hedgerow trees; • Increase in development, and edge uses such as paddocks, on the edges of existing settlements; • Sprawling ribbon development along roads, particularly to the east; • A small group of wind turbines north of Watchfield; • Solar farm development, albeit less extensive than in the Lower Vale Farmland to the south; • Overhead pylons crossing the eastern end of the ridge. • Noise and light pollution from main roads which cross the ridge; and • Occasional golf courses.	• Decline in active management of meadows and pasture on the floodplain and conversion to arable farming; • Poor maintenance and loss of field boundaries, resulting in gaps in hedgerows; • Lack of pollarding and loss of boundary willows; • Extensive gravel extraction with restoration at various stages; • Encroachment from urban edge development along the edges of settlements within the east of the District; • Increased demand for moorings; and • Overhead pylons crossing the area.
Landscape strategy	"The strategy for the Wooded Corallian Limestone Ridge LT is to conserve and enhance the large tracts of woodland, including ancient woodland and the special habitats of the SSSIs. The sense of peace and quiet in unsettled areas	"The landscape strategy for the Corallian Limestone Ridge with Woodland LT is to conserve the woodlands, hedges and riparian vegetation which give the ridge its treed character, protect remaining semi-natural habitats and resist further urbanising sprawl of low density development."	"The strategy for the River Floodplain LT is to conserve the rural, secluded areas of landscape with its river channels, pasture, and wetlands, and resist further encroachment of development along the edges of the Thames and Ock towards the east of the District. Restoration of gravel

	Wooded Corallian Limestone Ridge LT	Corallian Limestone Ridge with Woodland LT	River Floodplain LT
	should be maintained, and further low density residential development resisted elsewhere."		workings should continue and managed to assimilate into the surrounding landscape character."
Built Development	• Resist the loss of woodland to development. Conserve the sense of seclusion; • Limit any further spread of low density dwellings; • Maintain the wooded and undeveloped skyline; • Ensure that road lighting is assessed for visual impact and encourage conservation of the existing 'dark skies' on the ridge; and • Promote the use of traditional buildings materials and signage features with particular regard to local style and materials.	• Protect the sensitive historic edges of settlements from development and resist an increase in settlement edge uses such as paddocks and horse keeping; • Where extensions to larger settlements are planned, develop landscape strategies which minimise effects on the surrounding landscape and are in keeping with its characteristics; • Resist the spread of low density development, including ribbon or sporadic development along roads; • Conserve gaps between settlements to prevent coalescence and retain separate settlement identities; • Improve understanding of the general pattern of settlements and their relationship to the landscape and maintain development control to ensure that new development is sympathetic to the wider pattern of settlement; and • Conserve the rural roads minimising small-scale incremental change such as signage and fencing, which would change their character.	• Avoid significant new development in the floodplain; • Ensure any new development is sensitively sited and designed with, scale, form and detailing, including materials, which conserve the character and settlement pattern of the area; • Resist potential mineral workings which could adversely affect the landscape character of the River Floodplains; • Conserve gaps between settlements to prevent coalescence and retain separate settlement identities; • Conserve the rural roads and bridges minimising small-scale incremental change such as signage, fencing or improvements to the road network or bridges which would adversely change their character; and • Minimise the visual impact of intrusive land uses at the fringes of towns with planting of appropriate tree and shrub species characteristic of the area.

2 Method for Undertaking the Landscape Character Assessment

2.1 Overview

2.1.1 The methodology for this study has been derived from aspects of:

- Guidelines for Visual and Landscape Impact Assessment 3 (2013) [12];
- The Countryside Agency Topic Paper 6 (2002): Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity[13]; and
- Natural England (2014) An Approach to Landscape Character Assessment[14].

2.1.2 It can be summarised as having four steps:

- Define purpose and scope of the project;
- Desk study;
- Field study; and
- Classification and description of landscape character types and areas.

2.2 Step 1: Define purpose and scope of the project

2.2.1 Cumnor Parish Council have commissioned a Landscape Character Assessment to be undertaken by Lepus Consulting. Upon commencement of the project, Lepus met with the representatives of CPC to confirm the precise aims and objectives of the project, defining the scope of assessment. The scope of work is presented in **Appendix A**.

[12] Landscape Institute and Institute of Environmental Management & Assessment (2013) Guidelines for Landscape and Visual Impact Assessment (Third Edition). Abingdon: Routledge

[13] The Countryside Agency (2002) Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity. Available at: http://publications.naturalengland.org.uk/publication/5601625141936128 [Date Accessed: 15/06/18]

[14] Natural England (2014) An Approach to Landscape Character Assessment. Available at: https://www.gov.uk/government/publications/landscape-character-assessments-identify-and-describe-landscape-types [Date Accessed: 15/06/18]

2.3 Step 2: Desk study

2.3.1 The desktop study stage consisted of information gathering exercises to prepare a baseline review of natural, cultural and social aspects of the NDP area. Information was collected from the following sources:

- Character Assessments for Dean Court, Cumnor Hill, Cumnor Village and Farmoor[15];
- VoWH Landscape Character Assessment (2017);
- OWLS[16];
- Parish Local Green Spaces;
- Mike Gilbert Planning Ltd (2015) Proposed changes to the Oxford Green Belt at Cumnor;
- Thames Valley Environmental Records Centre (TVERC);
- Listed buildings in Cumnor;
- John Hanson's historic collection;
- Oxford Green Belt Study[17]; and
- VoWH Green Belt Review[18].

[15] Draft Character Assessments. Available at: https://www.cumnorneighbourhoodplan.co.uk/housing

[16] Vale of White Horse Parish. Available at: http://owls.oxfordshire.gov.uk/wps/wcm/connect/occ/OWLS/Home/Oxfordshire+Districts/Oxfordshire+Districts+-+Parishes/Vale+of+White+Horse+Parishes/

[17] LUC (2015) Oxford Green Belt Study. Available at: https://www.oxfordshiregrowthboard.org/wp-content/uploads/2018/04/OxfordGreenBeltStudyFinalReport.pdf

[18] Kirkham Landscape Planning Ltd / Terra Firma Consultancy (2014) Vale of White Horse District Council, Green Belt Review: Final Phase 2 Report. Available at: http://www.whitehorsedc.gov.uk/sites/default/files/Green%20Belt%20Phase%201&2%20Report%20final%20February%202014_reduced%20pdf.pdf

2.4 Step 3: Field study

2.4.1 As stated in the Natural England guidance 'An Approach to Landscape Character Assessment[19]': *"the field study is an essential part of the Landscape Character Assessment process. It presents the opportunity to observe and understand how all the factors identified as part of the desk study interact and are perceived and experienced, to give us landscapes of distinct character. It also enables the identification of other factors that are not evident from the desk study and the chance to record aesthetic and perceptual aspects".*

2.4.2 The approach to the study will depend upon the purpose, scope, and desired outputs of the assessment. It is essential that the survey is specifically designed to meet the objectives of the project being undertaken and as such each field study is expected to identify unique features of a landscape.

2.4.3 It should be noted that, although there is now a range of digital information available that might aid Field Survey such as Google Maps and Street View, online resources should be used as additional resources and not as a substitute for undertaking field work. There is no replacement for being in and experiencing the landscape directly.

2.4.4 **Figure 2.1** illustrates the various components that together make a landscape. These are under umbrella headings of (i) Natural, (ii) Cultural and Social, and (iii) Perceptual and Aesthetic factors.

[19] Natural England (2014) An approach to Landscape Character Assessment. Available at: https://www.gov.uk/government/publications/landscape-character-assessments-identify-and-describe-landscape-types [Date Accessed: 15/06/18]

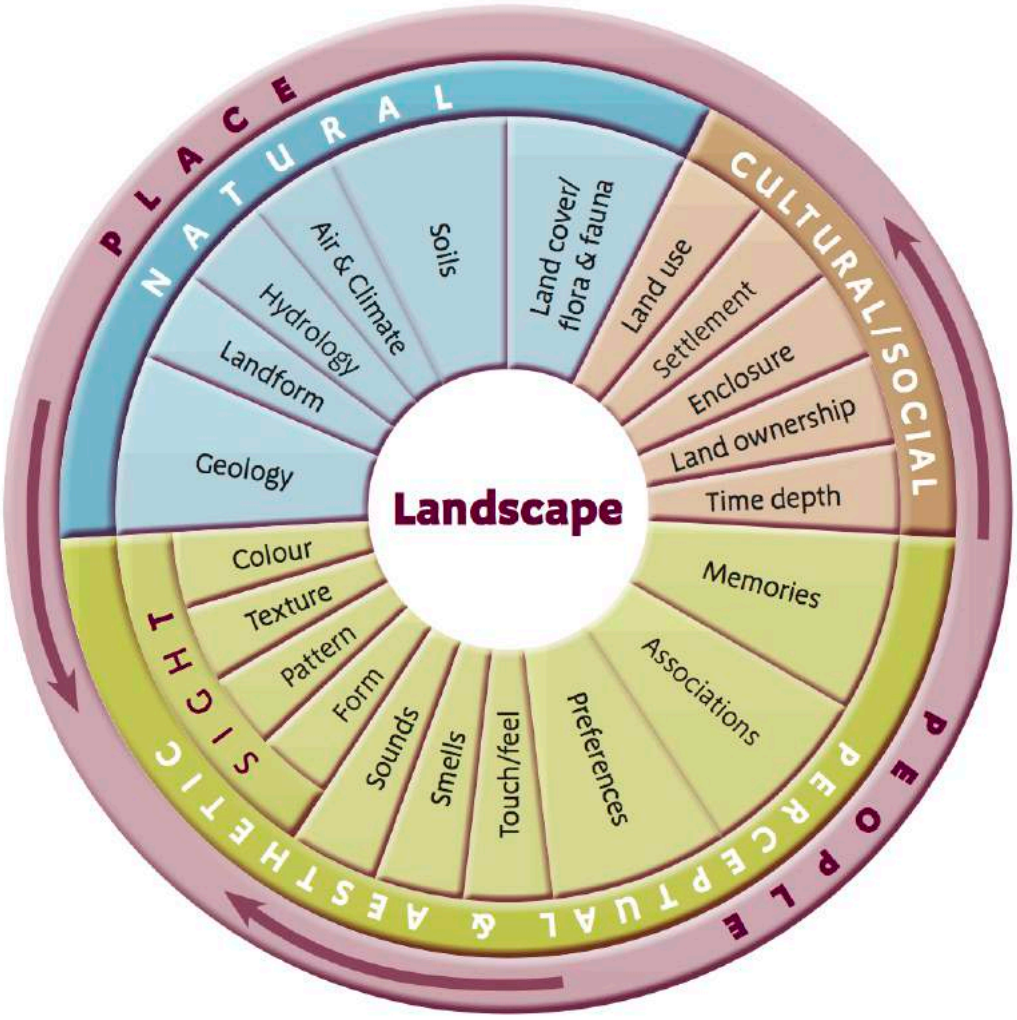


Figure 2.1: *What is Landscape?*[20]

2.5 Step 4: Classification and description of landscape types and character areas.

2.5.1 The fourth stage of the landscape character assessment guidance from Natural England states that this part of the process deals with the final classification and description of landscape types and character areas, and explains: the difference between landscape types and landscape character areas, and their use; classification at different scales; involvement of people; boundary confirmation; naming landscape character types and areas; how to describe landscape character; mapping landscape character types and/or areas.

[20] Natural England (2014) An Approach to Landscape Character Assessment. Available at: https://www.gov.uk/government/publications/landscape-character-assessments-identify-and-describe-landscape-types [Date Accessed: 15/06/18]

2.5.2 Overall, landscape classification was informed by the three previous steps which were used to divide the landscape into areas of distinct, recognisable, and consistent character, and groups areas of similar character together. This provided information on the extent and distribution of different landscape character areas at a local scale.

2.5.3 The three previous stages of assessment have provided a spatially referenced framework on which landscape character descriptions, and follow on judgements about future policy development, design strategies, or land management can be based.

2.5.4 Landscape classification can be prepared at a variety of scales depending on the purpose and scope of the project. The scale of the area to be assessed determines the likely level at which the differences between homogeneous and distinctive factors are separated to identify character areas. The process of characterisation divides landscapes into areas of distinct, recognisable, and consistent character, and groups areas of similar character together. The characterisation provides the spatially referenced framework on which landscape character descriptions, and follow on judgements about future policy development, design strategies, or land management may be based.

2.5.5 Landscape Character Areas (LCAs) are identified in this assessment because they identify the unique and distinctive features of an area that is needed for this scale of assessment. Key features of LCAs are listed in **Box 2.1**.

Box 2.1: Definition of Landscape Character Areas

Landscape Character Areas …

- are the unique individual geographical areas in which landscape types occur;
- share generic characteristics with other areas of the same type, but have their own particular identity;
- can often be more readily recognised and identified by non-specialists – sense of place is often important to local people and visitors for example;
- may often be more prevalent than landscape character types, because some types will occur in more than one area;
- can be identified at each level in the hierarchy of assessment;
- can provide a good spatially referenced framework from where patterns of local distinctiveness, and factors influencing sense of place, can be drawn; and
- can be used to develop tailored policies and strategies, that reflect the characteristics that make a given landscape different or special.

2.5.6 **Figure 2.2** provides a summary of the stages and detail for each stage.

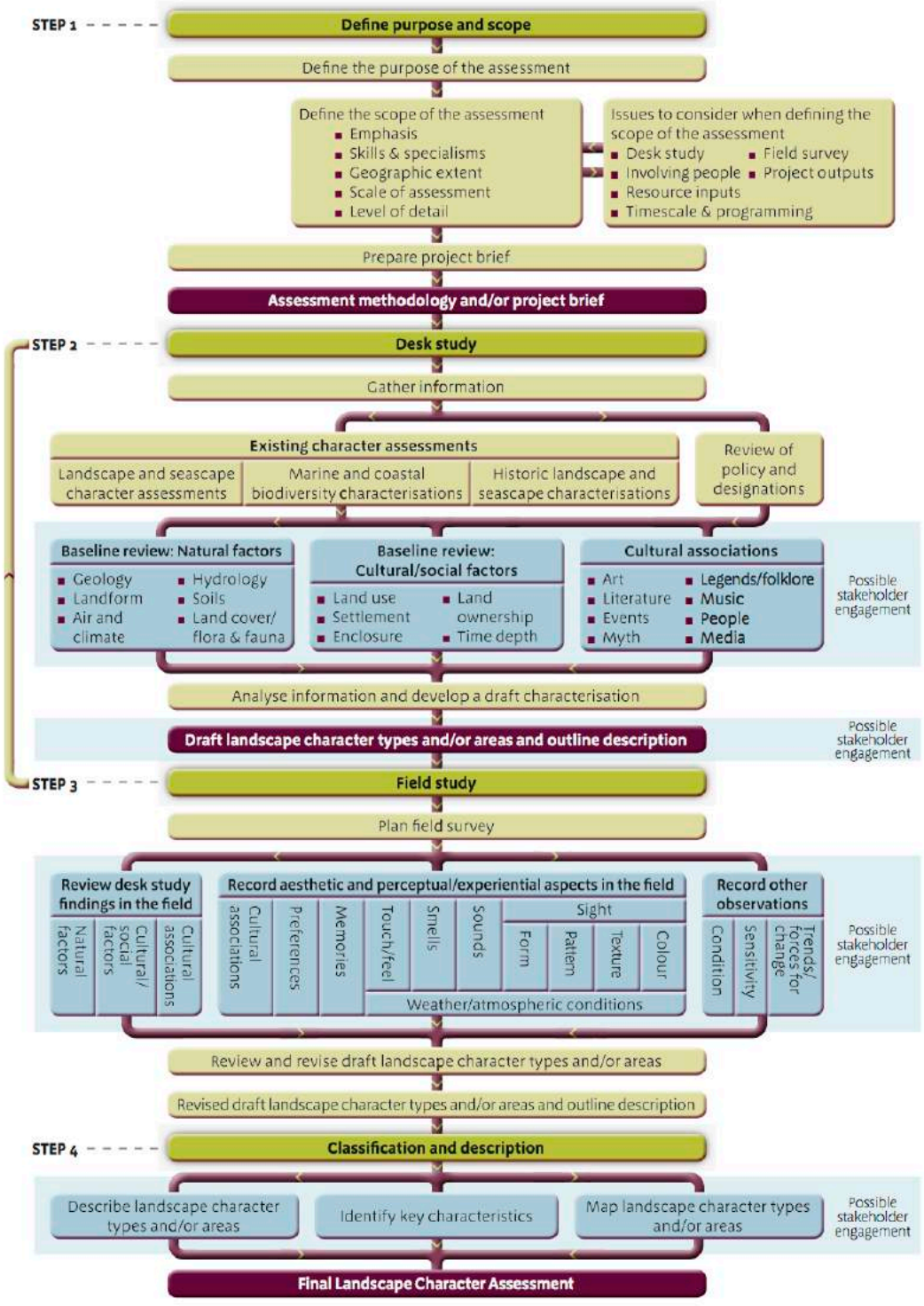


Figure 2.2: *Landscape Character Assessment - the process*[21]

[21] Natural England (2014) An Approach to Landscape Character Assessment. Available at: https://www.gov.uk/government/publications/landscape-character-assessments-identify-and-describe-landscape-types [Date Accessed: 15/06/18]

3 Desk Study

3.1 Policy Background

National Planning Policy

3.1.1 The NPPF identifies Landscape Character Assessment as a tool for protecting valued landscapes outside nationally designated areas without the need for statutory designation. Landscapes are mentioned as important features to consider in relation to development in the NPPF.

Table 3.1: *Paragraphs of the NPPF relevant to this study.*

Para	NPPF Quote
Para 20	*"Strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for … conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation"*
Para 127	*"Planning policies and decisions should ensure that developments … are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities)"*
Para 170	*"Planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan) … and the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland"*

3.1.2 When considering the wider landscape value of Cumnor, it is appropriate to consider 'natural capital' as per the NPPF[22]. Para 170 states that:

[22] MCHLG (2018) NPPF. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/733637/National_Planning_Policy_Framework_web_accessible_version.pdf [Date Accessed: 03/09/18]

"Planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan) [and] recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland".

3.1.3 Significant adverse impacts should be avoided, mitigated where avoidance is impossible or compensated for if mitigation is not possible.

3.1.4 In 2015, the Department for Communities and Local Government drew the importance of landscape character to the attention of the Planning Inspectorate. The minister drew attention to several recent appeal cases in which harm to landscape character has been an important consideration in the appeal being dismissed.

3.1.5 Writing about landscape character and prematurity in planning decisions Brandon Lewis (the minister) stated that:

"I have become aware of several recent appeal cases in which harm to landscape character has been an important consideration in the appeal being dismissed. These cases are a reminder of one of the twelve core principles at paragraph 17 of the National Planning Policy Framework, that plans and decisions should take into account the different roles and character of different areas, and recognise the intrinsic character and beauty of the countryside, to ensure that development is suitable for the local context".

District Planning Policy

3.1.6 VoWh District Council (DC) is developing a new Local Plan[23]. The emerging Local Plan sets out a vision for VoWH up to the year 2031.

[23] Vale of White Horse (2018) Local Plan Part 2: Detailed Policies and Additional Sites. Available at: http://www.whitehorsedc.gov.uk/services-and-advice/planning-and-building/planning-policy/local-plan-2031-part-2 [Date Accessed: 15/06/18]

3.1.7 Regarding the Local Plan, VoWH DC states that:

"Local Plan 2031 Part 1 was adopted in December 2016. The Part 1 plan sets out the 'spatial strategy' and strategic policies for the district to deliver sustainable development. It identifies the number of new homes and jobs to be provided in the area for the plan period up to 2031. It makes provision for retail, leisure and commercial development and for the infrastructure needed to support them".

"The Local Plan 2031 Part 2: Detailed Policies and Additional Sites complements the Part 1 plan and sets out policies and locations for housing for the Vale's proportion of Oxford's housing need up to 2031, which cannot be met within the City boundaries. It contains policies for the part of Didcot Garden Town that lies within the Vale of White Horse District, and detailed development management policies to complement the Local Plan 2031 Part 1, which replace the saved policies of the Local Plan 2011. It also allocates additional development sites for housing".

3.1.8 Relevant policies from the Local Plan 2031 Part 1[24] include:

- Core Policy 37: Design and Local Distinctiveness;
- Core Policy 41: Renewable Energy;
- Core Policy 44: Landscape; and
- Core Policy 45: Green Infrastructure.

3.1.9 Relevant policies from the Local Plan 2031 Part 2[25] include:

- Development Policy 5: Replacement Dwellings in the Open Countryside;
- Development Policy 7: Re-use, Conversion and Extension of Buildings for Dwellings in the Open Countryside;
- Development Policy 21: External Lighting;
- Development Policy 22: Advertisements;
- Development Policy 29: Settlement Character and Gaps;
- Development Policy 30: Watercourses;

[24] Vale of White Horse (2016) Adoption of the Local Plan 2031 Part 1: Strategic Sites and Policies. Available at: http://www.whitehorsedc.gov.uk/services-and-advice/planning-and-building/planning-policy/new-local-plan-2031-part-1-strategic-sites [Date Accessed: 15/06/18]

[25] Vale of White Horse (2018) Local Plan Part 2: Detailed Policies and Additional Sites. Available at: http://www.whitehorsedc.gov.uk/services-and-advice/planning-and-building/planning-policy/local-plan-2031-part-2 [Date Accessed: 15/06/18]

- Development Policy 31: Protection of Public Rights of Way, National Trails and Open Access Areas;
- Development Policy 33: Open Space; and
- Development Policy 35: New Countryside Recreation Facilities.

3.2 Natural factors

Geology

3.2.1 According to the BGS[26], Cumnor Parish contains the following types of bedrock:

- Oxford Clay Formation and West Walton Formation – Mudstone
- Hazelbury Bryan Formation – Sandstone, siltstone and mudstone;
- Kingston Formation – Sandstone;
- Stanford Formation - Limestone.
- Ampthill Clay Formation and Kimmeridge Clay Formation – Mudstone; and
- Lower Greensand Group – Sandstone.

Landform

3.2.2 The topography of the Parish is gently sloping, with high points to the north and south gently sloping to the centre in a valley formation. The west of the Parish is mainly flat at approximately 60m AOD. The high points of the Parish are Wytham Hill at 160m AOD to the north and Hurst Hill at 150m AOD and Cumnor Hill at 140m AOD to the south.

3.2.3 Farmoor Reservoir is located at the base of the valley along with arable fields. Most of the settlements are located on the north facing valley sides.

3.2.4 A map showing the topography data of the Parish from the Ordnance Survey (OS Terrain 5) is shown in **Figure 3.1**.

[26] British Geological Survey (2018) Geology of Britain. Available at: http://mapapps.bgs.ac.uk/geologyofbritain3d/index.html? [Date Accessed: 19/06/18]

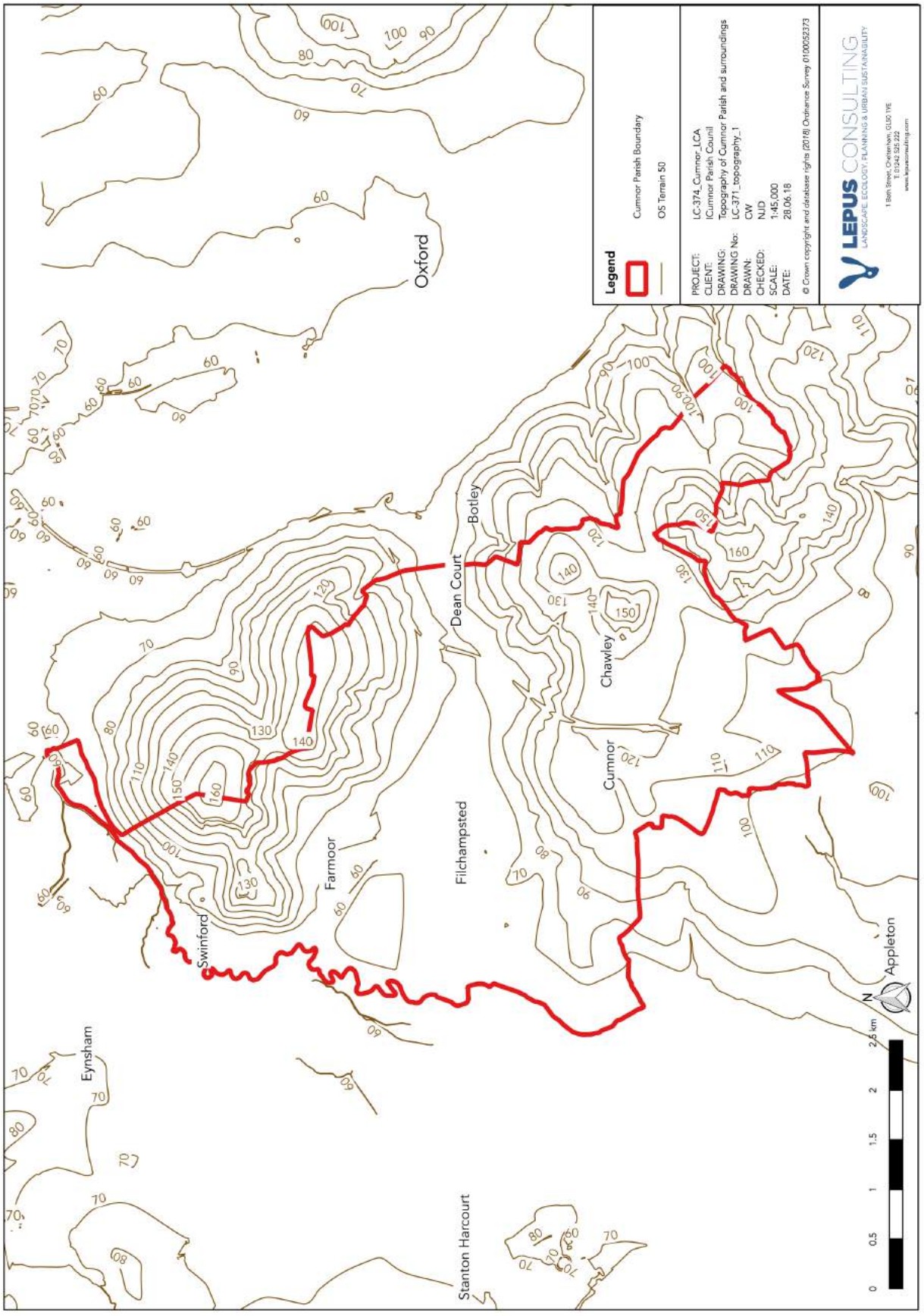


Figure 3.1: *The topography of Cumnor Parish and surroundings.*

Hydrology

3.2.5 There are major watercourses that cross into the centre of the Parish. To the west and north, the Parish border is almost entirely defined by the River Thames, which flows past Farmoor Reservoir and Swinford. The floodplain associated with this stretch of the River Thames extends into the Parish and these areas have a higher risk of flooding. The entire west and north Parish border is within Flood Zones 2 and 3. The west, north and east of the reservoir and Filchampstead are also within these two flood zones.

3.2.6 The NDP area is located within the Thames River Basin District[27]. Cumnor Parish is situated within two Management Catchments[28]; the Cotswolds as well as the Gloucestershire and the Vale catchments.

3.2.7 There are a number of watercourses running from The Hurst down to the valley at Dean Court.

Soil Types

3.2.8 In accordance with paragraph 118 of the NPPF, development can have an irreversible adverse (cumulative) impact on the finite national and local stock of best and most versatile (BMV) land. Avoiding the loss of BMV land is a priority as mitigation is rarely possible. BMV is usually indicated by Agricultural Land Classification (ALC) Grade 1, with ALC Grade 5 the least valuable.

3.2.9 There are three ALC types within Cumnor Parish, which is primarily Grade 3 land, with a large proportion of Grade 4 land across the centre of the Parish. A small area of Grade 2 land is located to the south, with the remainder of the land being classed as 'Urban' (see **Figure 3.2**).

[27] DEFRA (2016) Thames river basin district river basin management plan. Available at: https://www.gov.uk/government/publications/thames-river-basin-district-river-basin-management-plan [Date Accessed: 26/06/18]

[28] Environment Agency (2017) Catchment Data Explorer. Available at: http://environment.data.gov.uk/catchment-planning/ [Date Accessed: 26/06/18]

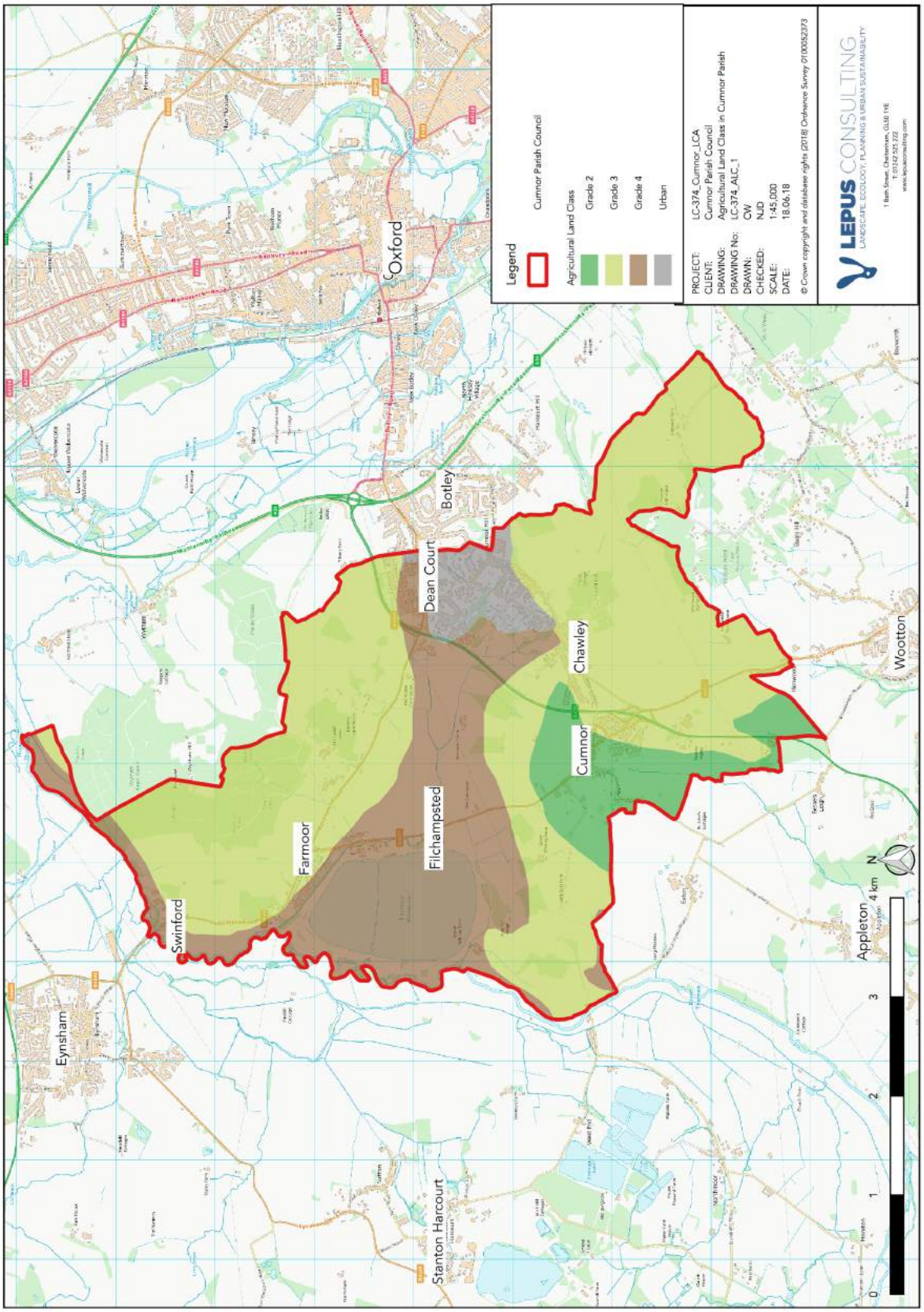


Figure 3.2: *Agricultural Land Class (ALC) across Cumnor Parish.*

Biodiversity/flora and fauna

3.2.10 Oxford Meadows Special Area of Conservation (SAC)[29] is partially adjacent to the northern boundary of Cumnor Parish, with the majority of the SAC located 2km north east of the Parish (see **Figure 3.3**). It is one of two SACs that represent lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) in the Thames Valley. The site has benefited from the survival of traditional management, which has been undertaken for several centuries, and so exhibits good conservation of structure and function. Part of the site is one of only two known sites in the UK for creeping marshwort (*Apium repens*).

3.2.11 Hydrological changes and invasive species are known threats to the creeping marshwort at Oxford Meadows SAC. Measures to combat these threats include improving the knowledge and understanding of the hydrological conditions on site and to prevent the spreading of invasive *Crassula* populations across the meadows.

3.2.12 Cothill Fen SAC[30] is located approximately 1km south of the Parish (see **Figure 3.3**). It is designated for its outstanding range of nationally rare habitats which support a large number of rare invertebrates and plants. The habitats consist of calcareous fen, calcareous grassland, woodland and scrub of varying degrees of wetness. The habitat supports over 330 species of vascular plant and over 120 nationally scarce or rare invertebrates, including the nationally rare Southern Damselfly (*Coenagrion mercuriale*).

3.2.13 At Cothill Fen SAC, the calcium-rich springwater-fed fens are pressured and threatened by water pollution, air pollution and hydrological changes. Measures to combat these pressures include reducing atmospheric nitrogen impacts, continue water sampling and analysis, develop a Diffuse Water Pollution Plan and assess the current surface water flows in streams, ditches and runnels.

[29] Natural England (2014) Site Improvement Plan: Oxford Meadows. Available at: http://publications.naturalengland.org.uk/publication/4942743310696448 [Date Accessed: 28/06/18]

[30] Natural England (2014) Site Improvement Plan: Cothill Fen. Available at: http://publications.naturalengland.org.uk/publication/6482436405854208 [Date Accessed: 28/06/18]

3.2.14 There are three Sites of Special Scientific Interest (SSSIs) within the Cumnor Parish boundary; Wytham Woods SSSI to the north of the Parish, Hurst Hill SSSI in the centre and Cumnor SSSI towards the south of the Parish. **Table 3.2** below shows further detail on these three sites.

Table 3.2: *Description of the three SSSIs located within Cumnor Parish.*

SSSI Name	Site Description	SSSI Unit	Habitat	Condition	Comment
Wytham Woods	Site consists of ancient woodland (Saxon era), wood pasture, common land and old limestone grassland. Rich in flora and fauna. Essential landscape features are the outliers of Calcareous Grit and Coral Rag. Spring-fed streams rich in calcium release from higher ground.	001 - 005	Lowland broadleaved, mixed and yew woodland	Unfavourable - Recovering	Moving towards 'favourable' due to selective felling, deer fencing and deer control programmes. There is evidence of some natural regeneration, except in Unit 005, where the dense canopy may be impeding.
		006	Lowland calcareous grassland	Favourable	Unit now 'favourable'. Grazed every spring and summer by a low stocking rate of Sussex Red cattle.
Hurst Hill	Supports a large range of semi-natural habitats which reflect the complex geology. On the western side, clay has been exposed following extraction for local brickworks. The old brick pits which lie to the west of Hurst Hill summit have produced a typical Kimmeridgian selection of marine reptiles.	001	Lowland broadleaved, mixed and yew woodland	Unfavourable - Declining	Earth Science feature obstructed. The grass sward is being maintained through cattle grazing, along with some mechanical cutting. Cattle removed over winter months.
		002	Lowland acid grassland	Unfavourable - Recovering	The grass sward is being maintained through cattle grazing, along with some mechanical cutting. Cattle removed over winter months.
Cumnor	Late Jurassic locality exposes an attenuated Corallian succession spanning the complex Lower and Middle Oxfordian cordatum-tenuiserratum Zone time interval.	001	Earth Heritage	Favourable	Exposure is visible, accessible and free from any vegetation. Site is very narrow (3-4m) between 2 fences and split between 2 owners. Badgers digging adjacent to the feature but not damaging the exposed rock face.

3.2.15 The Plan Area contains numerous stands of Ancient Woodland. The largest of which is Wytham Woods (see **Table 3.2**). There are also approximately ten other smaller stands of woodland scattered across the Parish.

Local Wildlife Sites

3.2.16 TVERC have provided a list of Local Wildlife Sites (LWSs) within Cumnor Parish, many of these are located in the centre of the Parish. There are seven LWSs across Parish, which are listed below:

- Thames Island west of Farmoor;
- Smith Hill Copse;
- Long Leys Farm Meadows;
- Farmoor Reservoir;
- Pasture near Chawley;
- Chawley Footpath; and
- Long Copse.

3.2.17 There is a proposed LWS at Denman's Copse.

Air and Climate

3.2.18 The air and climate of an area can impact landscape features, primarily in terms of agricultural possibilities and woodland development. The successful growth of these features impacts the surrounding landscape, with large stands of woodland adding a vertical sense to many areas.

3.2.19 The nearest Met Office climate station to Cumnor is Oxford. Here, the annual average temperature is 14.6°C, with highs of 22.7°C in July and lows of 1.8°C in the winter.

3.2.20 The yearly rainfall is on average 659.7mm, being greatest in October. The annual average wind speed is 7.9kn, the highest in February.

3.2.21 There are two air quality management areas (AQMAs) within 1km of the Parish. 'The City of Oxford' in an AQMA of approximately 4,500ha which is approximately 700m east of the Parish. The smaller AQMA at Botley is only 3.5ha and is 650m east of the Parish. Both of these areas are designated due to their elevated atmospheric NO_2 levels.

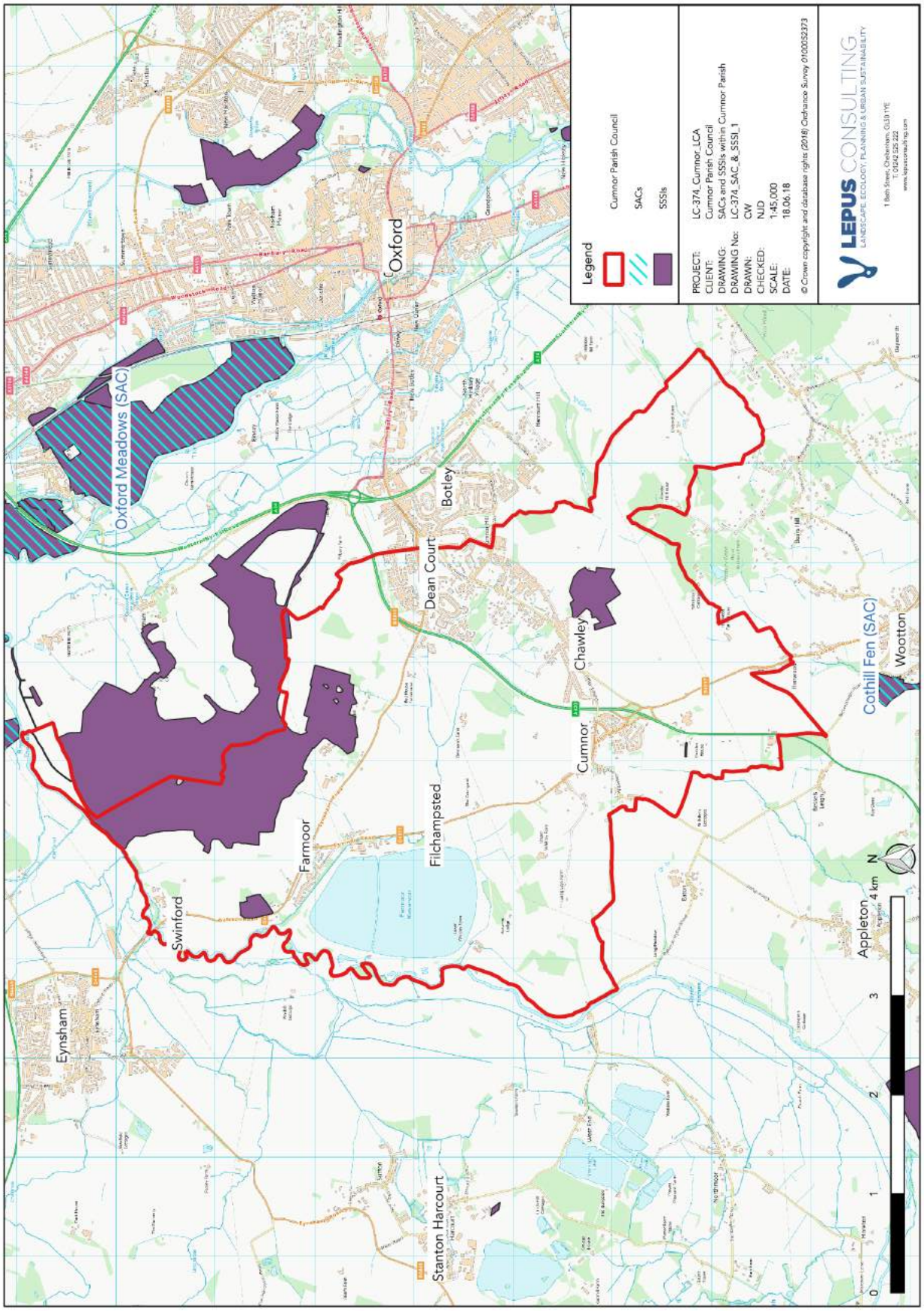


Figure 3.3: *The location of SACs and SSSIs in and surrounding Cumnor Parish.*

3.3 Cultural and social factors

Land use and land management

3.3.1 'A Thousand Years' by John Hanson[31] is a study carried out in the late 20th century that aims to identify how the landscape in the Cumnor area has developed over the past 1,000 years.

3.3.2 It is believed that the first settlements in the Parish were established during the Saxon invasion period. The Parish's economy consisted of agriculture, with river fisheries adding to its wealth, however the black death in 1349 had significant negative impacts on the Parish.

3.3.3 Over the 17th to 19th century change occurred very slowly, with the rural parish economy being dependent solely on agriculture until the 20th century. During the Victorian era the parish continued to be populated by labourers, with the population exceeding 1000 by 1841 which led to the construction of various amenities including the Parish school in 1861 and a post office and an inn by 1872[32].

3.3.4 The 20th century saw a rapid increase in development such as with the introduction of the local bus services, and by 1950 the increasing population was dependent on Oxford for employment, with high property prices influencing the socio-economic levels of the parish.

3.3.5 The Oxfordshire Historic Landscape Characterisation Report[33] maps the current and past land uses across Oxfordshire. The project examined maps of historic and archaeological processes which have over time influenced the landscape seen today.

[31] John Hanson (1996) A Thousand Years, a study of the interaction between people and environment in the Cumnor, Wytham and North Hinksey area of (former) North Berkshire.

32 GB Historical GIS / University of Portsmouth, History of Cumnor, in Vale of White Horse and Berkshire | Map and description, A Vision of Britain through Time. Available at: http://www.visionofbritain.org.uk/place/3598 [Date Accessed: 18/06/18]

[33] Oxfordshire County Council (2017) Oxfordshire Historic Landscape Characterisation. Available at: https://www2.oxfordshire.gov.uk/cms/content/oxfordshire-historic-landscape-characterisation-project [Date Accessed: 02/07/18]

3.3.6 In the report, Cumnor has been described as a 'rural settlement'. These are often the oldest parts of the Oxfordshire landscape, with the cores of some of the villages dating back to the 12th century. Cumnor is one of the larger villages surrounding Oxford. Population increases across the county are likely to lead to the merging of some of these adjacent, historic villages.

Figure 3.4: *The Old School on Cumnor High Street in the 1930s.*

Farmoor Reservoir

3.3.7 There are approximately 13,800 million tonnes of water stored at Farmoor Reservoir, which is filled from the River Thames[34]. It is the largest single area of open water in Oxfordshire.

3.3.8 Farmoor Reservoir is owned and managed by Thames Water Utilities Ltd. Its primary use is for drinking water supply, and predominantly supplies water to Swindon, among other locations.

[34] Thames Water (2016) Farmoor Reservoir. Available at: https://corporate.thameswater.co.uk/About-us/Community/Great-days-out/Recreational-sites/Farmoor-reservoir [Date Accessed: 03/07/18]

3.3.9 Stage 1, the northern half of the reservoir, was built in 1967 and Stage 2 to the south in 1976. There is a causeway across the reservoir, separating these two stages. There is a pumping station to the west and a water treatment works to the east.

3.3.10 Recreational activities carried out at the Reservoir include extensive trout fishing and sailing. The reservoir is also a highly-visited bird watching site[35]. Bird species that are commonly found across the reservoir include:

- Ducks and other wildfowl;
- Rare Gulls, such as Mediterranean, Little and Iceland;
- Passerines, such as wagtails, chats and pipits; and
- Sometimes raptors.

3.3.11 Three nature reserves are located near Farmoor Reservoir include Pinkhill Meadow, Shrike Meadow and Buckthorn Meadow. Both Pinkhill and Shrike Meadows have observation hides and Pinkhill has a feeding station.

Listed Buildings and Scheduled Monuments

3.3.12 Listed Buildings are those that have been placed on the Statutory List of Buildings of Special Architectural or Historic Interest. There are 59 Listed Buildings across the Parish, most of which are concentrated within the village of Cumnor (see **Figure 3.5**). There are two Grade II* Listed Buildings and one Grade I Listed Building.

3.3.13 Swinford Bridge is scheduled under the Ancient Monuments and Archaeological Areas Act 1979. The bridge is Grade II listed.

[35] Oxford Ornithological Society (2018) Farmoor. Available at: http://www.oos.org.uk/Sites/Farmoor.php [Date Accessed: 03/07/18]

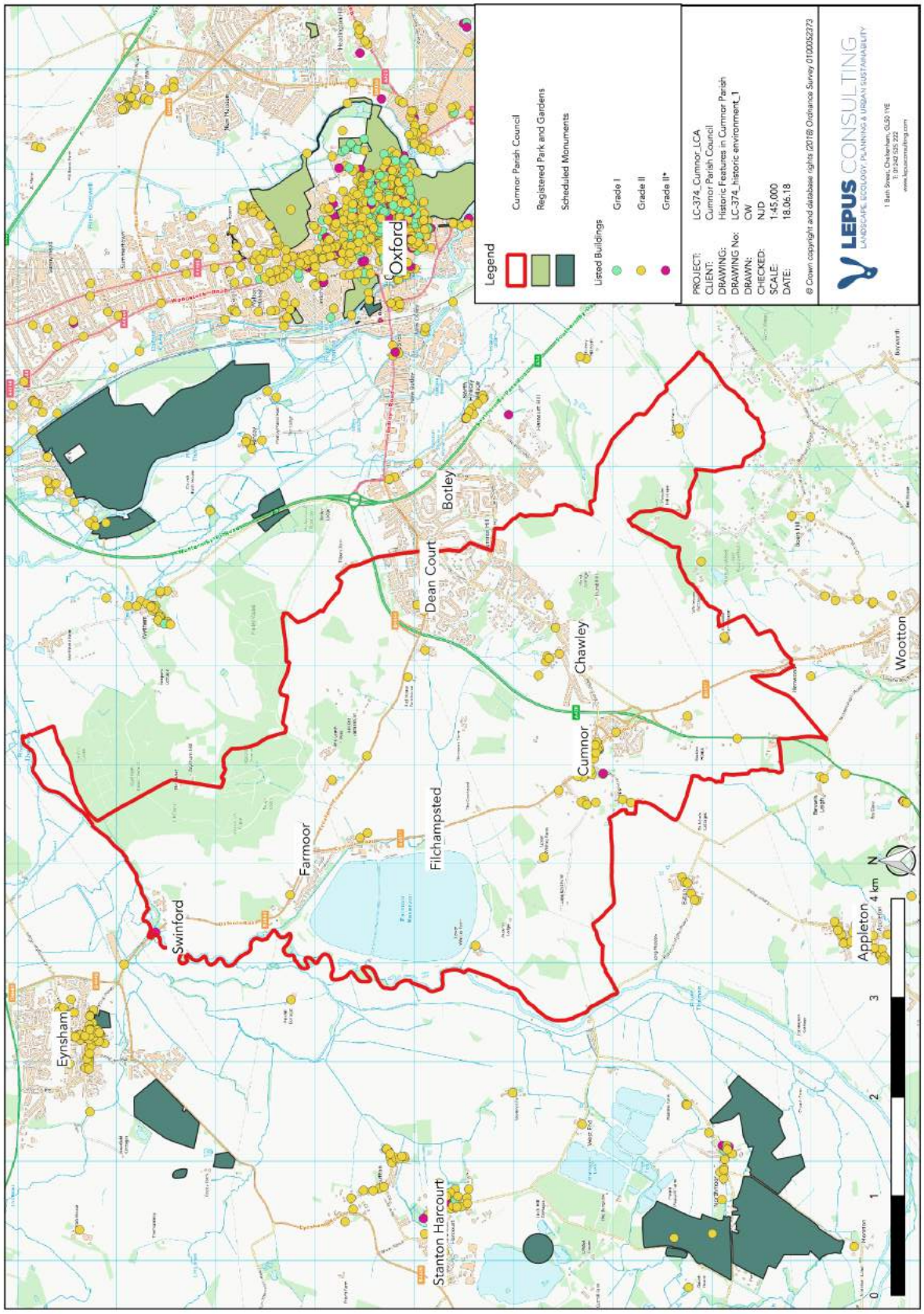


Figure 3.5: *The historic environment of Cumnor Parish and surroundings.*

Conservation Areas

3.3.15 There is one Conservation Area (CA) within the Parish located in and around Cumnor Village[36]. It covers an area of approximately 30ha. It was first designated in 1969 but the boundary was amended in 1990. The CA incudes key buildings within Cumnor village such as St Michaels Church, New Cumnor Place and the Bear and Ragged Staff Public House.

Public Rights of Way

3.3.16 There is a network of Public Rights of Way (PRoW) footpaths and bridleways within the Parish, in particular around the village of Cumnor. There are 56 separate footpaths and bridleways within Cumnor Parish. A small stretch of 'byway open to all traffic' is located in the south of the Parish.

3.3.17 There is no PRoW footpath through the north of the Parish, around Wytham Woods, as these are only accessible with a permit.

3.3.18 Safe cycle routes within the Parish are limited, with many bicycle users restricted to narrow roads or uneven footpaths. This includes limited cycle and pedestrian connectivity between Farmoor and Cumnor village, as well as between Farmoor and Dean Court.

[36] Vale of White Horse (2011) Cumnor Conservation Area Appraisal. Available at: http://www.whitehorsedc.gov.uk/vale/cumnor-conservation-area-appraisal-adoptedtcm4-8240.pdf [Date Accessed: 29/06/18]

3.4 Perceptual and aesthetic factors

Views

3.4.1 A views policy was first introduced in Oxford in 1962 to protect the character of the city's skyline from the impacts of high buildings and has served the city for fifty years in successive development plans. Policies HE.9 and HE.10 in the Oxford Local Plan 2001-2016[37] aim to protect the character of the skyline and manage the characteristics of Oxford's view cones. In light of the continuing challenges of building within the city to meet the demands of a modern society and to support its academic and economic communities, Oxford City Council, Oxford Preservation Trust and English Heritage have collaborated to produce an Assessment of the Oxford View Cones[38].

3.4.2 The Assessment of Oxford View Cones provides an insight into the views as important heritage assets of Oxford. It examines the significance of the ten protected views that were set out in Oxford's previous Local Plan. Of these ten protected views, a few incorporate Cumnor and its surroundings.

3.4.3 Although outside the Parish boundary, the view from Boar's Hill into Oxford is important to the local area. The east of Cumnor Parish is within the foreground of this view, providing an attractive rural foreground view. There are no physical structures that distract from the view of the City Centre. The numerous small farm cottages and buildings contribute highly to the aesthetic landscape. There are evident features of farming in the rural character of these hillsides and the preservation of the character associated with the artists and poets of the past. The main detractors of this view are the pylons stretching from east to west.

[37] Oxford City Council (2001) oxford Local Plan 2001 – 2016. Available at: https://www.oxford.gov.uk/downloads/download/414/oxford_local_plan_2001_-_2016 [Date Accessed: 02/07/18]

[38] Oxford City Council, Oxford Preservation Trust and Historic England (2015) Assessment of Oxford View Cones. Available at: https://www.oxford.gov.uk/info/20064/conservation/876/oxford_views_study [Date Accessed: 02/07/18]

3.4.4 Other protected views are from viewpoints located to the east of Oxford, looking past the City Centre and its historic features, with areas of Cumnor and Wytham Woods forming backgrounds and horizons of the view. For example, from Elsfield, Cumnor Hill forms a *"dark backdrop with fields"*.

3.4.5 The assessment of views from South East Oxford (Crescent Road) states that *"Wytham Hill provides a background and horizon to the view. The indistinct texture of woodland provides a sense of depth to the view"*. However, both of these views are distracted by the presence of pylons.

Noise

3.4.6 The main aural detractors in and around the Parish are from the road network, specifically the A420 dual carriageway which runs from the east to the south of the Parish. The B4017 runs north to south across the Parish and the B4044 north to east. Aural detractors outside of the Parish boundary include the A40 to the north and the A34 to the east. The west of the Parish has minimal road networks, with the reservoir and large open fields. This reduces noise impacts to the western side of the Parish.

3.4.7 Some noise disturbance can be heard from flights in and out of the nearby Brize Norton air field. This can be between the hours of 11pm and 6am and therefore becomes a more distinctive aural detractor of the surrounding rural countryside.

3.5 Green Infrastructure

3.5.1 Natural England's Green Infrastructure (GI) Guidance[39] defines GI as:

"Green Infrastructure is a strategically planned and delivered network comprising the broadest range of high quality green spaces and other environmental features. It should be designed and managed as a multifunctional resource capable of delivering those ecological services and quality of life benefits required by the communities it serves and needed to underpin sustainability. Its design and

[39] Natural England (2009) Natural England's Green Infrastructure Guidance (NE176). Available at: http://publications.naturalengland.org.uk/publication/35033 [Date Accessed: 12/06/18]

management should also respect and enhance the character and distinctiveness of an area with regard to habitats and landscape types.

"Green Infrastructure includes established green spaces and new sites and should thread through and surround the built environment and connect the urban area to its wider rural hinterland. Consequently, it needs to be delivered at all spatial scales from sub-regional to local neighbourhood levels, accommodating both accessible natural green spaces within local communities and often much larger sites in the urban fringe and wider countryside".

3.5.2 As stated in the Natural England guidance, types of GI include the following:

- Parks and Gardens – urban parks, Country and Regional Parks and formal gardens.
- Amenity Greenspace – informal recreation spaces, housing green spaces, domestic gardens, village greens, urban commons, other incidental space and green roofs.
- Natural and semi-natural urban greenspaces - woodland and scrub, grassland (e.g. downland and meadow), heath or moor, wetlands, open and running water, wastelands and disturbed ground) and bare rock habitats (e.g. cliffs and quarries).
- Green corridors – rivers and canals including their banks, road and rail corridors, cycling routes, pedestrian paths and PRoW.
- Other - allotments, community gardens, city farms, cemeteries and churchyards.

3.5.3 Regarding GI, the NPPF states that local planning authorities should:

"Set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure".

4 Field Study

4.1 Introduction to field studies

4.1.1 Information collected in the field can be used to test, refine and add to the results of the desktop study. This method was vital to confirm the boundaries of the draft LCA's identified. The field work was essential to capture the aesthetic, perceptual and experiential qualities of landscapes. Any queries that were brought up and identified during the desk study were answered and clarified during the field study.

4.2 Planning the field survey

4.2.1 A common checklist was created and used to record natural, cultural and aesthetic features visible from each viewpoint. The checklist ensured all aspects of the landscape had been considered whilst out in the field. The field checklist can be found in **Appendix B**.

4.2.2 It is acknowledged that not all areas of an LCA were publicly accessible and some viewpoints chosen could only lead to views of part of an LCA. The field survey was not an exhaustive study of every corner of the Parish; it provided useful contextual information when considered alongside the desk study. Together both techniques provided an evaluation of landscape character.

4.2.3 Where possible, at least two viewpoints within an LCA were visited to gain a greater understanding of the land. As a result, some of the perceptual features recorded in the field are sometimes contradicting and therefore both descriptions are recorded.

4.3 Field survey results

4.3.1 The field survey took place on the 17th July 2018 between 10am and 4pm by Neil Davidson (BSc Hons, MSc, CMLI, CIEEM) and Catherine Wright (BSc Hons, MSc). The day was warm and slightly overcast.

4.3.2 As the field study was undertaken in the height of summer, the vegetation was high and it is anticipated that this restricted some of the potential long distance views. Other seasonal impacts were the colour and height of many arable fields, which were tall and yellow at the time for surveying. In the winter, trees and other vegetation are likely to be sparse and bare. This would allow for more long distance views, but also has the potential to lead to increased noise in the area.

4.3.3 Overall, the results of the field study matched with that of the desktop study. No changes were made to the draft LCA boundary lines.

4.4 Landscape character areas

4.4.1 Following careful analysis of landscape character in the NDP area, the following 14 LCAs have been identified. These are presented in **Figure 4.1** and are listed below:

- Farmoor Reservoir to Wytham River Floodplain (LCA 1);
- Farmoor Reservoir (LCA 2);
- Edge of Reservoir and Farmoor (LCA 3);
- Beacon Hill (LCA 4);
- Wytham Woods (LCA 5);
- Land North of Dean Court (LCA 6);
- Reservoir to Dean Court (LCA 7);
- Whitley to Saddle Copse (LCA 8);
- Land between Bablock Hythe and Cumnor Village (LCA 9);
- Cumnor Village (LCA 10);
- Land North of Chawley (LCA 11);
- Dean Court and Chawley (LCA 12);
- Land South of Cumnor and Chawley (LCA 13); and
- Hurst Hill and Chilswell Farm (LCA 14).

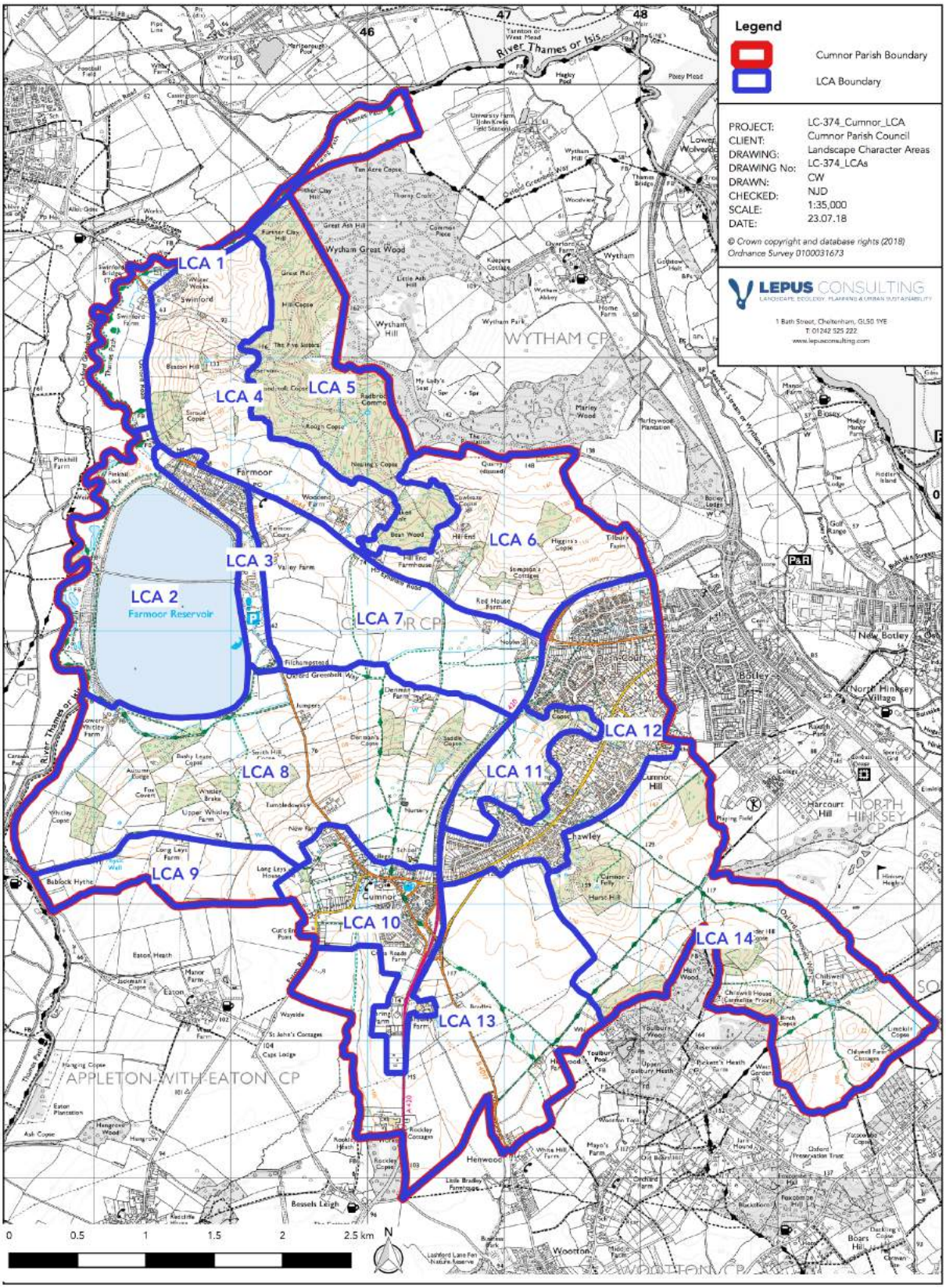


Figure 4.1: *Map of LCAs identified within the Cumnor Parish boundary.*

5 Farmoor Reservoir to Wytham River Floodplain (LCA 1)

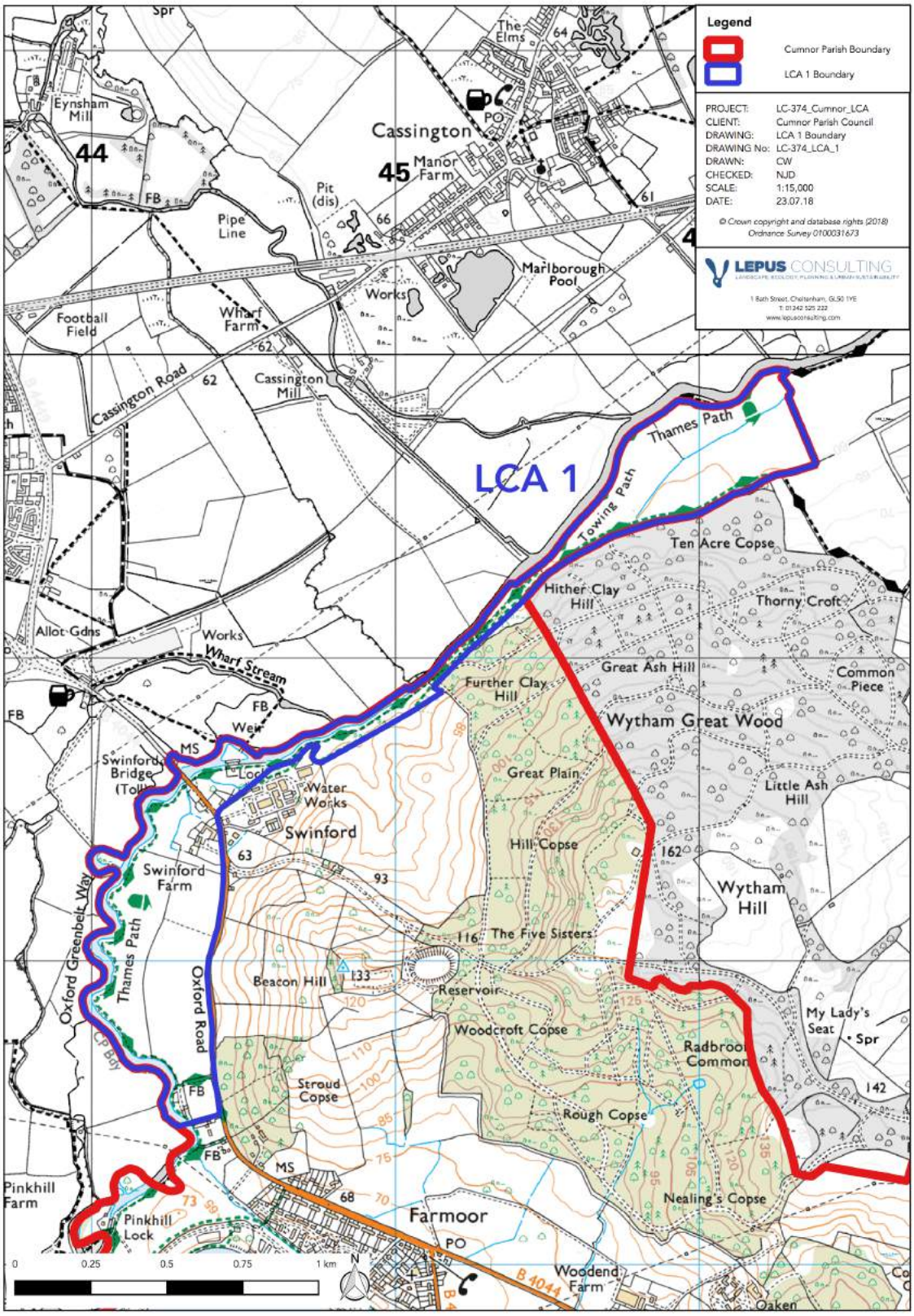


Figure 5.1: *View of Swinford Bridge from the south (by Andrew Gustar).*

5.1 Location and Boundaries

5.1.1 Farmoor Reservoir to Wytham River Floodplain LCA consists of the watercourse of the River Thames and the southern side of its associated floodplain. The area is confined to the north by the Parish boundary, which follows the course of the river. The LCA boundary incorporates Flood Zone 2.

5.2 Designations and Policy

5.2.1 This area contains part of the Wytham Woods SSSI. The B4044 crosses the river to the north (Swinford toll bridge) and borders the LCA to the south east. Part of the Thames Path National Trail and the Oxford Green Belt Way follow the River Thames along south bankside and the north and north west borders of the LCA. There are four Listed Buildings in the LCA; three Grade II and one Grade II*. The area primarily covers Grade 4 ALC land, and a small proportion of Grade 3 ALC land to the east.

5.3 Natural

Landform

5.3.1 The geological bedrock of this area is comprised of Oxford Clay Formation and West Walton Formation Mudstone. Land cover of the area comprises of the watercourse, broadleaved woodland, pastureland and Swinford village. The topography of the area is flat, raising slightly to 60m AOD in the north of the LCA, towards Wytham Woods.

Biodiversity and the Natural Environment

5.3.2 The River Thames is located along the northern and western boundaries of the LCA, which is also the Parish boundary. Along the northern boundary, the watercourse is primarily adjacent to woodland or lined with trees. Along the western boundary, the watercourse is adjacent to open grassland. The LCA primarily consists of large fields with intact hedgerows, often connecting to vegetation along the river.

5.4 Cultural/Social

Built Environment

5.4.1 The small settlement of Swinford is situated in the centre of the LCA, which consists of a few dwellings associated with the farmstead at Swinford Farm, where Swinford toll bridge carries the B4044 across the Thames. The B4044 also borders part of the LCA. To the south and to the east of Swinford there is no built form. Vehicle access to the far corners of the LCA is restricted as there are no roads or tracks. The Thames Path National Trail follows the river in the LCA.

5.4.2 Swinford Toll Bridge carries the B40444 and crosses the River Thames at Swinford, near Eynsham Lock. The bridge is privately owned, and the current toll charge is 5p per car, rising to 10p for larger vehicles. The bridge was built for the Bridger Company Turnpike Trust and opened in 1769. It remains one of only two toll bridges that cross the Thames upstream of London. The Swinford Toll bridge features in Nevil Shute's first works 'Stephen Morris' and 'Pilotage'.

Community Assets

5.4.3 The community assets within the LCA are located at Swinford and include:

- Swinford Manor Farm (bed and breakfast);
- Swinford Toll;
- Pearson Buchholz Ltd (accountants);
- Me and My Car Gift Shop; and
- Eynsham Lock Campsite.

5.5 Perceptual and Aesthetic

5.5.1 Unsettled areas, particularly to the north, have a sense of peace and tranquillity, although human influence including occasional views of settlement limit the sense of remoteness. Long distance views from this area are limited due to the sunken topography created by the watercourses and Wytham Hill rising to the south east.

Important Views

5.5.2 Wytham Hill frequently forms a wooded backdrop in views across the area to the east. To the west, there are views across the Thames and pasture outside the Parish boundary.

Noise

5.5.3 The north of the LCA is quiet, with no major roads nearby and the terrain and vast area of Wytham Woods providing an aural barrier to the busy A420 and other roads in the Parish. To the south of the LCA, the B4044 passes through the area. This creates noise disturbance from the traffic to nearby residents. However, due to the toll bridge located here, traffic is slow and often stops to queue over the bridge. This helps mitigate the sound impact of the traffic.

5.6 Recommendations to plan, manage and protect distinctiveness

- Enhance and strengthen the character of tree-lined watercourses by planting native tree species such as willow and alder.
- Establish and maintain diverse banksides and aquatic vegetation through sympathetic management and the use of agri-environment schemes.
- The tranquil and secluded character of the area should be maintained.

6 Farmoor Reservoir (LCA 2)

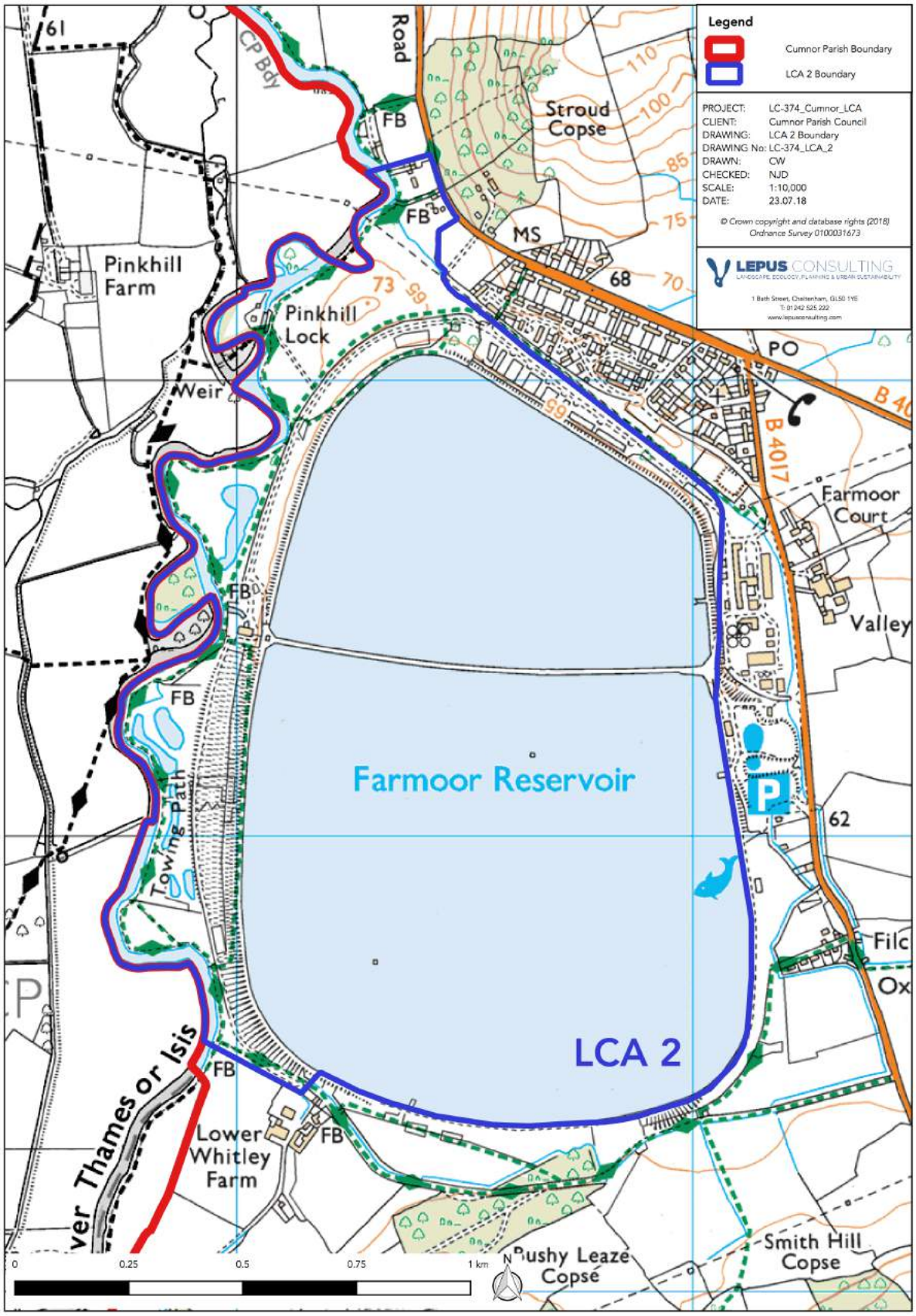


Figure 6.1: *View from Farmoor Reservoir car park looking southwards, showing the activities that can take place here.*

Figure 6.2: *View from Farmoor Reservoir car park looking west, showing the openness of the Reservoir.*

6.1 Location and Boundaries

6.1.1 The Farmoor Reservoir LCA is located on the western boundary of the Parish, comprising of the River Thames and the eastern side of its associated floodplain and Farmoor Reservoir itself. The LCA includes land classified as Flood Zone 2.

6.2 Designations and Policy

6.2.1 Part of the Thames Path National Trail follows the River Thames along the north west boundary of the LCA. Part of the Oxford Green Belt Way follows the border of the LCA to the west and south. There is a network of pubic footpaths that surround the reservoir and along the River Thames eastern border. There are no statutory designated biodiversity or historic features in the LCA.

6.3 Natural

Landform

6.3.1 The geological bedrock of this area is comprised of Oxford Clay Formation and West Walton Formation Mudstone. Land cover of the area comprises of the reservoir, part of the River Thames, areas of scrub and grassland. The topography of the area is flat, at 60m AOD. The landform is distinctive to the area.

Biodiversity and the Natural Environment

6.3.2 Farmoor Reservoir is an LWS, as well as a small site known as 'Thames Island west of Farmoor'. The River Thames is located along the western boundary of the LCA, which is also the Parish boundary. The watercourse is adjacent to grassland/scrubland or lined with trees.

6.4 Cultural/Social

Built Environment

6.4.1 The LCA is primarily covered by Farmoor Reservoir with the only other built features being small buildings for recreational activities along the River Thames. The Thames Path National Trail follows the river within the LCA.

Community Assets

6.4.2 The reservoir provides significant recreational opportunities, including sailing and fishing. The LCA has good access for bird watching, fishing and walking. Community assets in the LCA also accommodate recreational opportunities along the River Thames, which includes Anglo Welsh Ltd – Oxford (Boat Tour Agency) and Oxford Cruisers.

6.5 Perceptual and Aesthetic

6.5.1 Recreational structures and human activity prevent a sense of remoteness in the LCA. The flat area leads to a sense of exposure and vastness. When visited on a windy day, the sound of the water against the concrete edges of the reservoir is prominent. There is a sense of busyness due to the sailing and windsurfing activities taking place, although the area is generally quiet. The area is tranquil due to the calming sound of the waves and birds visiting the reservoir and there is almost no sound of traffic.

Important Views

6.5.2 There are views across the large waterbody of the reservoir from the top of the surrounding embankment, including from the public footpath adjacent to the south-western edge of the reservoir. The reservoir is a prominent feature in views from the elevated locations which overlook the area to the north, east and south.

Noise

6.5.3 There is almost no aural detraction from the nearby road. Cumnor Road is relatively quiet with less traffic than other roads in the Parish. The main sounds are from waves against the edge of the reservoir and ropes hitting sailboat masts in the wind.

6.6 Recommendations to plan, manage and protect distinctiveness

- Enhance and strengthen the character of tree-lined watercourses.
- Establish and maintain diverse banksides and aquatic vegetation through sympathetic management and the use of agri-environment schemes.
- The tranquil character of the area should be maintained.
- The reservoir should be maintained and enhanced as an LWS and an important local feature.
- Currently, there is only one public access point in the Parish to launch boats etc onto the Thames. This is located at Bablock Hythe on common land. Greater access to the Thames would encourage use of this as a recreational asset.

7 Edge of Reservoir and Farmoor (LCA 3)

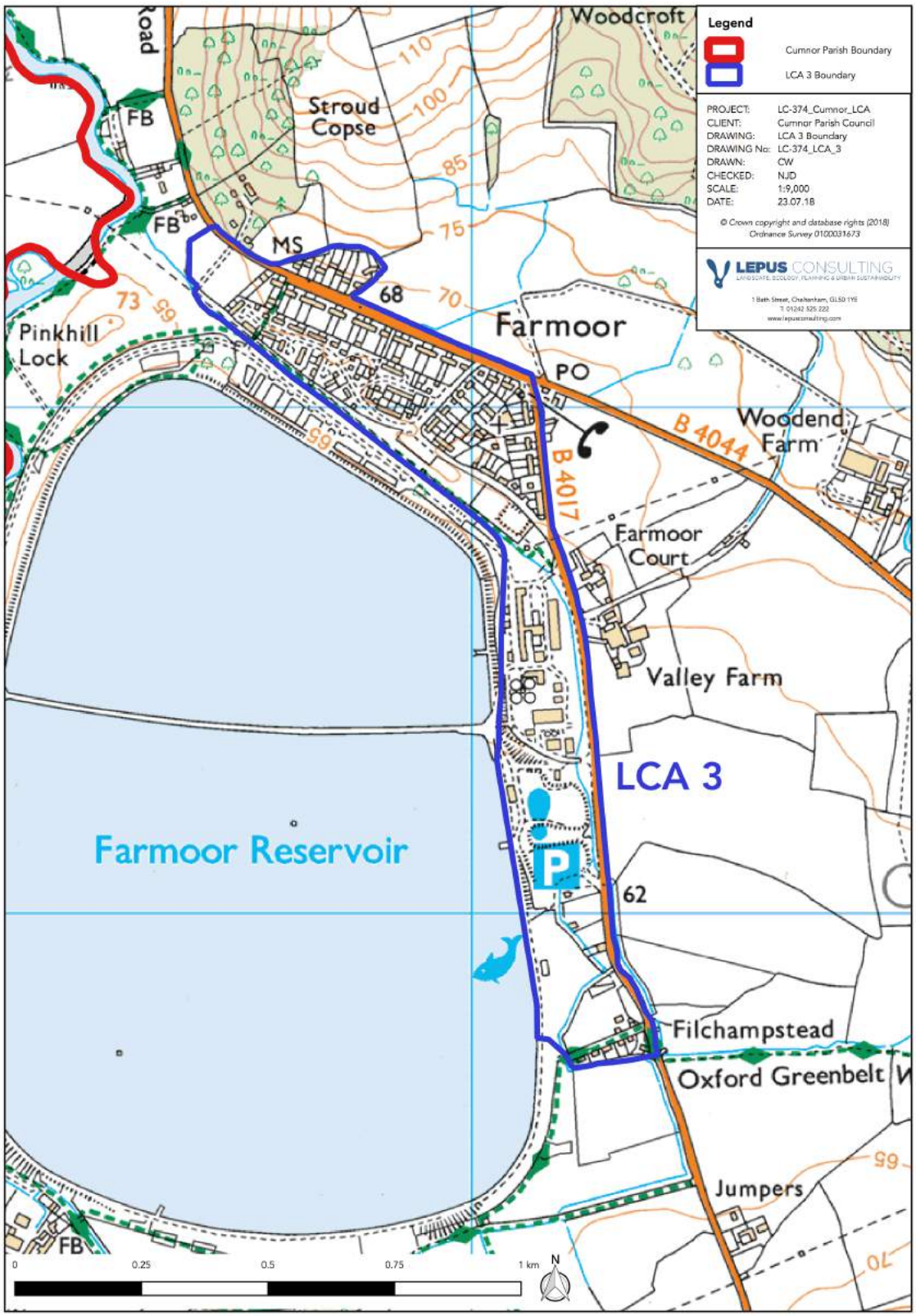


Figure 7.1: *Sailing boats berthed at the Oxford Sail Training Trust showing the type of activity that takes place in the LCA.*

7.1 Location and Boundaries

7.1.1 Edge of Reservoir and Farmoor LCA is located to the west of the Parish. The western boundaries follow the reservoir. The eastern boundary follows Cumnor Road, with the north boundary following the B4044 mostly, but also includes he small area of settlements situated north of the B4044. The south border follows largely follows Lower Whitley Road, where most of the built form ends and fields are found to the south.

7.2 Designations and Policy

7.2.1 There are some public footpaths in the LCA, with three routes surrounding the settlement to the north of the LCA and one along the southern border. A short section of the Oxford Green Belt Way borders the south of the LCA. There are no statutory designated biodiversity features or sites in the LCA. There is one Grade II Listed Building in the LCA. The area primarily covers Grade 4 ALC land, and a small proportion of Grade 3 ALC land to the north.

7.3 Natural

Landform

7.3.1 The geological bedrock of this area is comprised of Oxford Clay Formation and West Walton Formation Mudstone. Land cover of the area comprises of mainly built form, including dwelling and recreational centres. There is also a water treatment works and a large car park for the reservoir within the LCA. The topography of the area is flat at 60m AOD.

Biodiversity and the Natural Environment

7.3.2 In-between the built form, there are areas of grassland land and trees scattered across the LCA. However, biodiversity features are few and dispersed.

7.4 Cultural/Social

Built Environment

7.4.1 A large proportion of the LCA is covered by dwellings to the north of the LCA. Other features are related to use of the reservoir, including the water treatment works, large car park and sailing club. The small hamlet of Filchampstead is located in the south of the LCA, which consists of a lane with houses either side.

Community Assets

7.4.2 The community assets situated within the LCA primarily relate to the recreational activities which take place on the reservoir. These and other community assets include:

- Oxford Sailing Club;
- Oxford Sail Training Trust;
- Hackett's Harbour Café;
- Farmoor Trust Fishery;
- Farmoor Stores;
- The Oxford Limousine Company;
- Oxford Meditech Ltd (computer shop);
- CVM Minibus Rentals;
- The Firs Boarding Cattery; and
- Gavin's Bike Hospital.

7.5 Perceptual and Aesthetic

7.5.1 The area has a sense of enclosure and intimacy due to the various facilities and services that are within the south of the LCA. The north is primarily residential. Overall, the area feels busy and slightly discordant.

Important Views

7.5.2 Views are limited in the north of the area, often obscured by buildings. The south of the LCA has vast views across Farmoor Reservoir and to the west outside the Parish.

Noise

7.5.3 Cumnor Road to the east of the LCA is relatively quiet with less traffic than other roads in the Parish. The main sounds in the south of the LCA are from the reservoir and ropes hitting sailboat masts in the wind. In the north of the LCA, the B4044 is noisy and is aurally distracting. The north of the LCA is not tranquil due to these detractors, whereas there is a greater sense of remoteness in the south.

7.6 Recommendations to plan, manage and protect distinctiveness

- Maintain the presence of trees and plant new ones where possible.
- Maintain the recreational facilities available to enhance visitor numbers to the reservoir.
- Development of cycle path, particularly between Farmoor and Cumnor, but also one that continues into Oxford. A safe cycle route from Farmoor to Cumnor, and Farmoor to Dean Court, would enhance connectivity
- New development should take the opportunity to integrate with the landscape using materials and dwelling size at an appropriate scale and dimension so as not to antagonise existing discordant characteristics.
- The setting and special character of the historic towns should be preserved.
- Development should not be supported if it is likely to result in neighbourhood towns merging into one another nor the sprawl of large built-up areas.
- The surrounding countryside should be safeguarded from encroachment.

8 Beacon Hill (LCA 4)

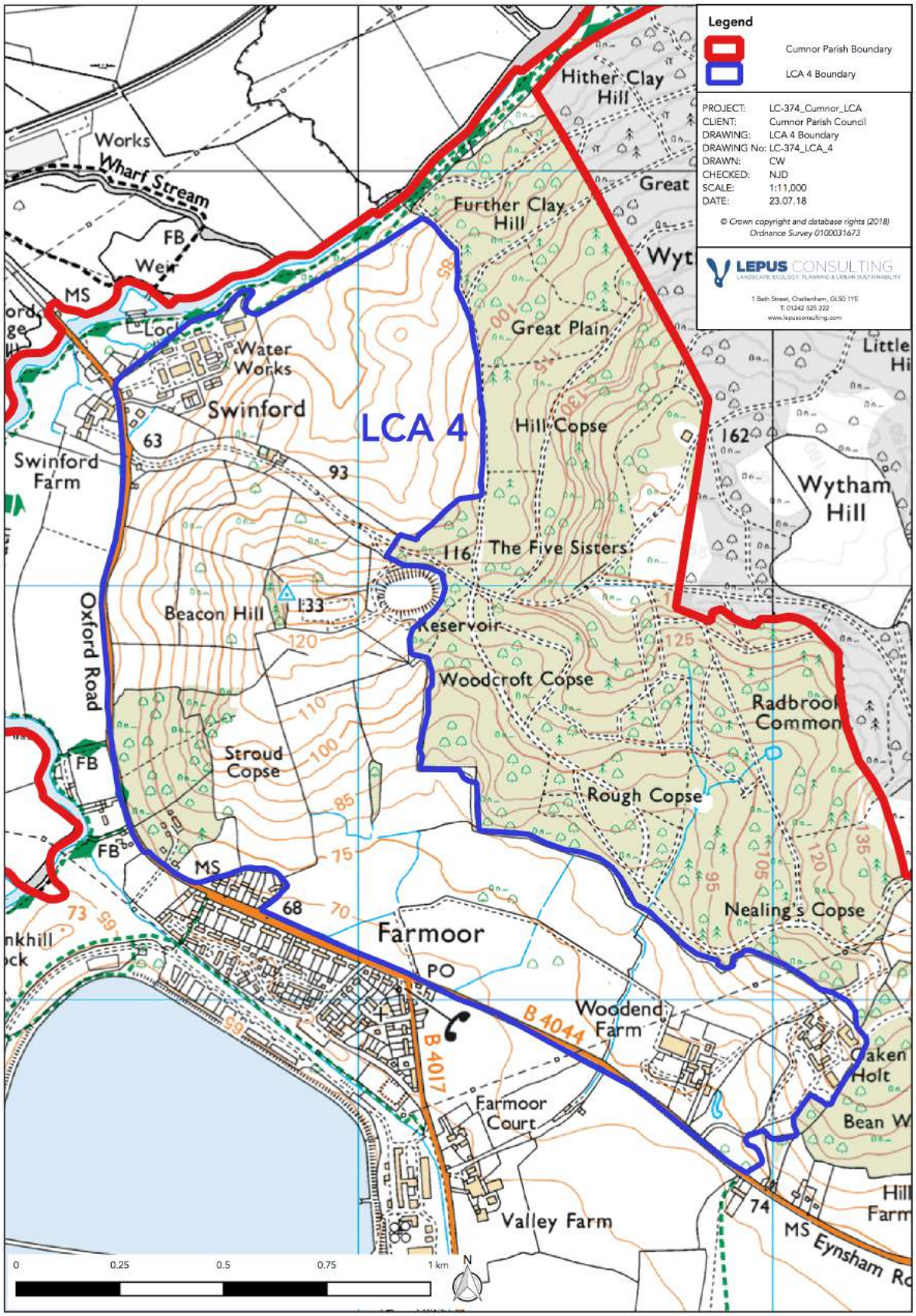


Figure 8.1: *View from near the summit of Beacon Hill to the north, showing arable fields surrounded by hill side woodland which provides an enclosing effect.*

Figure 8.2: *View from the roundabout on the B4044 to the north showing twinned hedgerows.*

8.1 Location and Boundaries

8.1.1 Beacon Hill LCA is located to the north of the Parish. It is bordered by the B4044 to the west and south. To the north it is bordered by the River Thames floodplain. The eastern LCA boundary follows the tree line of Wytham Woods.

8.2 Designations and Policy

8.2.1 There is one public footpath along the northern border of the LCA. There is one Grade II Listed Building in the LCA. Part of Wytham Woods SSSI in the LCA. There is one stand of Ancient Woodland in the LCA. The LCA is predominantly Grade 3 ALC land, with a small area of Grade 4 land to the north.

8.3 Natural

Landform

8.3.1 The geological bedrock of this area is comprised of:

- Hazelbury Bryan Formation; and
- Oxford Clay Formation and West Waldon Formation.

8.3.2 The topography of the area is sloping, with Beacon Hill as a high point at 130m AOD in the centre of the LCA, sloping down to 70m AOD at the north and south ends.

Biodiversity and the Natural Environment

8.3.3 South of Swinford, the fields are mostly small with hedgerow boundaries. These hedgerows are tree lined and often connect with Wytham Woods and other small areas of scattered trees in the LCA. There is a strong hedgerow structure with hedgerow trees. These hedgerows define the fields within the LCA. There are distinctive twinned hedgerows in the southern part of the LCA. The hedgerows connect areas of valued habitats to the nearby Wytham Woods. The tree species in the area are primarily ash and oak. Some trees seen in the area are likely good habitat for bat species.

8.3.4 The fields within the area are varied. There are fields of rough pasture, as well as arable fields. The land is associated with Wytham Wood and is farmed up to the lower slopes to the east. The fields form part of the important setting of Wytham Woods SSSI.

8.3.5 The stand of Ancient Woodland within this LCA is Stroud Copse.

8.4 Cultural/Social

Built Environment

8.4.1 There are two drinking water reservoirs at the summit of Beacon Hill and pipelines from Farmoor and Swinford water treatment plants.

Community Assets

8.4.2 There are few community assets located around the LCA order, which includes:

- Azad University in Oxford;
- Wytham House (nursing home); and
- Oaken Holt Care Home.

8.5 Perceptual and Aesthetic

8.5.1 The area is large, but the lines of trees that border the numerous fields in the area provides a sense of enclosure. The varied field use makes the area diverse and interesting. The majority of the fields are arable and highly managed, but some fields of rough pastureland provide a more natural feel.

Important Views

8.5.2 Beacon Hill is identified as an Oxford view cone[40]. Views from the viewpoint were somewhat limited at the time of the field study due to the high vegetation and tree lines. There are some views to the north out over the River Thames. However, pylons present disrupt the views.

8.5.3 The views from Eynsham Road are of the rolling hills sloping up to the north with Wytham Woods towards the horizon.

Noise

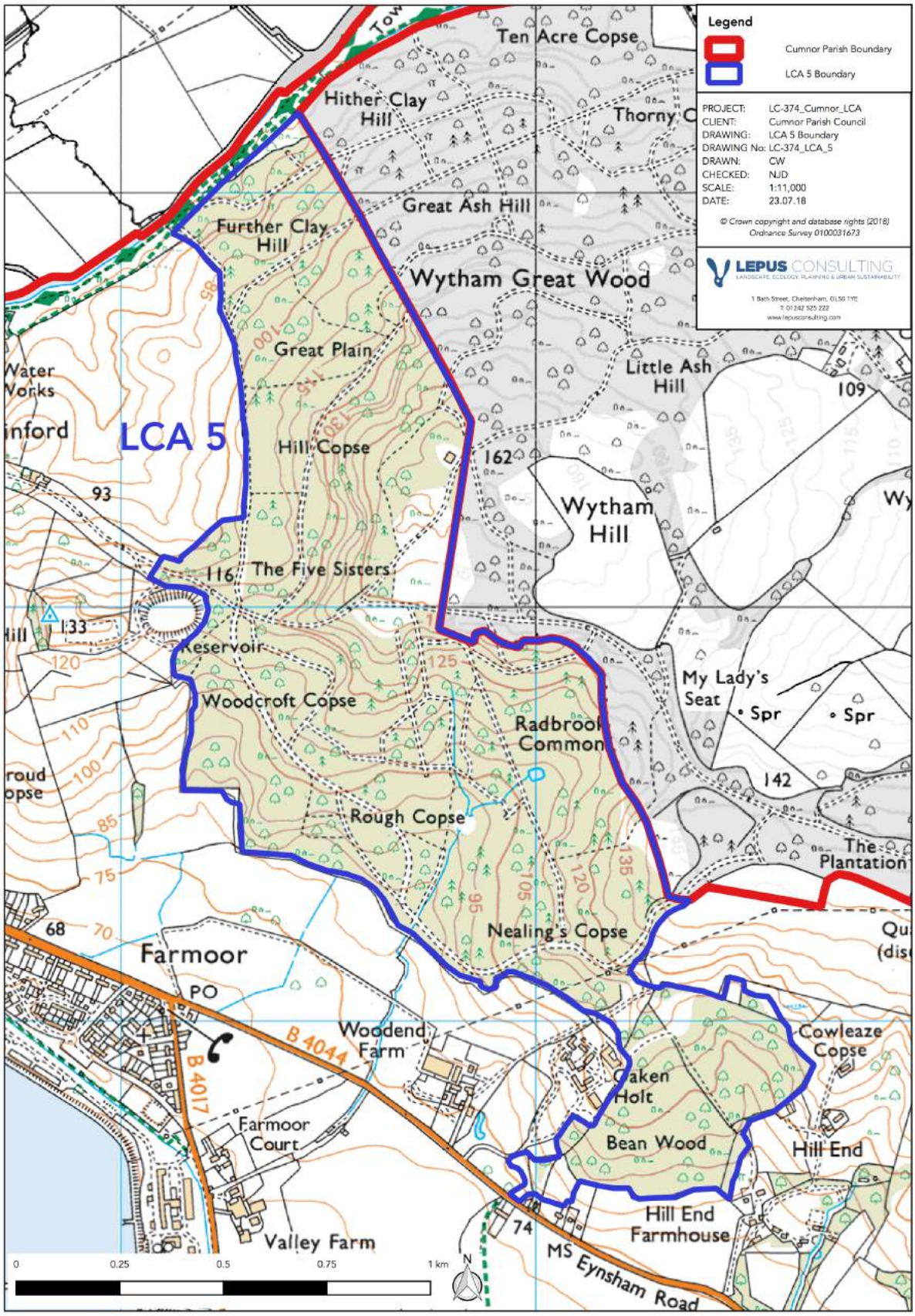
8.5.4 There is intermittent noise disturbance from the nearby road. The southern part of the LCA is nosier due to being closer to the B4044 and Eynsham Road. Wytham Woods acts as a sound barrier to noise disturbance from the north. The constant sound of the road however disturbs the tranquil and still setting of the LCA.

8.6 Recommendations to plan, manage and protect distinctiveness

- Strengthen the field pattern by conserving species rich hedgerows and sympathetically maintaining all hedgerows.
- Ancient Woodland should be managed to maintain favourable condition.
- Maintain the presence of trees in this landscape.
- Avoid the introduction of structures that would be visually intrusive to the foreground of views from Wytham Woods.
- Maintain grazing within the LCA.
- Remove the pylons from this landscape by routing the cabling underground.
- Development would only be appropriate so long as it accords with the distinctive qualities of this rural landscape.

[40] Oxford City Council, Oxford Preservation Trust and Historic England (2015) Assessment of Oxford View Cones. Available at: https://www.oxford.gov.uk/info/20064/conservation/876/oxford_views_study [Date Accessed: 02/07/18]

9 Wytham Woods (LCA 5)



9.1 Location and Boundaries

9.1.1 Wytham Woods LCA is located to the north east of the Parish. The eastern border follows the Parish boundary. The south and east borders follow the tree line of Wytham Woods. The River Thames floodplain borders the LCA to the north.

9.2 Designations and Policy

9.2.1 There is only one public footpath along the northern border of the LCA. There are no statutory designated historic features in the LCA. The LCA is situated almost entirely within the Wytham Woods SSSI which is ancient semi-natural woodland. The LCA is predominantly Grade 3 ALC land, with a small area of Grade 4 land to the north.

9.3 Natural

Landform

9.3.1 The geological bedrock of this area is comprised of:

- Hazelbury Bryan Formation;
- Kingston Formation;
- Oxford Clay Formation and West Walton Formation; and
- Stanford Formation.

9.3.2 Land cover of the area comprises almost entirely of woodland. The topography of the area is sloping, with steeper areas towards the highpoint of 160m AOD at Wytham Hill to the east of the LCA, and lower as it slopes downwards to the west.

Biodiversity and the Natural Environment

9.3.3 Almost the entirety of the LCA is within Wytham Woods SSSI. The 1,000 acres of SSSI designated ancient semi-natural woodland is owned and managed by the University of Oxford. The ancient woodlands date back as early as the Ice Age. It is known to be one of the most researched pieces of woodland in the UK, containing over 500 species of plants and 800 species of butterflies and moths. Dominant tree species include ash (*Fraxinus excelsior*) and sycamore (*Acer pseudoplatanus*). Beech (*Fagus sylvatica*) and pedunculate oak (*Quercus robur*) are widespread throughout the woodland.

9.3.4 Stands of Ancient Woodland within this LCA include:

- Great Wytham Wood;
- Cowleaze Copse;
- Bean Wood; and
- Further Clay Wood (replanted Ancient Woodland).

9.4 Cultural/Social

Built Environment

9.4.1 There is no built form within the LCA.

Community Assets

9.4.2 There are no community assets within the LCA.

9.5 Perceptual and Aesthetic

9.5.1 The area is quiet and tranquil as the trees are a barrier to many noise disturbances in the area. The area is simple, as it is almost completely ancient woodland, with dominant trees of ash and oak. The trees make the area feel tall and vertical. The LCA is muted in colour as it darker under the canopy of the trees, making the area almost monotonous.

Important Views

9.5.2 Views are limited within the LCA due to dense trees and vegetation across the area. This also means there are limited views of the pylons that disrupt many of the long distance views within the Parish.

Noise

9.5.3 There are no roads near the LCA, so the area is quiet, tranquil and still. The trees act as a barrier to disrupting sound of any road traffic.

9.6 Recommendations to plan, manage and protect distinctiveness

- Ancient Woodland should be managed to maintain favourable condition.
- Avoid the introduction of visually intrusive structures within the large expanse of woodland as it is likely to detract from views of Wytham Woods.
- Remove the pylons from this landscape by routing the cabling underground.

10 Land North of Dean Court (LCA 6)

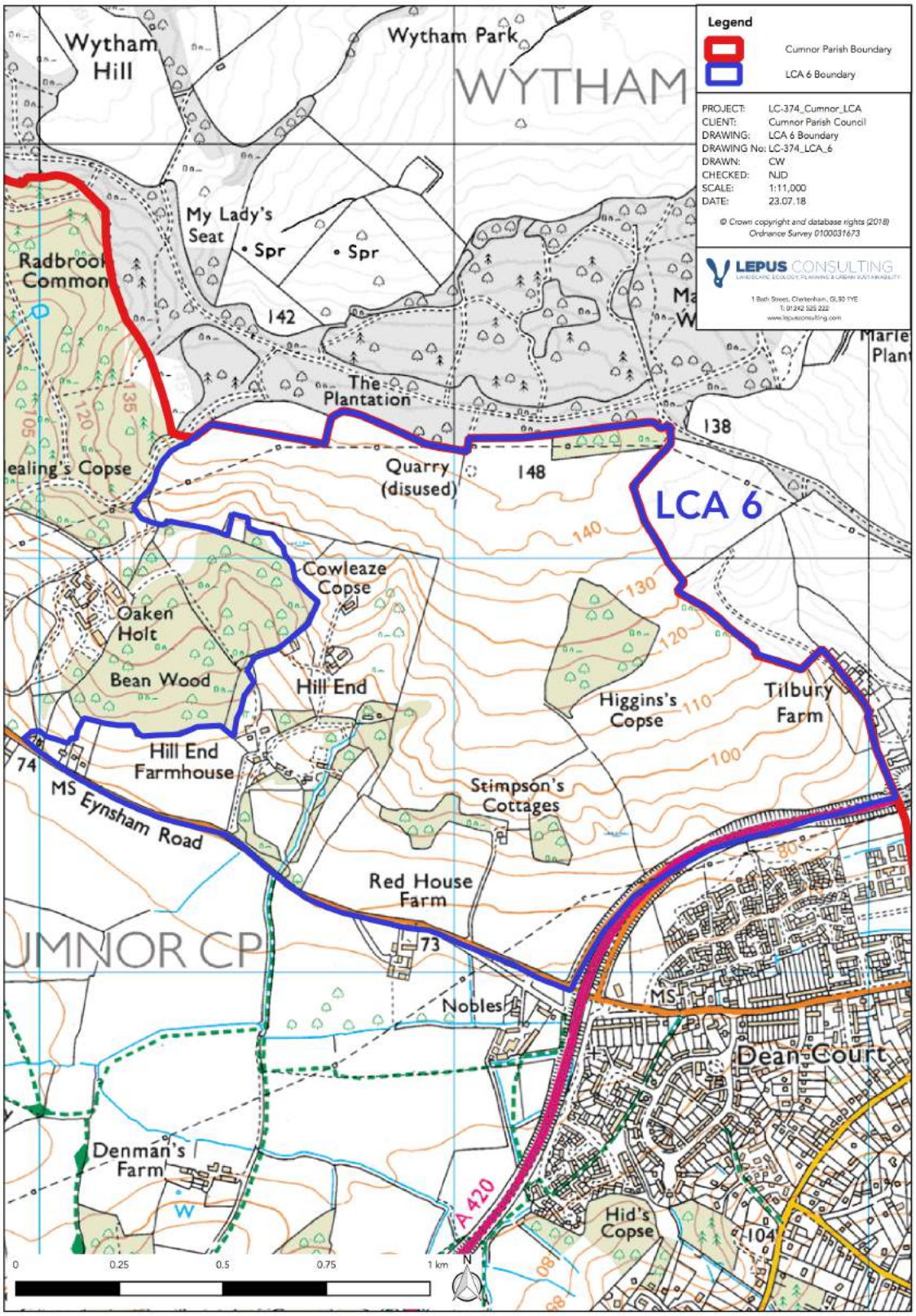


Figure 10.1: *View from Stimpson Cottage on Eynsham Road looking north east, showing the woodland which provides an enclosing effect.*

10.1 Location and Boundaries

10.1.1 The Land North of Dean Court LCA is located to the east of the Parish. The north of the LCA is bordered by the Parish boundary. The B4044 borders the LCA to the south west and the A420 to the south east. The western LCA boundary follows the tree line of Wytham Woods.

10.2 Designations and Policy

10.2.1 There are no public footpaths or statutory designated historic features in the LCA. A small area of the LCA is Wytham Woods SSSI. There are three stands of Ancient Woodland in the LCA. The LCA is almost entirely Grade 3 ALC land, with a small area of Grade 4 land to the south.

10.3 Natural

Landform

10.3.1 The geological bedrock of this area is comprised of:

- Oxford Clay Formation and West Walton Formation;
- Hazelbury Bryan Formation;
- Kingston Formation; and
- Stanford Formation.

10.3.2 Land cover of the area comprises of large open fields and stands of woodland. The fields are bordered by intact hedgerows with trees. The topography of the area is gently sloping downwards to the south to 70m AOD. The northern border is the highest at 140m AOD.

Biodiversity and the Natural Environment

10.3.3 The LCA comprises large fields bordered by an intact network of species-rich hedgerows. These hedgerows create a network of paths connecting the stands of woodland that can be used by a wide range of mammals in the area. The green fields and scattered trees to the west of the LCA are part of the Hill End Centre and it is likely that there would be fewer mammal inhabiting this area due to disturbance.

10.3.4 The large open fields within the LCA can be seen as a vital part of the setting of Wytham Woods SSSI.

10.3.5 Ancient Woodland stands within this LCA include:

- Stimpson's Copse;
- Cammor Copse; and
- Higgin's Copse.

10.4 Cultural/Social

Built Environment

10.4.1 There is little built form within the LCA, with the buildings associated with the Hill End Centre being the only one in the area. There is also a small area for car parking alongside these buildings.

Community Assets

10.4.2 There are almost no buildings within the LCA, with the only community asset being the 'Hill End Centre', an education centre. The education centre provides an opportunity for visitors to be 'close to nature' and encourages them to explore the natural environment. The centre provides activities for school, teacher training, alternative education, adult learning and family events.

10.5 Perceptual and Aesthetic

10.5.1 There are large fields across the LCA which provides a sense of exposure and openness, although the stands of woodland scattered in the area provide a more diverse setting. There are rolling hills juxtaposed against the vertical tree line.

Important Views

10.5.2 Views from Eynsham Road looking north are limited due to the stands of woodland, lines of trees and hedgerows that block long distance views. The contour of the land does invite views to the north. There may be further views from higher points in the north of the LCA, but this area is not accessible by road or public footpaths.

Noise

10.5.3 The southern border of the LCA follows Eynsham Road, which is busy and a main route towards Oxford city centre. This makes the southern part of the LCA unsettling, however, the northern side is distant from the road and the sound of the traffic.

10.6 Recommendations to plan, manage and protect distinctiveness

- Strengthen the field pattern by conserving species rich hedgerows and sympathetically maintaining all hedgerows.
- Ancient Woodland should be managed to maintain favourable condition.
- Maintain the presence of trees in this landscape.
- The tranquil character of the area should be maintained.
- Prevent the introduction of structures that would be visually intrusive and detract from the expansive views.

11 Reservoir to Dean Court (LCA 7)

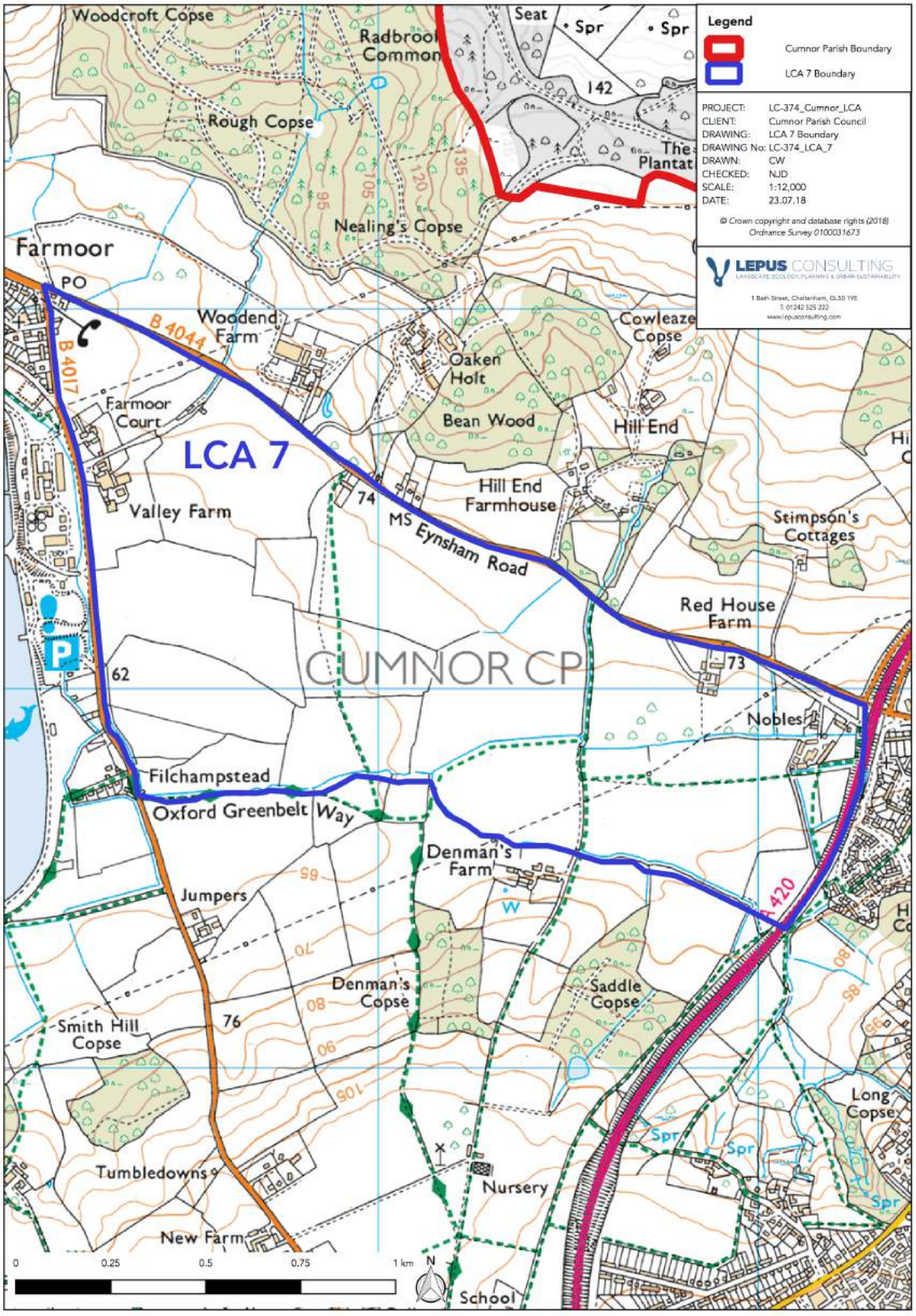


Figure 11.1: *View from Eynsham Road to the west towards the reservoir showing the pylons that detract from the landscape.*

11.1 Location and Boundaries

11.1.1 The Reservoir to Dean Court LCA is located in the centre of the Parish. The LCA consists of the Farmoor Reservoir to the west and settlement to the east. The north of the LCA is bordered by the B4044 (Eynsham Road) and the foot of north facing slopes are to the south of the LCA.

11.2 Designations and Policy

11.2.1 There are two PRoW routes crossing the LCA north to south and one bordering the LCA to the south. A section of the Oxford Green Belt Way is to the south. There are five Grade II Listed Buildings in the LCA. There are no statutory designated biodiversity features or sites. The area covers Grade 3 ALC land to the north, and Grade 4 ALC land to the south.

11.3 Natural

Landform

11.3.1 The geological bedrock of this area is comprised of Oxford Clay Formation and West Walton Formation mudstone. Land cover of the area comprises of arable fields, some smaller pastureland and scattered trees. The topography of the area is lowland, within an overall ridge which falls gently towards the reservoir at 65m AOD.

Biodiversity and the Natural Environment

11.3.2 The land cover is predominantly large open fields with an intact network of hedgerows with trees along field boundaries. There are lines of trees, hedgerows and woodland. There is limited woodland within the LCA, with a line of trees located along the eastern boundary acting as a visual and aural buffer to the A420.

11.4 Cultural/Social

Built Environment

11.4.1 There are approximately a dozen dwellings and a few farmhouses in the LCA. Pylons cross the eastern and western ends of the LCA. Vehicle access is limited within the LCA, with only access via tracks.

Community Assets

11.4.2 There are a large number of community assets situated near the edges of the LCA. These include:

- Oxford Digital Media;
- CBG Consultants (engineering);
- Valley Farm camp site;
- Botley Windscreens;
- Warburton Building Services;
- Oxford Bed and Breakfast Sabine Barn;
- Conifer Lodge Guest House (bed and breakfast);
- TSH Architects; and
- Jewson Film Productions.

11.5 Perceptual and Aesthetic

11.5.1 This is a rural, relatively unsettled area, with a keen sense of place, contained by the slopes to the north and south. The sloping and various land use makes the area diverse and textured. Pylons and traffic along the B4044 are detracting features. There is a degree of peace and tranquillity along footpaths within the middle of the area whereas the west and east borders follow roads which make the area busy and unsettled.

Important Views

11.5.2 The east of the LCA is highly colourful, with green and yellow arable fields and red farm building against the blue sky. However, the pylons that cross the landscape are highly disruptive

Noise

11.5.3 The LCA is bordered to the north, east and west by roads. Eynsham Road is to the north, which is very busy and leads to disruption over almost the entire LCA. The A420 follows the east border which is highly disruptive, whereas the road to the west is quieter. Overall, the road network is highly disruptive and prevents the sense of stillness and tranquillity.

11.6 Recommendations to plan, manage and protect distinctiveness

- Strengthen the field pattern by conserving species rich hedgerows and sympathetically maintaining all hedgerows.
- Maintain the presence of trees in this landscape.
- Prevent the introduction of structures that would be visually intrusive and detract from the expansive views.
- Remove the pylons from this landscape by routing the cabling underground.

12 Whitley to Saddle Copse (LCA 8)

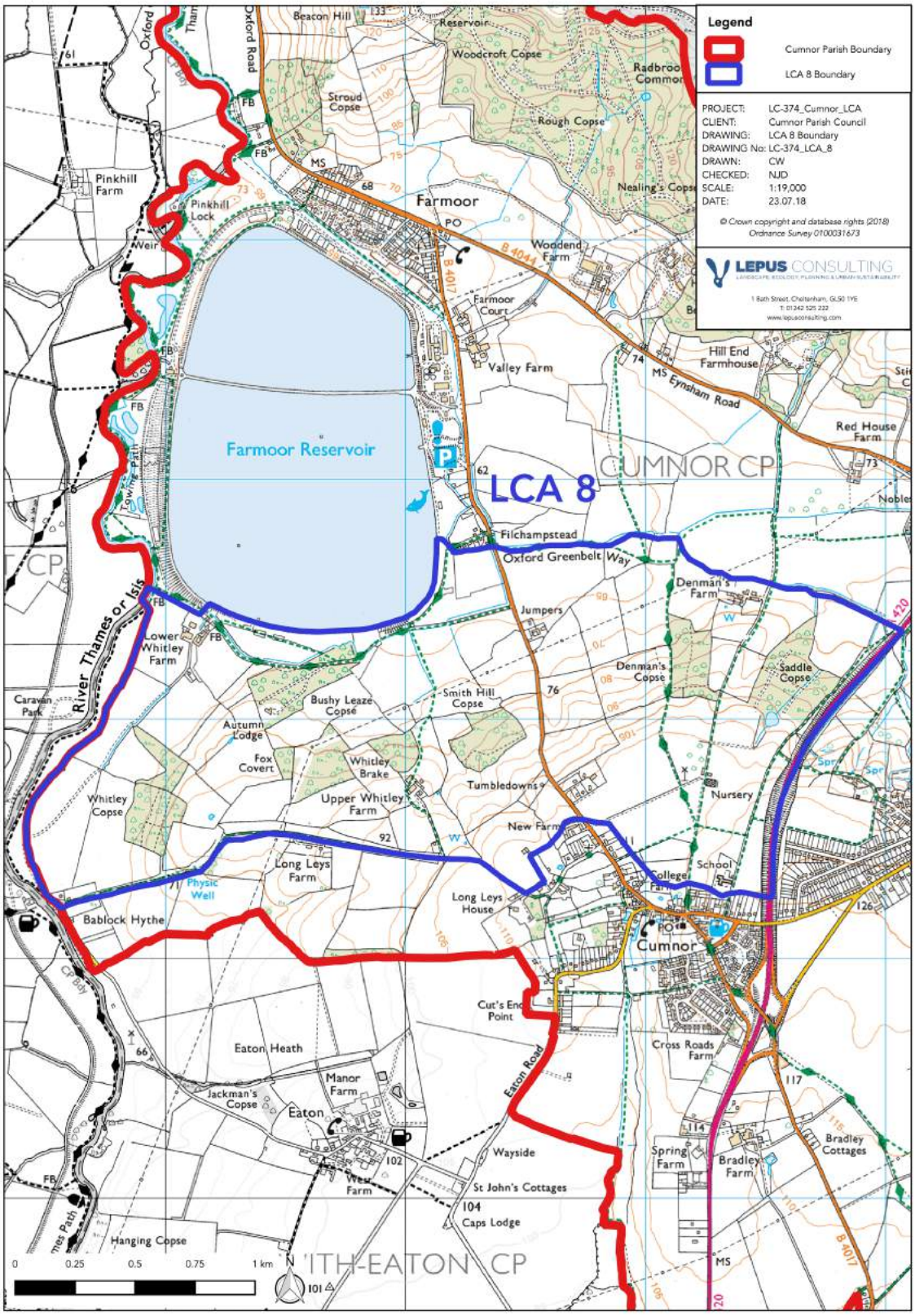


Figure 12.1: *View from the B4017 looking westwards towards the reservoir showing the pylons that detract from the landscape.*

Figure 12.2: *View from the B4017 looking east showing the high hedgerows and rolling hills of the landscape.*

12.1 Location and Boundaries

12.1.1 The Whitley to Saddle Copse LCA is located to the west of the Parish. A public bridleway borders the LCA to the south and primarily follows fields boundaries to the north. The west of the LCA is bordered by the Parish boundary. The eastern border follows the A420.

12.2 Designations and Policy

12.2.1 A section of the Oxford Green Belt Way primarily crosses the LCA from north to south. There is a network of PRoW routes crossing the LCA, being bordered by footpaths to the west, north and east, and a bridleway to the south. There are two Grade II Listed Buildings and five stands of Ancient Woodland in the LCA. Approximately half of the LCA is Grade 3 ALC land and half Grade 4 ALC land.

12.3 Natural

Landform

12.3.1 The geological bedrock of this area is comprised of:

- Oxford Clay Formation and West Walton Formation.
- Hazelbury Bryan Formation;
- Kingston Formation;
- Stanford; and
- Ampthil.

12.3.2 Land cover of the area comprises of arable fields with numerous stands of woodland dispersed between. The landform predominately consists of north facing slopes, which fall from the flatter hill top which reaches a height of approximately 110m AOD within the south-eastern corner of the LCA. To the west, the slopes turn to face the Thames.

Biodiversity and the Natural Environment

12.3.3 Ancient Woodland is a defining feature of this LCA, scattered across the landscape. The stands include:

- Saddle Copse;

- Whitley Copse;
- Bushy Leaze Copse;
- Smith Hill Copse;
- Denman's Copse; and
- Longmoor Copse.

12.3.4 Smith Hill Copse is also an LWS.

12.3.5 Field boundaries are lined with a network of hedges and occasional trees. Hedges vary in quality and include low clipped hawthorn hedges as well as more substantial lines of vegetation including mature trees such as oak and sycamore. The fields are primarily arable.

12.4 Cultural/Social

Built Environment

12.4.1 The B4017 travels down the slope between Cumnor and Farmoor through the centre of the LCA. Vehicle access to all other parts of the LCA are limited to tracks. Settlement is limited to occasional isolated small groups of dwellings and scattered farms. Pylons cross through the centre of the LCA.

Community Assets

12.4.2 Community services are scarce but include:

- Glasshouse Studios;
- Eaton Environmental Services;
- New Farm;
- Denman's Farm;
- Upper Whitely Farm;
- Lower Whitley Farm; and
- Gray Page (security Services)

12.5 Perceptual and Aesthetic

12.5.1 The area is identified as having a mixture of post medieval and modern fieldscapes. This is a rural landscape with distinctive views framed by woodland. There is a sense of peace and tranquillity from public rights of way as they pass between blocks of woodland away from development. Human influences including pylons, roads and settlement reduce the sense of remoteness.

Important Views

12.5.2 The north facing slopes have wide views north over the Thames Vale, including Farmoor Reservoir, as well as views of rising ground including wooded Wytham Hill on the horizon to the north. There are panoramic views north from the B4017, after leaving the built-up area of Cumnor at the southern edge of the LCA. The north edge of the village is filtered by tree cover, although buildings, including the tower of St Michael's Church, are visible from the adjacent upper part of the LCA. The southern boundary of this LCA contributes to the setting of the Cumnor Village Conservation Area.

Noise

12.5.3 The west of the LCA is distant from busy roads so the area is primarily quiet and tranquil. However, the A420 follows the east border which results in high disturbance. Cumnor Road passes through the LCA which causes a small amount of noise disruption.

12.6 Recommendations to plan, manage and protect distinctiveness

- Strengthen the field pattern by conserving species rich hedgerows and sympathetically maintaining all hedgerows.
- Ancient Woodland should be managed to maintain favourable condition.
- Maintain and enhance the presence of trees in this landscape.
- The tranquil character of the area should be maintained.
- Prevent the introduction of structures that would be visually intrusive and detract from the expansive views.
- Conserve the important panoramic views to Wytham Woods to the north.
- Development would only be appropriate so long as it accords with the distinctive qualities of this rural landscape.
- The setting to the Cumnor Village Conservation area should be maintained and enhanced.

13 Land between Bablock Hythe and Cumnor Village (LCA 9)

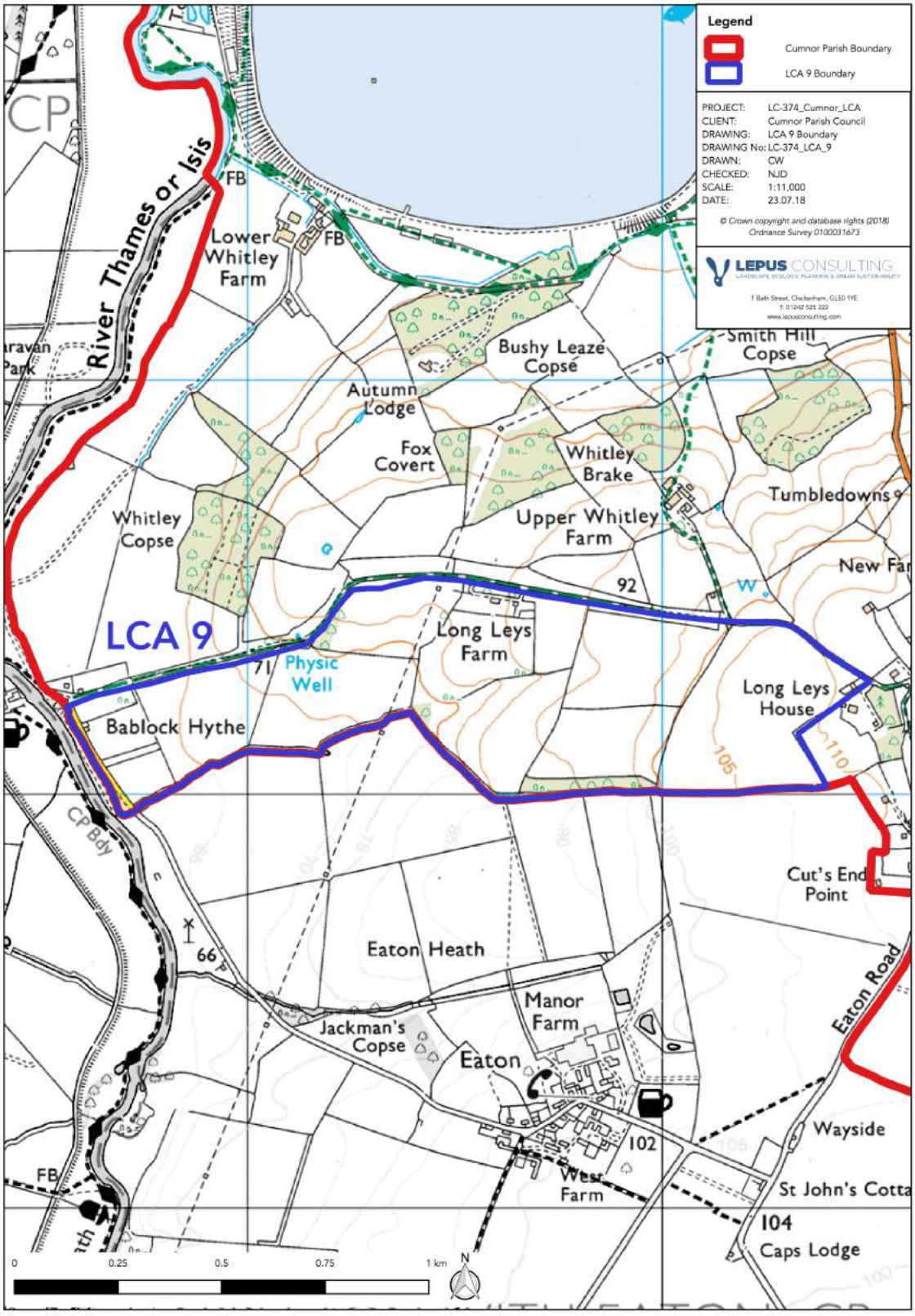


Figure 13.1: *View from Bablock Hythe towards the east and Cumnor village showing the pylons that detract from the landscape.*

Figure 13.2: *View from Leys road looking south west.*

13.1 Location and Boundaries

13.1.1 Land between Bablock Hythe and Cumnor Village LCA is located in the south west of the Parish. It is bordered to the west and south by the Parish boundary, although similar land formation is seen south of the boundary. The river to the west acts as a natural Parish boundary. To the east the LCA is bordered by edge of Cumnor village. The north boundary is defined by Leys Road and a public bridleway.

13.2 Designations and Policy

13.2.1 There is one public bridleway along the northern border of the LCA. There are two public footpaths along the western and eastern borders of the LCA. There are no statutory designated historic or biodiversity features in the LCA. The LCA covers Grade 2, 3 and 4 ALC land.

13.3 Natural

Landform

13.3.1 The geological bedrock of this area is comprised of:

- Hazelbury Bryan Formation; and
- Oxford Clay Formation and West Walton Formation.

13.3.2 Land cover of the area comprises of arable fields defied by hedgerows. The topography of the area is gently sloping, with the high point of 100m AOD to the east and low point of 60m AOD to the west.

Biodiversity and the Natural Environment

13.3.3 The land cover is predominantly small fields of rough pastureland. There is a relatively intact network of species-rich hedgerows along field boundaries. These hedgerows connect possible mammals to the River Thames floodplain. There are lines of trees of oak, ash and hazel. There is one LWS within the LCA known as Long Leys Farm Meadows. This surrounds the farm which is situated towards the centre of the north boundary of the LCA.

13.4 Cultural/Social

Built Environment

13.4.1 There is limited vehicle access within the LCA, with a short track on the eastern side being the only road to Long Leys Farm. This farm is the only built form in the LCA.

Community Assets

13.4.2 Long Leys Farm and Bablock Hythe parking area and ferry crossing point are community assets within this LCA. The ferry point is the only point of public access to the River Thames in the Parish. The passenger and vehicle ferry used to operate from this point of the river but is no longer in operation.

13.4.3 Bablock Hythe features in Nevil Shute's first works 'Stephen Morris' and 'Pilotage' and Matthew Arnold's poem 'The Scholar Gypsy'.

13.4.4 A Physic Well is found within the LCA, located approximately a mile west of Cumnor Village along the bridleway, close to the ferry point at Bablock Hythe. It was known as a 'Holy Well' or 'Sacred Spring' which was thought to have healing powers.

13.5 Perceptual and Aesthetic

13.5.1 The rough pastureland of the LCA gives a sense of roughness and texture. The land use is constant throughout making the area simple but also intimate and enclosed. There is very little movement in the area, providing a sense of stillness and safety. This is generally a rural landscape, with a sense of peace and tranquillity. The fieldscapes across the area are identified as having either post medieval or modern history.

Important Views

13.5.2 Due to the lines of trees and slopping hills, there are limited views in the LCA. The views across the fields are disrupted by pylons.

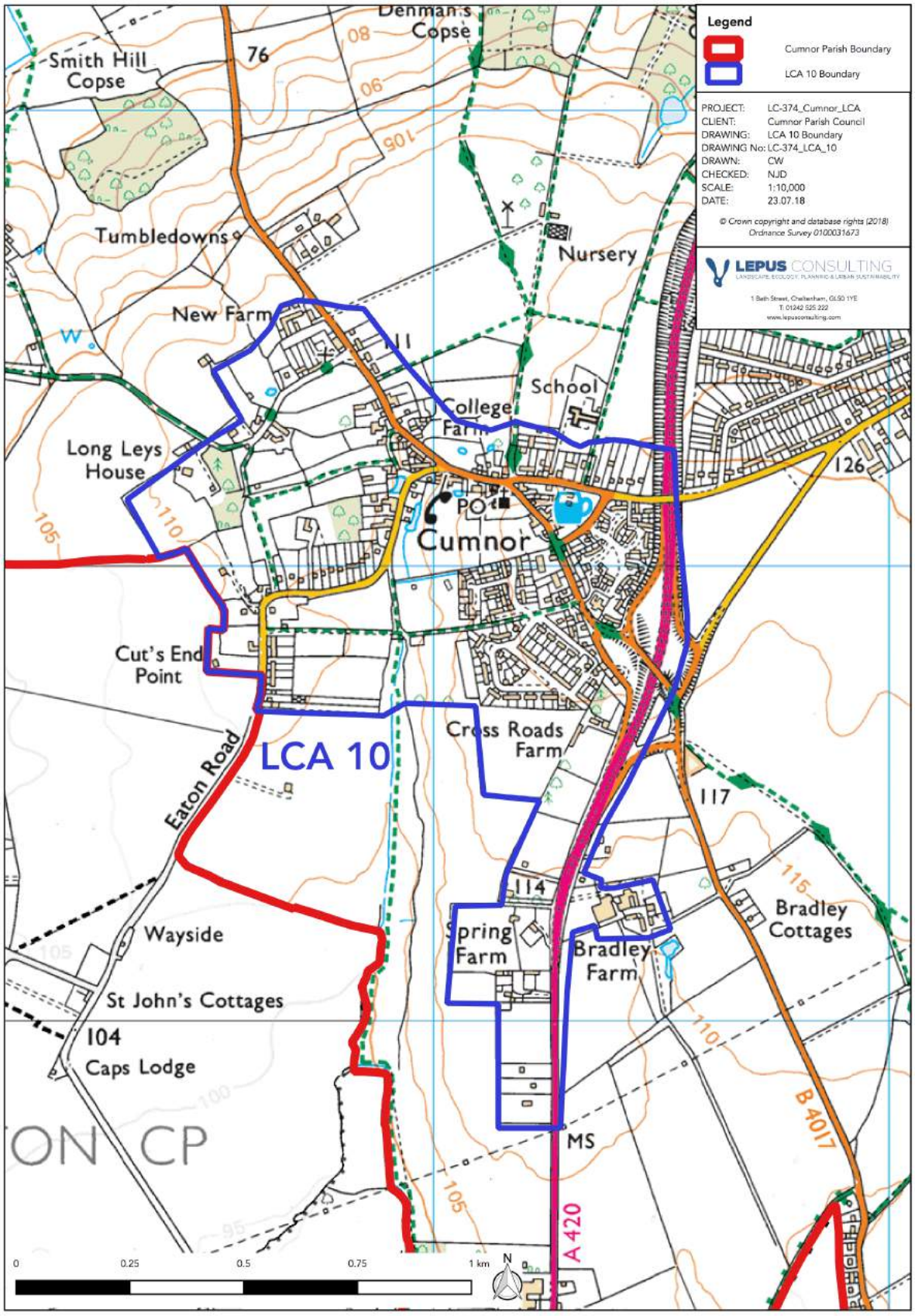
Noise

13.5.3 The area is very quiet. There are no main roads to the west of the LCA, with only a small track road. The north border follows the public bridleway which is also very quiet. This means the area is still and tranquil.

13.6 Recommendations to plan, manage and protect distinctiveness

- Strengthen the field pattern by conserving species rich hedgerows and sympathetically maintaining all hedgerows.
- Maintain the presence of trees in this landscape.
- The tranquil character of the area should be maintained.
- Prevent the introduction of structures that would be visually intrusive and detract from the expansive views.
- Development would only be appropriate so long as it accords with the distinctive qualities of this rural landscape.

14 Cumnor Village (LCA 10)



14.1 Location and Boundaries

14.1.1 Cumnor Village LCA is located to the south of the LCA. The area consists of the small village as well as surrounding small parcels of land associated with the edge of the village. These land parcels are contrasted with the surrounding larger, open fields.

14.2 Designations and Policy

14.2.1 There is network of short public footpath routes crossing the LCA. A section of the Oxford Green Belt Way passes through Cumnor village. There are 27 Grade II, one Grade II* and one Grade I Listed Buildings in the LCA. Cumnor Site of Special Scientific Interest (SSSI) is within the LCA. The LCA covers Grade 2 ALC land to the east and Grade 3 ALC land to the west.

14.3 Natural

Landform

14.3.1 The geological bedrock of this area is comprised of:

- Hazelbury Bryan Formation;
- Kingston Formation; and
- Stanford Formation.

14.3.2 Land cover of the area comprises of urban settlement, as well as small pastoral fields, paddocks and large gardens. The landform falls from approximately 120m AOD, down towards a watercourse which flows to the south of Cumnor.

Biodiversity and the Natural Environment

14.3.3 A small area to the north of Spring Farm is designated as a SSSI for its paleogeographic value. There are numerous small green spaces within and across the village, including small fields, species-rich hedgerows and trees.

14.4 Cultural/Social

Built Environment

14.4.1 The LCA incorporates the A420, which cuts through the eastern edge of the area, and includes a section of and a junction of the B4017. Many of the houses within Cumnor are detached three to five bed dwellings, in a range of sizes. New development should take the opportunity to integrate with the landscape using materials, density and dwelling size at an appropriate scale and dimension. Given the Conservation Area status of the LCA, edge of settlement development should retain the open nature of the village. Further detail on Cumnor village can be found in the Character Assessments[41] carried out by Cumnor Parish Council.

14.4.2 The Vale of White Horse District Council's Landscape Character Assessment[42] concludes that areas of open land within the built-up area of the village are *"closely associated with the edge of Cumnor, consisting of small scale, pastoral fields, paddocks and large gardens, with thick belts of boundary vegetation and tree groups. The Character Area lies on the edge of, or within, Cumnor conservation area. The small scale of this Character Area contrasts with the large-scale arable fields of adjacent Character Areas"*.

14.4.3 The Oxford Green Belt Study[43] concluded that all *"areas bordering Cumnor Village contribute at the highest level to the Oxford Green Belt, … contains the characteristics of countryside, has no or very little urbanising development, and is open"*.

14.4.4 Sir Walter Scott's novel 'Kenilworth' written in 1821 is set in Cumnor Place, the location of the death of Amy Robsart, the wife of Robert Dudley, Earl of Leicester, reputed to be Queen Elizabeth 1's lover.

[41] Cumnor Neighbourhood Plan (2017) Draft Character Assessments. Available at: https://www.cumnorneighbourhoodplan.co.uk/housing [Date Accessed: 03/07/18]

[42] Vale of White Horse District Council (2017) Landscape Character Assessment. Available at: http://www.whitehorsedc.gov.uk/java/support/Main.jsp?MODULE=FolderView&ID=789122104&CODE=498F5A0A897C751630F233DEB1E72432&NAME=19.+Landscape+Character+Assessment&REF=Local%20Plan%202031%20Part%202:%20Publication%20Version%20Publicity%20Period [Date Accessed: 24/09/18]

[43] LUC (2015) Oxford Green Belt Study. Available at: https://www.oxfordshiregrowthboard.org/wp-content/uploads/2018/04/OxfordGreenBeltStudyFinalReport.pdf [Date Accessed: 24/09/18]

Community Assets

14.4.5 There are numerous community assets within the LCA, which include most services essential for residents. This includes:

- Whitecross Accountancy Ltd;
- The Closes (football pitch);
- Cumnor Minors Football Club;
- Spring Farm;
- Bradley Farm;
- Cross Roads Farm;
- Wisteria Lodge (bed and breakfast);
- Cumnor United Reform Church;
- Cumnor Village Hall;
- College Farm Plant Nursery;
- Cumnor Post Office;
- Wade Katie B (pet care store);
- Bardwell Press (book publisher);
- Cumnor Garage;
- The Bear and Ragged Staff (public house);
- Saint Michaels Church;
- Michael Cain and Family Butchers;
- Cumnor Church of England Primary School;
- Cumnor After School Club;
- Andy Grey Fly Fishing;
- Glebe Play Park;
- Cumnor Bed and Breakfast;
- The Vine Inn (public house);
- Oxenford House (assisted living residence);
- Cumnor Cricket Club;
- Cranham Publications (stationary shop); and
- Oxford Private Care (assisted living residence).

14.5 Perceptual and Aesthetic

14.5.1 There is a degree of tranquillity within the enclosed spaces, although human influences limit the sense of remoteness. The land surrounding Cumnor Village is important to its setting and character. This includes small fields with strong hedgerow networks and lines of trees which forms the edge of settlement.

14.5.2 The area is identified as having a combination of post medieval and modern fieldscapes. The small, well enclosed, fields to the west of the LCA adjacent to Cumnor are recorded as medieval, and there is a ridge and furrow field located off Appleton Road.

14.5.3 Various areas of open space surrounding Cumnor Village are known to be important for both the landscape setting of Oxford and the special character of Conservation Areas in the villages around Oxford[44]. Many of these spaces assist in safeguarding the countryside from encroachment and help to preserve the setting and special character of historic towns. Some of these spaces are also used for sports and recreation within the village.

Important Views

14.5.4 Vegetation along field boundaries and roads enclosures the area and limits the distance of views within the area. Other important views include views from Bradley Farm to The Hurst and the rural landscape with a wooded backdrop of the SSSI.

Noise

14.5.5 The village is small and quiet, but there is the constant sound of cars either within the village itself or from the A420 in the east. Noise disturbance from the A420 is highly disrupting and prevents the sense of stillness and tranquillity. Tree cover encloses the area and provides a buffer between the built-up area and the wider countryside.

[44] Mike Gilbert Planning Ltd (2015) Proposed changes to the Oxford Green Belt at Cumnor

14.6 Recommendations to plan, manage and protect distinctiveness

- The setting and special character of the historic towns should be preserved.
- Development should not be supported if it is likely to result in neighbourhood towns merging into one another nor the sprawl of large built-up areas.
- The surrounding countryside should be safeguarded from encroachment.
- The setting to the Cumnor Village Conservation area should be maintained and enhanced.
- Maintain the presence of trees in this landscape.
- Add trees and vegetation to act as a further barrier to the noise of traffic on the A420.
- The tranquil character of the area should be maintained.
- Prevent the introduction of structures that would be visually intrusive and detract from the expansive views.
- Aim to maintain Grade 2 ALC land.

15 Land North of Chawley (LCA 11)

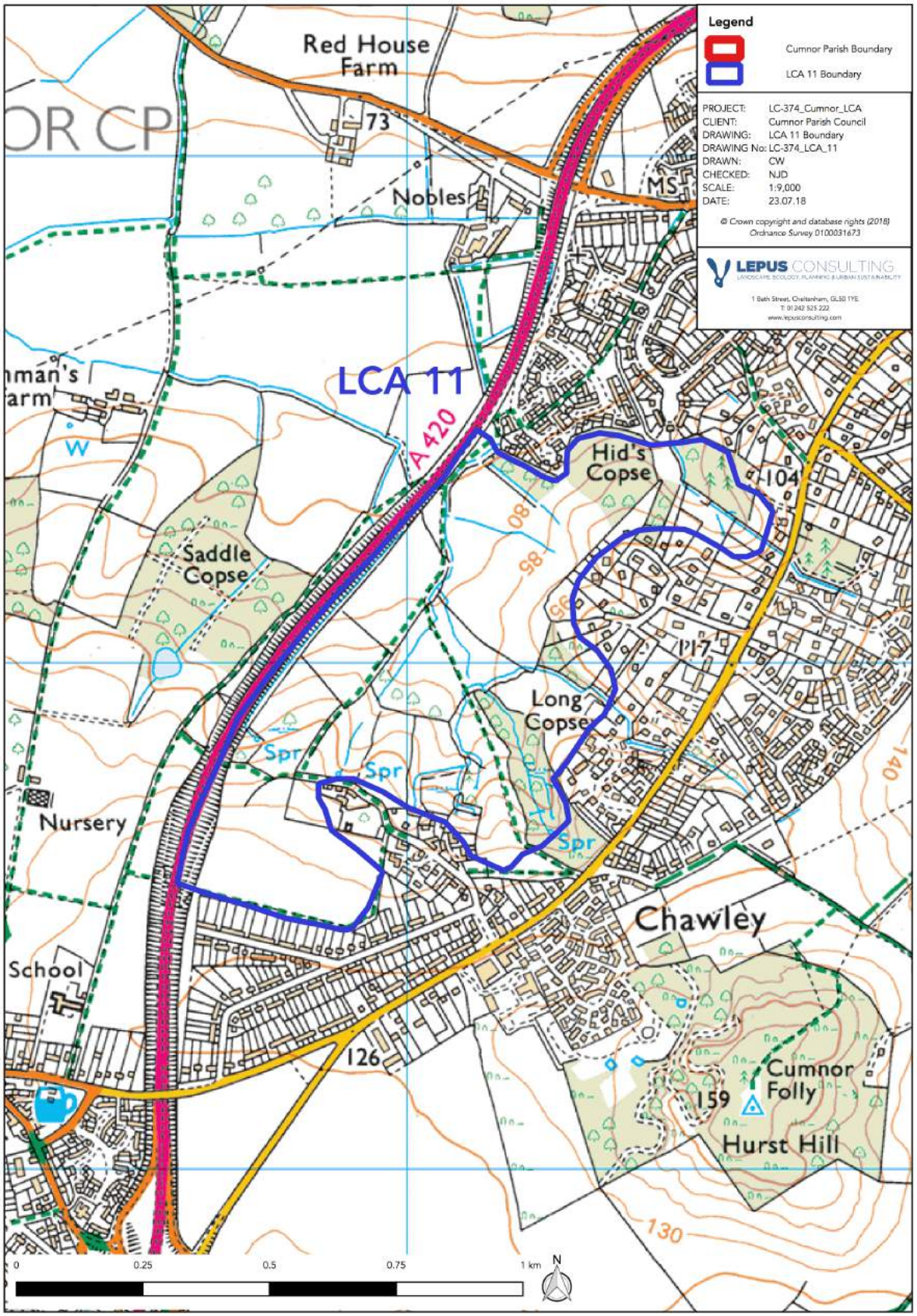


Figure 15.1: *View from the end Chawley Lane looking north east over the A420, showing the line of trees that act as a visual barrier.*

15.1 Location and Boundaries

15.1.1 The Land North of Chawley LCA is located in the centre of the Parish. It is bordered to the north west by the A420. The rest of the LCA is bordered by the edge of settlement boundary.

15.2 Designations and Policy

15.2.1 There are a few public footpaths crossing the LCA, with one crossing from north to south. There are no statutory designated historic features in the LCA. There are five stands of Ancient Woodland in the LCA. The LCA covers Grade 2, 3 and 4 ALC land.

15.3 Natural

Landform

15.3.1 The geological bedrock of this area is comprised of:

- Oxford Clay Formation and West Walton Formation;
- Hazelbury Bryan Formation;
- Kingston Formation; and
- Stanford Formation.

15.3.2 Land cover of the area comprises of agricultural grazing land, unimproved, with mixed hedgerows, bordered to north by the A420 and the settlements of Chawley and Dean Court bordering to the east and south. The topography of the area is gently sloping downwards from Hurst Hill in the south.

Biodiversity and the Natural Environment

15.3.3 The area consists of rough grassland and areas of Ancient Woodland as well as scattered trees, predominantly hazel and willow. Ancient Woodland located within this LCA include:

- Hid's Copse;
- Hid's Brake;
- Ash Copse;
- Long Copse; and
- Well Yard Copse.

15.3.4 There are three LWSs within the LCA: Long Copse, Chawley footpath and Pasture near Chawley. These are all small areas of land, close together to the south of the LCA. Line of trees and hedgerows border the A420. Steams dissect the area and create marshy pockets of unique aquatic vegetation. As well as areas of rough pastureland, there are also closed fields with hedgerows that are farmed, for example, barley fields.

15.3.5 The area is a prominent part of the rural landscape and clearly extends out away from the built-up area of Cumnor and into open countryside. It has also been described as contributing *"significantly to the openness of the Oxford Green Belt and to three of the purposes of including land within the Green Belt, namely to prevent neighbouring towns merging into one another, to assist in safeguarding the countryside from encroachment, and to preserve the setting and special character of historic towns"*[45].

15.4 Cultural/Social

Built Environment

15.4.1 The LCA contains no built form as it follows the boundary of the surrounding settlements.

Community Assets

15.4.2 There are no community assets in the LCA.

15.5 Perceptual and Aesthetic

15.5.1 Due to the lines of trees and scattered stands of woodland, the area has a sense of intimacy and enclosure, with a diverse landscape. The area is predominantly natural with some management of vegetation. The trees and various sloping hills obscure long distance views. The tranquillity of the area and its stillness is disrupted by the presence of the A420 to the west which creates movement and noise in the area.

Important Views

15.5.2 There are views for approximately three miles to Wytham Woods when tree cover is low. During the summer months when tree cover is high, views are limited.

[45] Mike Gilbert Planning Ltd (2015) Proposed changes to the Oxford Green Belt at Cumnor

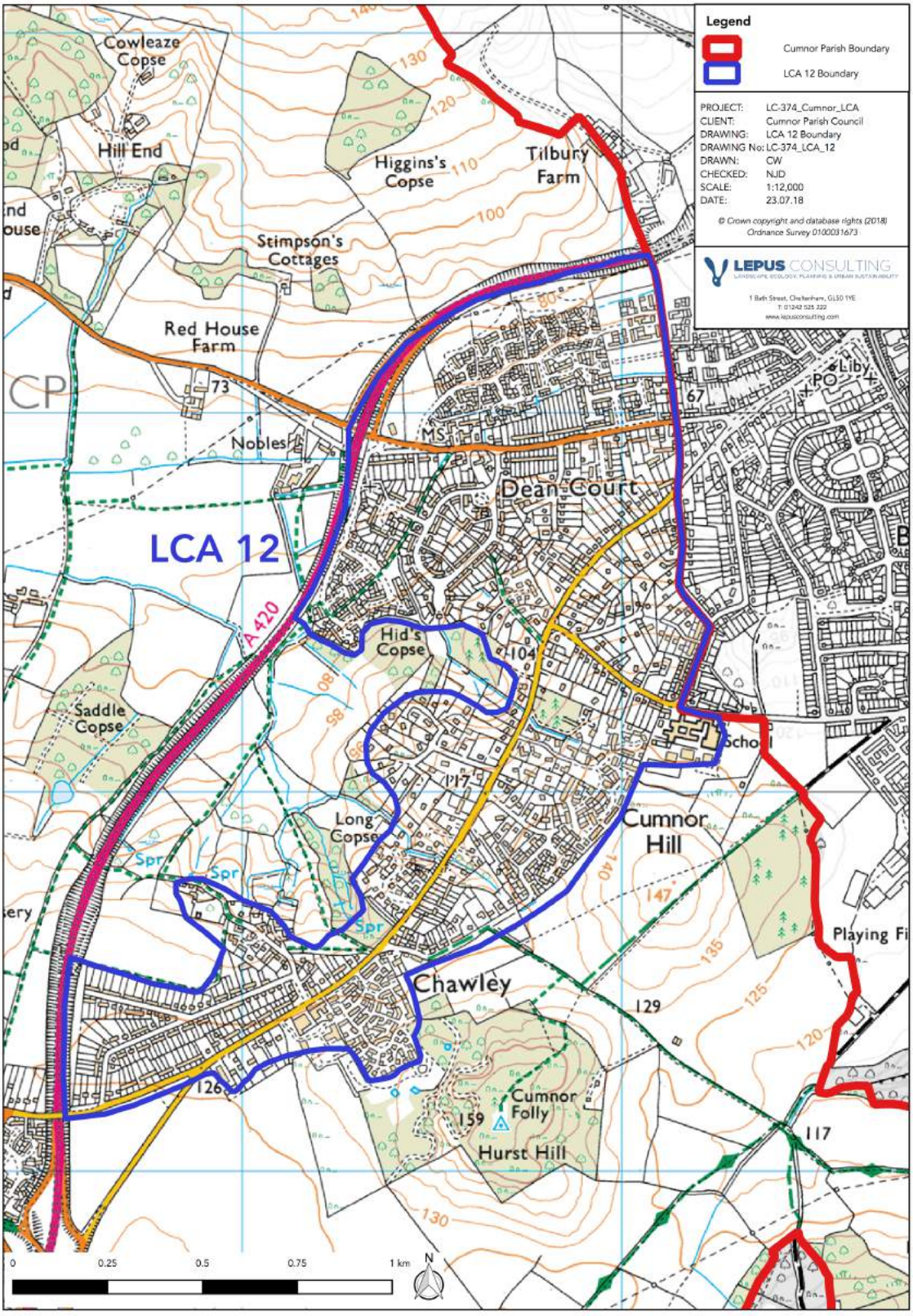
Noise

15.5.3 The sound of the A420 which borders the LCA to the west is a large aural detractor to the area. The vegetation that borders the road acts as a visual barrier to the A420 in the spring and summer months. When the trees are bare in the winter, the road is visible from many points of higher ground. The border of trees and hedgerows reduces the noise impact slightly of near-by residence but is still a considerable detractor to the tranquillity of the area.

15.6 Recommendations to plan, manage and protect distinctiveness

- Ancient Woodland should be managed to maintain favourable condition.
- Maintain the presence of trees in this landscape.
- The tranquil character of the area should be maintained.
- Prevent the introduction of structures that would be visually intrusive and detract from the expansive views.
- Planting further vegetation to act as an aural and visual barrier to the A420.
- Aim to protect the diverse range of habitats currently within the LCA.

16 Dean Court and Chawley (LCA 12)



16.1 Location and Boundaries

16.1.1 Dean Court and Chawley LCA is located to the east of the Parish. The area is almost entirely settlement and the edge of settlement is used as a boundary for the LCA. The A420 and B4044 follow LCA boundaries to the east and north. The east of the LCA is border by the Parish boundary, although the area of settlement continues into Botley.

16.2 Designations and Policy

16.2.1 There are a few public footpaths within the LCA. There are nine Listed Buildings in the LCA. There is a small area of Ancient Woodland. A small corner of Hurst Hill SSSI overlaps with the LCA. The LCA is predominantly urban land, with Grade 3 ALC land to the south.

16.3 Natural

Landform

16.3.1 The geological bedrock of this area is comprised of:

- Ampthill Clay Formation and Kimmeridge Clay Formation;
- Hazelbury Bryan Formation;
- Kingston Formation;
- Oxford Clay Formation and West Walton Formation; and
- Stanford Formation.

16.3.2 Land cover of the area comprises of urban land and settlement, with scattered trees. The topography of the area is gently sloping downwards from Hurst Hill in the south at 130m AOD to 60m AOD in the north.

Biodiversity and the Natural Environment

16.3.3 Although dominated by settlements, there are numerous small green spaces within and across the village, including small fields, species-rich hedgerows and trees. There are small areas of woodland within the LCA, particularly to the north of Chawley and a small strip of land between the A420 and Dean Court. There is a line of trees between the dwellings and the A420 to help reduce noise and visual detractors.

16.4 Cultural/Social

Built Environment

16.4.1 The LCA is bordered by the B4044 to the north. Some of the main roads through the LCA are Eynsham Road (B4044) and Cumnor Hill. The dwellings within the LCA are of a range of styles, often found in small clusters indicating the time development took place. As the area is entirely residential, the architecture is described as domestic. They are mostly made of red brick, but roof forms are highly varied, with a mixture of hipped and gable ended profiles. Further detail on Dean Court and Chawley can be found in the Character Assessments[46] carried out by Cumnor Parish Council.

Community Assets

16.4.2 As the LCA is entirely urban, there are numerous community assets in the area, which includes:

- Matthew Arnold School (Secondary);
- Dean Court Community Centre;
- Oxford Capital (investment service);
- G C Interiors (kitchen renovator);
- Hartwell Automotive Group;
- Yasmin Stores;
- Jennifer Tanner Ltd (beauty salon);
- Jacqui Lewis (florist);
- Kathleen's (hairdresser);
- Elite Cras Oxford (taxi service);
- Kemp House Chawley Park (publisher);
- Enjoy Languages (language school);
- A Kidd's Choice (baby shop);
- Cumnor Hill House Care Home;
- Peter Durham (food producer);
- Saint Andrew's Church;
- Tilbury Allotments;
- Pinnocks Way Play Park;
- Jamona (restaurant);

[46] Cumnor Neighbourhood Plan (2017) Draft Character Assessments. Available at: https://www.cumnorneighbourhoodplan.co.uk/housing [Date Accessed: 03/07/18]

- Pinnocks Lodge (bed and breakfast);
- Noted Guitars Ltd;
- Limo Hire Oxford;
- Quickstart and Oxfordshire Motorcycle Training;
- Oxford Swim School;
- Fogwell Road Play Area;
- Fogwell Road Recreation Centre; and
- Crampton Bruce (taxi service).

16.5 Perceptual and Aesthetic

16.5.1 To the east of the LCA, many of the houses have long front gardens with large numbers of trees and bushes. The tall trees provide a vertical emphasis and provide an enclosed sense of space.

16.5.2 The housing type across the area is varied but not clustered and overcrowded. The two main roads coming into the village, which continue towards Oxford city centre, can be busy. Cumnor Hill is semi-rural in nature, whilst Dean Court is more suburban. Cumnor Hill is designated as low density. Dean Court is higher density in places but typified by larger than average front and back gardens. Pinnocks Way began as council housing and is also typified by good-sized front and rear gardens. This has allowed for properties to be extended and allowed for the growth of car ownership.

Important Views

16.5.3 There are many views out to the open countryside beyond the suburb from the area, including many glimpses between the widely spaced buildings. Some of these are expansive, whilst others are framed by trees. Pylons across the lower slopes of Wytham Hill detract from the otherwise very attractive view.

Noise

16.5.4 There is loud traffic noise in the area from Eynsham Road and Cumnor Hill Road which pass through the area and head towards Oxford city centre. The A420 also borders the LCA to the west which leads to a high volume of traffic noise throughout the day. This means the LCA has a constant sense of busyness and lacks tranquillity.

16.6 Recommendations to plan, manage and protect distinctiveness

- The setting and special character of the historic towns should be preserved.
- Development should not be supported if it is likely to result in neighbourhood towns merging into one another nor the sprawl of large built-up areas.
- The surrounding countryside should be safeguarded from encroachment.
- Maintain the presence of trees in this landscape.
- Add trees and vegetation to act as a further barrier to the noise of traffic on the A420.
- The tranquil character of the area should be maintained.
- Prevent the introduction of tall structures that would be visually intrusive and detract from the expansive views.

17 Land South of Cumnor and Chawley (LCA 13)

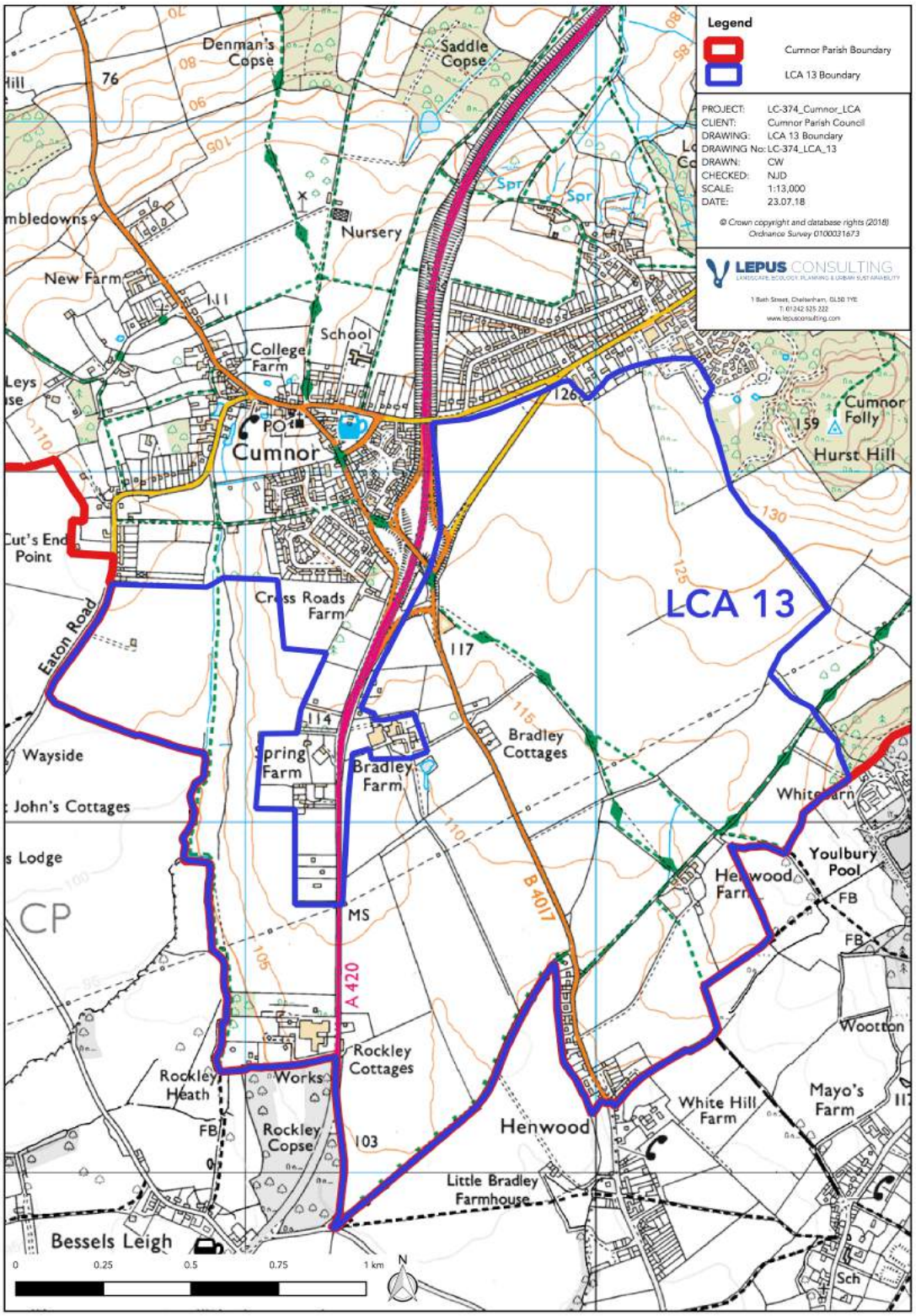


Figure 17.1: *View from edge of Hurst Hill looking south west towards Bradley Farm.*

Figure 17.2: *View from Henwood Farm looking north showing some of the visual detractors within the LCA.*

17.1 Location and Boundaries

17.1.1 The Land South of Cumnor and Chawley LCA is located to the south of the Parish. The area is defined by its extent of large scale, open, arable fields, with limited woodland and settlement. The southern half of the LCA coincides with the Parish boundary, whilst the north is bordered by the settlements of Cumnor and Chawley.

17.2 Designations and Policy

17.2.1 A section of the Oxford Green Belt Way crosses the LCA and along the southern LCA and Parish boundary. There is a network of public footpaths that cross the LCA. There is one public bridleway that passes through the LCA and a byway open to all traffic borders the LCA and Parish to the south. There are three Grade II Listed Buildings in the LCA. There are no statutory designated biodiversity features or sites. The LCA predominantly covers Grade 3 ALC land, with Grade 2 ALC land to the west.

17.3 Natural

Landform

17.3.1 The geological bedrock of this area is comprised of:

- Ampthill Clay Formation and Kimmeridge Clay Formation;
- Hazelbury Bryan Formation;
- Kingston Formation; and
- Stanford Formation.

17.3.2 Land cover of the area comprises of large, open, arable fields. The landform is gently south facing overall and falls subtly towards the middle of the LCA. The area rises to a maximum height of approximately 130m AOD towards the foot of the Hurst Hill, in the north east corner of the LCA.

Biodiversity and the Natural Environment

17.3.3 Hedges are absent or limited along some field boundaries. Other field boundaries have broken lines of vegetation or low clipped hedges. There is a small area of trees to the south of the LCA.

17.3.4 The fields to the east of the LCA can be seen as a vital part of the setting of Hurst Hill SSSI as well as Youlbury Woods south of the Parish boundary.

17.4 Cultural/Social

Built Environment

17.4.1 A line of pylons crosses east- to west through the middle of the LCA. A few farm buildings are located to the edge of the LCA. There are clusters of houses at Henwood and Cumnor. The A420 and B4017 transverse broadly north to south across the LCA.

17.4.2 The Vale of White Horse District Council's Landscape Capacity Study[47] states that development within LCA 13 would have a *"significant adverse impact on the landscape and visual characteristics of this area. The small triangular area in the north is less sensitive but development on this land would result in the loss of the remaining separation of Cumnor from Botley/Chawley. There is potential to mitigate the visual impact of housing through major planting which would be in keeping with the OWLS landscape strategy but this would not compensate for the loss of local open character and landscape links with the wider countryside. It is recommended that the site is not considered further as a contingency site"*.

[47] Kirkham Landscape Planning Ltd / Terra Firma Consultancy (2014) Vale of White Horse District Council Landscape Capacity Study 2014: Site Options. Available at: http://www.whitehorsedc.gov.uk/services-and-advice/planning-and-building/planning-policy/new-local-plan-2031/evidence-base [Date Accessed: 24/09/18]

17.4.3 The Vale of White Horse District Council's Landscape and Visual Feasibility Study[48] concluded that LCA 13 *"is detached from settlement and forms a prominent part of the wider landscape. The site has few urban influences and no detractors. Views into the site from the north are restricted by hedgerow boundaries lining Oxford Road and Cumnor Hill road, however gaps in the vegetation afford open and panoramic views across the site. Motorists are the most frequent visual receptors from these roads, who have transient views of the site. There are open views of the site from the bridleway that runs south- east through the site and intermittent views from the bridleway to the south of the site. Recreational walkers and horse riders are the key visual receptors from these viewpoints. They are likely to be focused on their surroundings and are highly sensitive to change. There are partial and glimpsed views into the site from the housing to the north of the site within Botley. There are also views into the western part of the site from the listed building at Bradley Farm. The site consists of an open and rural landscape, located within the Oxford Green Belt. Development within the site would be out of context with the existing settlement pattern and has the potential to cause coalescence between Botley and Cumnor"*.

Community Assets

17.4.4 There are two community assets in the LCA, 'Johnston Cave Associates', an architecture firm, and Henwood Farm.

17.5 Perceptual and Aesthetic

17.5.1 The medium sized LCA feels enclosed, primarily due to the varying land uses and rolling hills which blocks some long distance views in the area. This provides a sense of enclosure whilst the hills are curved and rolling. The area is disjointed due to the various land uses and visual detractors that cross the landscape. This includes pylons and telephone wires.

[48] Hankison Duckett Associates (2014) Vale of White Horse District Council, North Abingdon Land to the east of Oxford Road Landscape and Visual Feasibility Study. Available at: http://www.whitehorsedc.gov.uk/sites/default/files/LVIA%20Report.pdf [Date Accessed: 24/09/18]

17.5.2 The north and the south ends of the LCA are different, with the north having a greater sense of exposure and simplicity due to consisting mainly of large open fields. The south of the LCA has a greater sense of enclosure and diversity due the rolling hills breaking up the flat landscape.

17.5.3 The landscape across the area is identified as having either post medieval or modern fieldscapes. There is evidence of iron age archaeology within the LCA which is important to the setting of Henwood Farmhouse.

17.5.4 Key characteristics of the LCA include an open and exposed landscape, areas of land well-used and appreciated by the public and important public footpaths. Human influences such as roads and pylons alter the sense of remoteness and tranquillity.

Important Views

17.5.5 The area is relatively open, with views across the arable farmland, over the low hedges. Woodland atop Hurst Hill is noticeable over boundary vegetation to the north-east. This is a large-scale landscape with large open fields relatively undisturbed by development.

17.5.6 Long open views are visible from the Cumnor By-pass, with glimpses visible from Oxford Road, towards Didcot and Berkshire Downs. There are occasional long-distant views of the North Wessex Downs AONB on the horizon. There are also some important views from the Oxford Green Belt Way towards the AONB where rows of trees and hedgerows screen the nearby Oxford Road.

Noise

17.5.7 The constant sound of traffic on the A420 disrupts the sense of tranquillity and remoteness of some parts of the area. The A420 passes through the southern part of the LCA where the noise disturbance is the greatest, whereas the farthest east side of the LCA is quieter as it furthest from any major roads. For example, towards the Oxford Green Belt Way and the edge of Hurst Hill there is a greater sense of calm and tranquillity.

17.6 Recommendations to plan, manage and protect distinctiveness

- Strengthen the field pattern by conserving species rich hedgerows and sympathetically maintaining all hedgerows.
- Maintain the presence of trees in this landscape.
- The tranquil character of the area should be maintained.
- Prevent the introduction of structures that would be visually intrusive and detract from the current landscape.

18 Hurst Hill and Chilswell Farm (LCA 14)

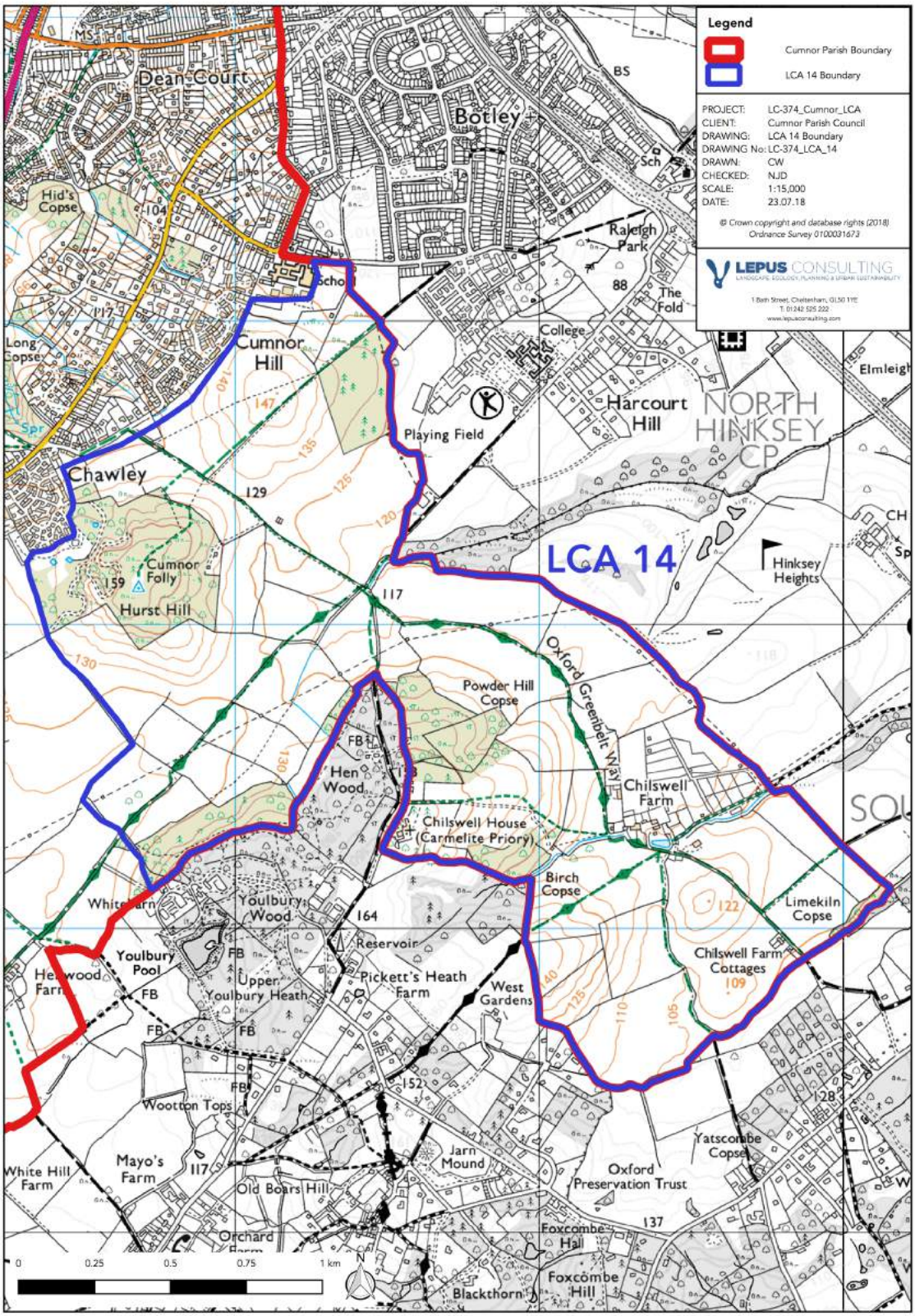


Figure 18.1: *View from Berkeley Road towards the east, with the south of Cumnor Parish visible to the left and, in the distance, the spires of Oxford can be seen to the right.*

Figure 18.2: *Far reaching views towards Farmoor Reservoir from the summit of Cumnor Hill.*

18.1 Location and Boundaries

18.1.1 The Hurst Hill and Chilswell Farm LCA is located in the south east corner of the Parish, with many of its borders coinciding with those of the Parish. The area is formed of the south facing slopes of Hurst Hill and north and west facing slopes of Boars Hill. The LCA is bordered to the north by the settlements of Chawley and Dean Court.

18.2 Designations and Policy

18.2.1 A section of the Oxford Green Belt Way passes through the LCA. There is a network of public bridleways that cross the LCA, primarily bordering the stands of woodland. Public footpaths, known locally as 'Chilswell Paths' cross the LCA. There are four Grade II Listed Buildings, all at Chilswell Farm. Hurst Hill SSSI is within the LCA. Four stands of Ancient Woodland are completely or partially within the LCA. The LCA almost entirely covers Grade 3 ALC land.

18.3 Natural

Landform

18.3.1 The geological bedrock of this area is comprised of:

- Lower Greensand Group; and
- Ampthill Clay Formation and Kimmeridge Clay Formation.

18.3.2 Land cover of the area comprises pastoral and arable fields as well as two large stands of woodland of Hurst Hill and Hen Wood. The topography of the area is complex with many hills and slopes. High points include Hurst Hill and Cumnor Hill of a height of approximately 150m AOD.

Biodiversity and the Natural Environment

18.3.3 Hurst Hill towards the east of the area is designated as a SSSI for mosses and liverworts as well as geological interest. The LCA is primarily open arable fields and rough pastureland. There are lines of trees, hedgerows and stands of woodland scattering the site.

18.3.4 Parts of larger stands of Ancient Woodland lie within the LCA, which includes:

- Hen Wood;
- Powder Hill Copse;
- Stone's Copse; and
- Birch Copse.

18.4 Cultural/Social

Built Environment

18.4.1 There is limited settlement in the area, primarily farmsteads of Chilswell Farm, Powder Hill House and Hurst Cottage. Chawley and Dean Court border the LCA to the north. Lines of pylons cross through the area. There is limited vehicle access in the LCA, with only a short lane between Chawley and Chilswell Farm.

Community Assets

18.4.2 There are no community assets within the LCA.

18.5 Perceptual and Aesthetic

18.5.1 The area consists of a mixture of post medieval and modern fieldscapes. Limited settlement and a combination of complex topography and woodland provide a distinctive landscape with a sense of peace and tranquillity, and a degree of remoteness, in certain areas. The area has a sense of openness and vastness. The varying views make the landscape diverse and textured. Overall, the area is calm and still, with little movement.

18.5.2 Cumnor Hill, also known as Botley Hurst has been described as 'sylvan'. The areas surrounding Cumnor Hill is semi-natural with low density.

Important Views

18.5.3 Views into the LCA are limited from the south due to the contouring of the land and tree cover, however, from the southern point there are outstanding views out across to Oxford. Views include the 'dreaming spires' of Oxford, as painted from Hinskey Hill by William Turner. The Oxford Preservation Trust owns land in the area in order to protect green spaces and views, including Chilswell Fields towards the south of the LCA.

18.5.4 Cumnor Hill is situated in the north of the LCA, where 360 degree views can be seen across the Oxfordshire landscape. Some views are partly limited due to Hurst Hill situated to the west, but there are still expansive, long distance views over Farmoor Reservoir as well as the countryside to the south.

18.5.5 Detracting features such a pylons and distant views of settlement reduce the sense of remoteness in some areas of the LCA.

Noise

18.5.6 There is limited noise in the areas but there is the distant intermittent sound of traffic from nearby roads. The stands of woodland at Boars Hill and its surrounding act as a barrier to aural detractors from the south.

18.6 Recommendations to plan, manage and protect distinctiveness

- Ancient Woodland should be managed to maintain favourable condition.
- The tranquil character of the area should be maintained.
- Maintain the presence of trees in the landscape.
- Strengthen the field pattern by conserving species rich hedgerows and sympathetically maintaining all hedgerows.
- Prevent the introduction of structures that would be visually intrusive and detract from the expansive views.
- Conserve the important panoramic views towards Oxford.

APPENDIX A: Project Scope

The Instruction for Work as stated by Cumnor Parish Council:

- Inception Meeting;
- Desktop Study;
- Field Study;
- Classification and description of landscape character areas;
- Writing of c. 15 landscape character areas;
- Presentation; and
- Final amendments.

The scope of the project includes:

- The landscape, including the impact of farming;
- Important views within the Parish, looking out from Parish towards, for example, Eynsham, the downs above Wantage etc. and from Oxford City looking into the Parish;
- How Cumnor village and its layout, Dean Court & Farmoor have evolved;
- The built environment including the Parish's heritage assets, with attention to the edge of settlements;
- Community assets, such as pubs, halls and green spaces; and
- Biodiversity and the natural environment.

APPENDIX B: Field Study Checklist

Table B.1: *Field checklist used on field survey.*

Factor	Landscape feature	Present? Y/N?	Low/ Medium/ High	Comments
Natural	Native woodland			
	Significant tree/groups			
	Strong hedgerow structure with hedgerow trees			
	Species rich grassland			
	Significant water feature(s)			
	Varied landform and distinctive feature of the area			
	Pronounced geology			
	Soils significantly contribute to landscape features			
	Complex and vulnerable land cover			
	Presence of other significant vegetation cover			
	Presence of valued wildlife habitats			
	Significant wetland habitats and meadows			
	Presence of common land			
	Presence of good heathland			
Cultural /social	Distinctive good quality boundary features			
	Evidence of surviving part of a historic landscape			
	Complex historic landscape pattern with good time depth			
	Important to setting or in a conservation area			

Factor	Landscape feature	Present? Y/N?	Low/ Medium/ High	Comments
	Includes a scheduled ancient monument important to setting			
	Locally distinctive built form and pattern			
	Important to setting of a listed building			
	Distinctive strong settlement pattern			
	Locally significant private gardens			
Perceptual	Quiet area			
	Absence of intrusive elements			
	Dark skies			
	Open exposed landscape			
	Unified landscape with strong landscape pattern			
	Well used area of land appreciated by the public			
	Important rights of way			
	Well used and valued open air recreational facilities			
	Open access land			

Factor	Feature		Comments
Aesthetic	Scale	Intimate? Small? Large? Vast?	
	Enclosure	Tight? Enclosed? Open? Exposed?	
	Diversity	Uniform? Simple? Diverse? Complex?	
	Texture	Smooth? Textured? Rough? Very rough?	
	Form	Vertical? Sloping? Rolling? Horizontal?	
	Line	Straight? Angular? Curved? Sinuous?	
	Colour	Monochrome? Muted? Colourful? Garish?	
	Balance	Harmonious? Balanced? Discordant? Chaotic?	
	Movement	Dead? Still? Calm? Busy?	
	Pattern	Random? Organised? Regular? Formal?	
Perceptual/ experiential	Security	Safe? Unsettling? Disturbing? Threatening?	
	Stimuli	Monotonous? Interesting? Challenging? Inspiring?	
	Tranquillity	Still? to Very busy?	
	Movement	Tranquil? to Vibrant?	
	Naturalness	Natural? Tamed? Managed? Artificial?	
	Noise	Quiet? Distant? Intermittent? Loud?	

APPENDIX C: NCA Information

Description

Physical and functional links to other National Character Areas

The Upper Thames Clay Vales National Character Area (NCA) covers an extensive area of low-lying land extending from west of Swindon through to Aylesbury in the east, and completely encircles the Midvale Ridge NCA.

Around 3 per cent falls within North Wessex Downs Area of Outstanding Natural Beauty (AONB), with smaller areas falling within the Chilterns and Cotswolds AONBs. To the north, Wiltshire, Oxfordshire and Buckinghamshire Vales adjoin Cotswolds NCA, while the Vales of White Horse and Aylesbury border the Berkshire and Marlborough Downs and Chilterns NCAs to the south. Avon Vales is to the west; Bedfordshire and Cambridgeshire Claylands lies to the north-east.

The Oolitic Limestone of the Cotswolds is a significant aquifer and gives rise to the rivers that cross into the NCA, including the Windrush, the Churn, the Coln and the Thames itself. Farmoor Reservoir relies on the Cotswolds for 60 per cent of its water. Principal aquifers associated with chalk bedrock in the Chilterns and Berkshire Downs also extend a little into this NCA. Main surface water abstractions are for the public water supply. To the east, the majority serves London, while Farmoor Reservoir provides for Oxford, Banbury and Swindon in neighbouring NCAs. The catchments of the rivers Ock and Thame in the south and the tributaries in the north (including the Evenlode, Windrush, Leach, Cherwell and Colne) all drain south-west into the Thames.

The Chalk scarp of the Chilterns and the Berkshire and Marlborough Downs forms a backdrop for many views from the Vales to the south.

The area is crossed by many transport corridors, including the M40, M4, A419 (M4–M5 link), Oxford and Grand Union canals and railway lines linking to the Midlands, and to the north and west of England. Cycle routes such as National Cycle Route 45 and The Ridgeway and Thames Path National Trails also pass through the area.

Distinct areas

- Wiltshire, Oxfordshire and Buckinghamshire Vales to the north and west of the Midvale Ridge
- Vales of White Horse and Aylesbury to the south of the Midvale Ridge

People enjoy the views of the Vales from the high ground of adjacent NCAs, including the escarpment of the North Wessex Downs Area of Outstanding Natural Beauty.

Key characteristics

- Low-lying clay-based flood plains encircle the Midvale Ridge. Superficial deposits, including alluvium and gravel terraces, spread over 40 per cent of the area, creating gently undulating topography. The Upper Jurassic and Cretaceous clays and the wet valley bottoms give rise to enclosed pasture, contrasting with the more settled, open, arable lands of the gravel.
- The large river system of the River Thames drains the Vales, their headwaters flowing off the Cotswolds to the north or emitting from the springline along the Chilterns and Downs escarpments. Where mineral extraction takes place, pits naturally fill with water, and limestone gravels from the Cotswolds give rise to marl formation. There are a high number of nationally important geological sites.
- Woodland cover is low at only about 3 per cent, but hedges, hedgerow trees and field trees are frequent. Watercourses are often marked by lines of willows and, particularly in the Aylesbury Vale and Cotswold Water Park, native black poplar.
- Wet ground conditions and heavy clay soils discourage cultivation in many places, giving rise to livestock farming. Fields are regular and hedged, except near the Cotswolds, where there can be stone walls. The Vale of White Horse is made distinct by large arable fields, and there are relict orchards on the Greensand.
- In the river corridors, grazed pasture dominates, with limited areas of historic wetland habitats including wet woodland, fen, reedbed and flood meadow. There are two areas of flood meadow designated for their importance at a European level as Special Areas of Conservation (SAC). There are also rich and extensive ditch systems.
- Gravel extraction has left a legacy of geological exposures, numerous waterbodies and, at the Cotswold Water Park, a nationally important complex of marl lakes.
- Wetland habitat attracts regionally important numbers of birds including snipe, redshank, curlew and lapwing and wintering wildfowl such as pochard. Snake's head fritillary thrives in the internationally important meadows. The area also supports typical farmland wildlife such as brown hare, bats, barn owl, tree sparrow and skylark.
- Blenheim Palace World Heritage Site, including its Capability Brown landscape, is the finest of many examples of historic parkland in this NCA. There are many heritage features, including nationally important survivals of ridge and furrow, Roman roads, deserted medieval villages and historic bridges.
- Brick and tile from local clays, timber and thatch are traditional building materials across the area, combined with limestone near the Cotswolds and occasional clunch and wichert near the Chilterns.
- Settlement is sparse on flood plains, apart from at river crossings, where there can be large towns, such as Abingdon. Aylesbury and Bicester are major urban centres, and the outer suburbs of Oxford and Swindon spread into this NCA. Market towns and villages are strung along the springlines of the Chilterns and Downs. Major routes include mainline rail, canals, a network of roads including the M40 and M4 and The Ridgeway and Thames Path National Trails.

Upper Thames Clay Vales today

The area is situated between the Chalk and limestone plateaux of the Cotswolds to the north and the Marlborough Downs, Berkshire Downs and Chilterns to the south and east. In the centre is the Midvale Ridge NCA, a low ridge of sandy Corallian Limestone. Either side of this ridge are river valley landscapes of flood plains, which form this NCA. Due to its size, and the different character of the Vales, this NCA has two distinct areas: Wiltshire, Oxfordshire and Buckinghamshire Vales to the north and west of the Midvale Ridge; and the Vales of the White Horse and Aylesbury to the south. The unifying feature is the Thames (or Isis) and its flood plains and tributaries.

The Wiltshire, Oxfordshire and Buckinghamshire Vales form part of a belt of clay lowland linking Cambridgeshire Claylands to the Avon Vales. This area consists of open, gently undulating lowland farmland bounded by the limestone scenery of the Cotswolds to the north and the narrow limestone outcrop of the Midvale Ridge to the south. It is underlain by an expanse of heavy blue-grey Oxford Clay and Kimmeridge Clay. In many places, the clay is covered locally by gravel deposits marked by extensive workings and flooded pits. The rivers Coln, Ray and Cherwell flow through the area, and the associated open flood plain landscapes consist of a regular and well-ordered field pattern, with willow pollards and reedbeds along the watercourses. Cotswold Water Park, a wetland area that includes the country's largest marl lake system, was created over the last 50 years by mineral extraction and lies to the west near Cricklade. Farmoor Reservoir lies to the west of Oxford, supplying much of the water for the surrounding areas.

The Vale of White Horse is a belt of heavy blue-grey Lower Cretaceous Gault Clay with exposures of underlying Jurassic Kimmeridge Clay, drained by the rivers Ock and Thame. South of Swindon, the Vale slopes down from the Berkshire and Marlborough Downs forming a clay plain, occasionally broken by minor hills of Greensand or Portland Limestone. Notable outliers of Chalk rise as hills near Dorchester and Cholsey. The area supports mainly arable farming with some pasture, producing a field pattern of large, regular fields with few hedgerows or trees. Villages such as Baulking and Goosey built around distinctive greens are located along the Ock Valley. Fruit orchards around Harwell thrive on light, fertile, sandy soils developed over the Greensand bench at the foot of the Chalk escarpment.

Otmoor is a large area of reedbed supporting a diversity of birds and other wildlife. Open water and semi-natural wetland habitats are characteristic of this area.

The Upper Thames drains the Vale to the west before cutting south at the confluence with the lower reaches of the Cherwell through the Midvale Ridge at Oxford. Wide expanses of terraced river gravels of limestone and wide alluvial flats dominate the Oxfordshire Vale. At the confluence of the Thames with the Windrush, Evenlode and Cherwell, distinctive hillocks form low, isolated features where patches of more ancient pebbly drift rest on the underlying Oxford Clay. Soils are generally yellowish brownearth, gleyed in lower-lying areas. West of Oxford, soils are dominantly calcareous with good drainage. The River Ray joins the Cherwell at Islip and drains the wide basin of Otmoor, where the soils are covered by a layer of peaty alluvium formed before the land was drained. The gently rising land along the northern rim to the east forms a watershed between the Ray and the Ouse.

The Vale of White Horse passes eastwards into the Aylesbury Vale. Here, the valley is dissected by alluvial flats and low river gravel terraces around the confluence of the Ock and the Thame. Farther east into the narrower Aylesbury Vale, sandy brownearths, developed from the ledge of Greensand below the Chalk scarp of the Chilterns, provide some of the most productive soils in the area. Aylesbury Vale is drained by the River Thame and numerous independent streams that flow south-west into the Thames. Where drainage is impeded, underlying waterlogged brown earths give rise to wet meadows. Predominantly an agricultural landscape, arable fields, dairy herds, hedges, hedgerow trees and field trees are frequent and characteristic. In places, mature field oaks give a parkland feel. The Chalk scarp of the Chilterns and the Berkshire and Marlborough Downs is prominent in many views from the Vales to the south.

In the north, the Wiltshire, Oxfordshire and Buckinghamshire Vales form a mainly pastoral landscape dominated by stock rearing, with some arable and areas of old unimproved hay meadows north of Oxford. Wetter areas are usually under grass such as ley grassland and unimproved pasture or meadows. Larger arable fields tend to be restricted to the elevated gravel terraces with better drainage. Woodlands are generally scarce, although watercourses are often marked by lines of willows or native black poplar.

The Oxfordshire and Wiltshire Vales are characterised by 18th- and early 19th-century enclosure landscapes of small woods and thorn hedges. Former and current gravel workings along the Upper Thames flood plain are characteristic. Many are now open water and used for recreation. Rivers and watercourses, particularly where tree lined, are important landscape features – including the springlines, which emerge from the base of the Chalk escarpment.

Aylesbury Vale is a continuation of the Vale of White Horse's agricultural landscape, with a geometric enclosure of farms set among large hedged fields with regularly spaced hedgerow trees. Around villages the fields are generally smaller and more irregular. Black poplar tree stands are distinctive features. Bankside willows and flat, open watermeadows fringe the River Thame, which drains towards the Thames in the south-west.

Woodland was already scarce by the 11th century, and the NCA now has only 3 per cent woodland cover. Watercourses are often tree lined, and there are remnants of ancient Royal Hunting Forests and concentrations of orchards on the Greensand. However, nearly 2,000 ha of historic parkland and mature hedgerow trees can give an impression of a more wooded landscape. Important wetland habitats are associated with the waterbodies, watercourses and flood plains, including internationally designated calcareous flood meadows north of Oxford. Some river valley meadows and pastures are

regionally important for wading birds such as curlew and lapwing, including breeding populations and large wintering numbers. Nationally important numbers of breeding and wintering wildfowl are associated with the water-filled gravel pits and reservoirs. In addition, the area's arable habitats support nationally important assemblages of farmland birds.

A line of settlements developed along the natural springlines at the base of the Chilterns Chalk scarp. Today, they include historic and distinctive market towns. Parkland and fine houses are also notable features.

Brick-built buildings with tiled roofs reflect the widespread use of the local clay. The southern vales have many buildings plastered with 'wichert', a traditional chalky marl mixed with straw, and are often colour-washed. Villages on the ledge of Greensand were rarely built of the local sandstone. However, use of chalk blocks, or 'clunch', quarried from the chalk hills, with some thatch, adds variety. Settlement follows the rim of the northern vales, with villages on rising ground or raised gravel spreads within the flood-prone lowlands. Isolated 19th-century farmhouses are characteristic, and older stone-walled and stone-slated buildings, particularly in the Oxford Vale, reflect the Cotswolds influence.

Although the NCA retains many tranquil spaces, the overwhelming impression is of an area criss-crossed by transport routes including motorways, major roads, canals and railway lines, dominated by Didcot Power Station and industrial activities around Abingdon in the south and Oxford Airport in the north, with the large towns of Swindon and Aylesbury to the west and east. Activity from military airbases such as Fairford and Brize Norton outside the NCA also impacts on the tranquillity of the area.

Snake's head fritillary grows in the historic meadows of North Meadow and Clattinger Farm SAC. Other characteristic species include brown hare, native black poplar and brown hairstreak butterfly.

The landscape through time

The Upper Thames Clay Vales NCA is predominantly underlain by clay rocks deposited on ancient sea floors between 165 and 100 million years ago. The Oxford Clay and Kimmeridge Clay were deposited during the Jurassic Period, and contain fossils laid down in a marine environment. At the end of the Jurassic Period and the start of the Cretaceous Period, shallow marine estuarine conditions prevailed and sands and limestones of the Portland Group and Purbeck Limestone were laid down. The Cretaceous Period then saw the return of a marine environment in which more clay – the Gault Clay – was deposited, followed by the Upper Greensand and then the Chalk. More recent Quaternary ice-age events (over the last 2 million years) are represented by river terrace gravels, some of which have yielded rich fossil faunas of large mammals and molluscs.

There is widespread evidence of Neolithic settlement of the river terraces downstream from Radley, and ancient field systems are visible as cropmarks in the Thames gravels. Many of these settlements survive beneath Medieval market towns along the ancient route of the Lower Icknield Way; much of the prehistoric trackway runs along the Greensand ledge. There is significant prehistoric and Roman archaeology throughout the Upper Thames gravels. A network of Roman roads connected the frontier post of Dorchester with wider areas and acted as trade routes after the conquest. Roman farms were concentrated on the better draining loams of the gravel terraces along the river valleys, particularly the Thames. These are no longer visible, but routes of Roman roads such as the Ermine Way remain significant features in modern-day road patterns.

Most of the area's towns have significant time depth. There are Saxon remains, such as defences at Wallingford and Cricklade, and a concentration of Anglo-Saxon burial sites in the south of the area. Domesday survey showed the narrow belt of springline villages on the Greensand at the foot of the Chilterns in Aylesbury Vale as the most densely populated area. Significant archaeological features remain visible, including ancient field systems evident as cropmarks and remnant embankments and ditches associated with royal hunting grounds. Around Aylesbury, deserted villages such as Quarrendon, Fleet Marston and Creslow are also significant medieval features. Ridge and furrow survives across the area, with nationally important survivals at West Hanney, Denchworth, Lodgershall, Hogshaw and Creslow. Straight-sided large fields enclosing the northern Vales are typical of a 'planned countryside'. Domesday records little woodland cover, with scarcely any placenames relating to woodland.

The sparse settlement pattern within the Vales was more or less established by the 11th century, with the Upper Thames area generally more populated than the Vale to the east. Otmoor was, as now, largely devoid of any buildings or settlement and was used for summer and autumn grazing. Contrast existed between the pattern of pastures and hedgerows of the clays, pollarded willows on alluvium and the hedgeless arable fields and villages confined to gravel spreads within river valleys. Generally older, smaller fields surround riverine areas, while larger fields dominate higher, drier ground. Evidence of reclamation of the wetter lands exists in the occurrence of 'moor' placenames such as Otmoor. Otmoor was a wet, open landscape before enclosure, at which point it was divided up. Some of the earliest regional Parliamentary enclosures were in the Vale of White Horse, reaching a peak in the second half of the 18th century as new ideas of farm husbandry spread. Dairy farming developed

rapidly as new methods increased productivity from the rich clay soils. The still predominant field pattern of large hedged fields dates from this time. Historically most Buckinghamshire orchards were located in the south of the county around High Wycombe and south of Aylesbury, with cherry orchards the county's speciality. The Aylesbury prune, a black plum or damson, was widely grown and principally used for cooking and making jam.

Villages that were slow to develop have remained small and retained their early settlement layout and old buildings. Aylesbury is the only town of any size, growing partly from its trade in Aylesbury ducks as the breed was refined and popularised during the 18th century. The Thames and Severn Canal and the Oxford Canal, completed in 1789 and 1790 respectively, were important trade routes between London and the East Midlands, and the Wilts and Berks Canal linked the Thames at Abingdon to the Kennet and Avon Canal. The arrival of the railway in 1839 had a powerful impact and boosted other industries; for example, up to a ton (1,000 kg) of ducks a night were being shipped from Aylesbury to London by 1850. Swindon Railway Works opened in 1843 and transformed Swindon into a busy industrial town, employing over 12,000 people in its heyday in the early 20th century.

The introduction of hardier Peking ducks in 1873 eventually led to the decline of the duck-rearing industry, and the Aylesbury duck is now a rare breed. Changes in agriculture reduced the area's characteristic cherry, plum and apple orchards by over 90 per cent by 1994, and they continue to decline. The County Council's Survey of Orchards in Southern Buckinghamshire revealed a 39 per cent loss in orchards between 1975 and 1995 in one of the areas that was previously extremely important for fruit production. The condition of the remaining orchards is generally poor.

The switch from steam to electric in the 1950s, and later from rail to road transport, resulted in the decline and eventual closure of the Swindon Railway Works. Didcot Power Station was completed in 1968 and its infrastructure dominates the area south of Oxford. The original Didcot A was decommissioned in 2013, replaced by Didcot B, a gas-fuelled station on the same site. The area's motorways (M40 and M4) were built in the early 1970s, although the final section of the M40 north of Oxford was not completed until 1991, the route being altered to avoid Otmoor following local objections. During the late 20th century, the population of the area increased dramatically, partly because families moved out of the capital from the 1960s as part of the London overspill policy and also because commuters were attracted by the area's excellent rail and road links.

Pump drainage allowed wet land on Otmoor to be drained to enable arable farming from the 1960s. The Royal Society for the Protection of Birds (RSPB) bought the first of these fields in 1997 and began to return them to grassland. Some sand and gravel had been sourced from this area since Roman times but was only exploited on a large commercial scale during the 20th century. Mineral extraction on the Wiltshire/Gloucestershire border over the past 50 years has resulted in the formation of a series of wetlands, recognised as a country park, the Cotswold Water Park in 1967 and now managed for wildlife and recreation.

The population of Aylesbury had more than doubled by 2011, and this change is reflected across the area.

Ecosystem services

The Upper Thames Clay Vales NCA provides a wide range of benefits to society. Each is derived from the attributes and processes (both natural and cultural features) within the area. These benefits are known collectively as 'ecosystem services'. The predominant services are summarised below. Further information on ecosystem services provided in the Upper Thames Clay Vales NCA is contained in the 'Analysis' section of this document.

Provisioning services (food, fibre and water supply)

- **Food provision:** Around 75 per cent of the land in this NCA is farmed, with 16 per cent classed as Grade 1 or Grade 2 land. Around 50 per cent of farmed land is cultivated – mostly cereals and other arable crops, with some horticulture, including orchard fruit. The rest is grazed or uncropped; this land is mainly used for sheep, with some beef. It was formerly a major dairy farming area but dairy now accounts for only 6 per cent. Pig rearing remains significant, although numbers of pigs fell by nearly 45 per cent between 2000 and 2009.

- **Water availability:** There is no significant underlying aquifer, but aquifers associated with the Chalk bedrock in the Chilterns and the Berkshire Downs extend a little into this NCA; the Oolitic Limestone of the Cotswolds gives rise to many of the rivers in this NCA, including the Windrush, the Churn, the Coln and the Thames itself. Farmoor Reservoir relies on the Cotswolds for 60 per cent of its water. It draws most of its water from the Thames and contributes to the public water supply, particularly for Banbury (outside the NCA), Oxford and Swindon. Main abstractions are from rivers and are for public water supply. To the east, the majority serves London. The NCA is classified as having 'no water available' for additional abstraction, with several areas that are over-licensed. A Restoring Sustainable Abstraction Programme has been put in place for sites that are adversely affected by abstractions (four sites within the Cherwell catchment).[4] Demands placed on the water supply will increase further with the significant identified growth of urban areas, with abstractions likely to be made up by water from outside the NCA.[5]

- **Genetic diversity:** The Aylesbury duck is now a rare breed, with only one pure-bred flock in the country, just outside the NCA. The Aylesbury prune, a historic Buckinghamshire plum widely grown throughout the county for centuries, is found in some hedgerows. Small numbers of Oxford Sandy and Black pigs are kept. Some of the ancient oak pollards of Blenheim Park may be direct lineal descendants of those recorded in Domesday.

  There is an ongoing study of the clonal genetic diversity of black poplars in the Cotswold Water Park, along with an active propagation and conservation programme.

[4] Cherwell, Thame and Wye Catchment Abstraction Licensing Strategy, Environment Agency (December 2012; URL: http://publications.environment-agency.gov.uk/pdf/GETH0705BJHS-E-E.pdf)

[5] Kennet and Vale of the White Horse Catchment Abstraction Licensing Strategy, Environment Agency (December 2012; URL: http://publications.environment-agency.gov.uk/pdf/GETH0306-E-E.pdf)

Regulating services (water purification, air quality maintenance and climate regulation)

- **Climate regulation:** Soil carbon content is generally slightly higher in the east of the NCA. Some of the loamy and clayey flood plain soils with naturally high groundwater (8 per cent) are peaty at depth or include small areas of peaty soils, and are likely to be associated with the large areas of wetlands (flood plain grazing marsh, fens and reedbeds); these form important stores of carbon, making their conservation a priority.

- **Regulating soil erosion:** Soils at risk of erosion cover 41 per cent of the NCA, including freely draining lime-rich loamy soils (16 per cent) and shallow lime-rich soils over chalk or limestone (8 per cent). These are at risk on sloping land where cultivated or bare soil is exposed (such as along footpaths and tracks or as a result of outdoor pig rearing in the case of the soils over chalk or limestone). This can be exacerbated where organic matter levels are low after continuous arable cultivation or where soils are compacted. Wind erosion is possible on some coarse-textured cultivated variants of the freely draining slightly acid loamy soils.

- **Regulating water quality:** Most of the rivers in the NCA are of good chemical quality, although a few are failing to achieve good chemical conditions. The ecological quality of the rivers is mixed: the River Thames/Isis and a few others are of bad quality in this NCA; a few are of good quality; but most are of moderate to poor quality. Causes of water pollution include channel modification and overshading, and point-source and diffuse agricultural pollution.[6]

[6] Water for Life and Livelihoods: River Basin Management Plan – South West River Basin District, Environment Agency (December 2009; URL: http://wfdconsultation.environment-agency.gov.uk/wfdcms/en/southwest/Intro.aspx)

- **Regulating water flow:** The risk of flooding is high throughout much of the NCA, as it forms the flood plain of many rivers, including the Thames. With large areas of undeveloped flood plain within this NCA, winter flooding is regular, and the flood plain provides a large area to store water, reducing risk within urban areas downstream. Nevertheless, settlements lying on the flood plain are susceptible to both river and surface water flooding. Generally the rivers flow in natural channels, but in areas around Oxford, Swindon and Aylesbury, urban growth has meant that many are modified, which has sometimes led to flash flooding.

Rivers, water-filled gravel pits and wetlands provide a range of ecosystem services. Water attracts wildlife and people and in this NCA where there is high flood risk, wetlands usefully hold water and intercept flow.

Cultural services (inspiration, education and wellbeing)

- **Sense of history:** A sense of history is evident in the wealth of visible archaeological remains, which include Roman roads such as the Ermine Way, a prehistoric trackway running along the foot of the Chalk scarp, ancient field systems, deserted villages such as Quarrendon, pre-Christian burial sites to the south and remnant embankments and ditches associated with royal hunting grounds. There are also numerous country houses, parks and gardens, including Blenheim Palace, a designated World Heritage Site.

- **Recreation:** The NCA offers an extensive network of rights of way totalling 3,369 km at a density of nearly 2 km per km2, as well as open access land covering 400 ha, or just over 0.2 per cent of the NCA. In addition, 117 km of the Thames Path and 5 km of The Ridgeway National Trails cross through the area, while the Great Western Community Forest surrounding Swindon (covering 14 per cent of the NCA) is where new open spaces are being developed. Woodland grant schemes support public access to a significant proportion of the NCA's woodland. The Cotswold Water Park and other restored gravel workings such as in the Lower Windrush Valley offer significant opportunities for activities such as bird watching, walking and water-based recreation, and the River Thames/Isis is important for competitive rowing. The Oxford Canal Walk links with the Oxfordshire Way and is part of European long-distance path E2. The area has many geocache sites. [7]

- **Biodiversity:** Oxford Meadows SAC and North Meadow and Clattinger Farm SAC include vegetation communities that are possibly internationally unique, reflecting the influence of long-term grazing and hay-cutting on lowland hay meadows. Little Wittenham SAC is one of the most studied great crested newt sites in the UK. Within the NCA, 2,500 ha of land is designated as Sites of Special Scientific Interest (SSSI – 1.3 per cent of the NCA). This NCA has 7,000 ha of flood plain grazing marsh, 2,500 ha of woodland (wet woodland, lowland mixed deciduous and lowland beech and yew) and just over 1,000 ha of lowland meadows. There are also 600 ha of fens and 400 ha of reedbeds. The area's wetlands, including gravel pit restoration schemes, are important for breeding and overwintering birds, for example in the Lower Windrush Valley, Cotswold Water Park and Dorchester areas. Flood plain grazing marsh alongside the rivers Ray (including Otmoor), Cherwell and Thame support important breeding populations of waders (curlew, snipe, redshank and lapwing). The area is a national stronghold for brown and black hairstreak butterflies, associated with blackthorn, while arable habitats such as those in the Vale of White Horse, Upper Thames and Ray valleys support important numbers of farmland birds such as tree sparrow.

- **Geodiversity:** There are a high number of sites designated for their geological interest: 11 geological SSSI; and another 27 Local Geological Sites. Faringdon is home to the famous Faringdon Sponge Gravel, a Cretaceous unit filled with spectacular fossil sponges, other invertebrates, a few vertebrate bones and teeth, and wonderful examples of bioerosion. Wootton Bassett Mud Spring is a geological SSSI featuring oozing springs of cold, grey mud which blister up under a thin layer of vegetation. It is an example of a hydrogeological phenomenon represented by few other examples in Britain, the mechanism of which has been studied in detail at this site.

[7] Geocache sites: http://www.geocaching.com/guide

Statements of Environmental Opportunity

SEO 1: Along the Thames and its tributaries, promote sustainable farming and best practice mineral working in order to conserve and restore semi-natural habitats, historic features, geodiversity, soil quality and soil carbon stores and also to regulate water flow in this area and downstream. Ensure conservation of Oxford Meadows Special Area of Conservation and North Meadow and Clattinger Farm Special Area of Conservation. Engage the public in river heritage and maintain traditional land management practices where appropriate.

For example, by:

- Making reference to the Water Framework Directive, catchment management plans, local Landscape Character Assessments and other strategy documents. Draw on best practice developed by initiatives such as the Catchment Sensitive Farming Programme, the Nature After Minerals Programme and the Payments for Ecosystem Services (PES) pilot developed in this National Character Area (NCA).
- Working across administrative and landownership boundaries to co-ordinate management along the length of watercourses and ditches. Co-ordination is relevant to ecological and physical processes, including the management of water levels. Restore and create habitats and corridors in order to improve resilience, ecosystem function and connectivity of the ecological network at a landscape scale.
- Where compatible with management of flood risk, continuing to restore or enhance as appropriate engineered watercourses to improve habitats, restore a more natural hydrological regime and re-connect watercourses with their flood plains.
- Identifying potential floodwater storage areas, including maximising opportunities around the restoration of mineral workings, and securing land uses that are flood compatible, including wet grassland.
- Considering and managing for climate change impacts on water levels. Identify those features that are sensitive to water level, including habitats, plant species and archaeology that are prone to drought or long-term submergence. Maintain and, where necessary, restore or create ditches and water level control structures.
- Managing improved and semi-natural grasslands and wetlands such as reedbed and wet woodland to slow run-off and filter pollutants. Also manage and create linear features such as hedgerows, ditches and grass strips to manage water flow and filter pollutants.
- Engaging communities in addressing sources of pollution and polluting practices in the rural and urban environment.
- Identifying areas of peat and deep soils that have higher carbon storage capacity. Manage these areas to minimise or avoid damage to soils, in some cases changing land use or restoring wetland habitat such as fen where appropriate.
- Conserving, restoring and creating wet grassland, reedbeds, ponds, species-rich ditches, lowland meadow and other semi-natural habitats. Focus creation and restoration around extending and linking existing areas of habitat in order to improve the function of ecological networks and secure management efficiencies.
- Identifying locations where arable farming is not sustainable in the

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long term and where arable reversion would increase benefits for biodiversity, regulation of water flow, regulation of water quality and conservation of soils. Support arable reversion by exploring and supporting markets for products of grasslands, including sustainable energy as developed in this area by the PES pilot.

- Where possible, making use of green hay and seeds from species-rich grasslands in the NCA to create and restore additional areas of species-rich grassland. Draw on best practice developed in the meadows in the Special Areas of Conservation and elsewhere to inform management of other meadows in the area.
- Providing suitable habitat for wildlife, particularly the area's characteristic species and rare species, including breeding waders. Tackle problems associated with non-native species such as crassula and mink.
- Conserving veteran trees, including pollarded willow and black poplar. Conserve suckering elm as vestiges of a tree that was once widespread in this area. Ensure that there are successors to veteran trees and guard against pests and diseases. Draw on best practice developed in Aylesbury Vale and Cotswold Water Park around black poplar.
- Managing and restoring active extraction sites to benefit geodiversity, biodiversity, recreation and all the water ecosystem services where possible.
- Creating habitats through restoration schemes for mineral workings in a way that contributes to a coherent and resilient ecological network. Where environmental conditions allow, seek to realise more complex or ambitious restoration options such as reedbed. Ensure that the long-term, sustainable management of habitats is secured along with recreational benefits engaging the public in learning about local geodiversity and biodiversity.
- Maintaining traditional management where this conserves distinctive landscape characteristics, biodiversity and cultural heritage, for example lowland meadow and willow pollards. Engage the public in these traditions and associated heritage.
- Ensuring that recreation activities are appropriately managed across the NCA in order to avoid disturbance of breeding birds, poor experiences of tranquillity and potential conflict between user groups. Securing sustainable recreation is particularly important on ecologically fragile sites or where the negative impact would be significant.
- Conserving heritage assets along rivers, including Scheduled Monuments, historic buildings, bridges and historic watermeadows. Survey historic features and riverine landscapes to inform conservation and public engagement activities.
- Continuing to engage people in the cultural heritage of the Thames through events, interpretation and education. Secure an overview of the artistic and literary work associated with the Thames which contributes to sense of place.
- Engaging the public in the geodiversity of the River Thames, including fossils found in the river gravels. Ensure the conservation of such geodiversity, in particular geological Sites of Special Scientific Interest (SSSI), and facilitate public access where possible.
- Along key sections of the Thames Path National Trail and associated key rights of way, seeking to maximise accessibility and to engage the public in the natural and cultural heritage. Review accessibility and interpretation of the Thames tributaries and make improvements where there is greatest opportunity.
- Conserving tranquillity as appropriate along the rivers and promoting rivers and lakes as places in which to experience tranquillity. People living in areas of low tranquillity will be target audiences for promoting river and lake recreation.

SEO 2: Manage farmland across the Upper Thames Clay Vales to produce food sustainably and maintain sense of place. Taking a catchment approach, improve filtration of pollutants and regulation of water flow by realising a farmland habitat mosaic that incorporates strategic areas of wet grassland, reedbed, wet woodland and ponds as well as ditches and hedgerows.

For example, by:

- Making reference to the Water Framework Directive, catchment management plans, Area of Outstanding Natural Beauty (AONB) management plans, local Landscape Character Assessments and other strategy documents. Draw on best practice developed by initiatives such as the Catchment Sensitive Farming Programme, the Nature After Minerals Programme and the PES pilot developed in this NCA.
- Identifying locations prone to run-off, including access routes, sloping land and cultivated land, and seeking to impede run-off. Convert strategic areas of arable to grassland where possible.
- Adopting efficient chemical application methods such as precision farming. Where compatible with food production, encourage minimal use of chemicals and enhance biodiversity.
- Where arable reversion is sought in order to secure improved or alternative ecosystem services, exploring and supporting markets for products of grasslands, including sustainable energy as developed in this area by the PES pilot.
- Along watercourses, ditches and waterbodies, maintaining buffers to filter pollutants from run-off, which affects water quality and aquatic biodiversity. Create wet grassland, wet woodlands and reedbeds to filter pollutants and secure additional biodiversity benefits.
- Conserving soils to maximise filtration, thereby reducing rapid run-off and loss of soil. It is important to avoid compaction. Soil conservation will benefit plant growth and consequently food provision.
- Creating short- and long-term water storage to secure improved water availability but also to manage water flow so as to avoid flash flooding, for example, reservoirs can secure water supply at any scale over any period, including at the farm scale and ditches with control structures can be restored or created for managing water levels in a flood meadow or fen. Short-term floodwater storage applies to seasonally flooded grasslands and seasonal ponds and scrapes.
- Maintaining and enhancing the farmland habitat mosaic, restoring habitats such as fen, reedbed, wet grassland, ponds and wet woodland in historic locations where possible.
- Avoiding creation or expansion of woodland where there are benefits in retaining an open landscape, particularly in relation to breeding waders and valued views. Use tree stock of local provenance to guard against pests and diseases and conserve local species such as native black poplar and small leaved lime. Manage deer pressure.
- Providing and managing sufficient habitat for wildlife across farmland that is characteristic of this area, including brown hare, tree sparrow, curlew, otter, water vole, brown hairstreak butterfly, and barn owl.
- Providing nectar-rich habitats adjacent to insect-pollinated crops. Manage these habitats to support local biodiversity.
- Managing the farmland mosaic to regulate pests and diseases that affect food production and to support biodiversity. Achieve this by maximising heterogeneity of land use, providing habitat for natural predators and seeking genetic diversity. Incorporate features such as beetle banks and uncultivated field corners and strips into arable fields.

SEO 3: Ensure that heritage assets, especially characteristic features such as ridge and furrow, abandoned medieval villages, Roman roads, canals and historic parkland, including Blenheim Palace World Heritage Site, are maintained in good condition. Integrate conservation of these features with sustainable food production and provide public access to key examples. Seek opportunities to restore the wider historic setting of a feature, particularly in relation to the historic Royal Hunting Forests of Bernwood, Braydon and Wychwood.

For example, by:

- Using historic characterisation of the area's landscape and heritage features, improve understanding and management of historic features and their condition, significance and setting. Also draw on local Landscape Character Assessments and AONB management plans.
- Continuing to conserve and provide sustainable recreation in the Blenheim Palace World Heritage Site to maintain sense of history, sense of place and recreation interests. Assist the World Heritage Site Committee in delivering the Management Plan in support of the site's Outstanding Universal Value.
- Improving the condition of heritage assets and features, including those on the Heritage at Risk register, and locally characteristic features such as ridge and furrow through appropriate measures and seeking to reduce conflicting or unsympathetic management regimes, while recognising the high potential in this landscape for undiscovered remains.
- Working with land managers to identify how to conserve historic features while also producing food in a sustainable way. Avoid ploughing damage to heritage assets, ideally by reversion to grass. Grassed monuments in the landscape can also conserve soils, filter pollutants from run-off and increase the heterogeneity of land use for the benefit of biodiversity.
- Engaging local communities and visitors in the historic landscape through a high-quality public access network, interpretation and education involving examples of key historic features. Draw on best practice visitor engagement and management developed at Blenheim Palace World Heritage Site. Further enhance people's engagement with the heritage of canals.
- Working at the appropriate landscape scale to restore the setting of key features, including the historic Royal Hunting Forest landscapes of Bernwood, Braydon and Wychwood. Draw on work already carried out in these areas.
- Seeking to restore the mosaic of land uses (or habitats) of the ancient Royal Hunting Forests where this will maintain sustainable food provision and boost biodiversity, sense of history and recreation. Protect parkland trees from plough damage and manage deer pressure in order to support conservation and creation of woodland.
- Restoring Plantations on Ancient Woodland Sites, particularly in the ancient Royal Hunting Forest areas. Secure management of woodland by supporting markets for woodland products.
- Maintaining public access to woodlands within the historic boundaries of the ancient Royal Hunting Forests and improving the accessibility of key rights of way in the area.
- Managing canals to conserve important heritage features, maximising sustainable recreation opportunities and providing corridors and habitat for wildlife.

SEO 4: Realise sustainable development that contributes positively to sense of place and built heritage. Ensure adequate greenspace in association with all development and most importantly in growing settlements such as Aylesbury and Swindon. Create and manage greenspace to provide benefits for biodiversity, floodwater management, filtration of pollutants, tranquillity and recreation, and secure strategic access routes between town and country.

For example, by:

- Drawing on local Landscape Character Assessments, AONB management plans and historic landscape characterisation to define settlement pattern and local building materials and techniques.
- Ensuring that development outside urban and urban fringe settings is monitored and understood, as it is nationally significant in this NCA. Manage such development to avoid negative impacts – particularly impacts on the AONB, including their settings.
- Seeking to ensure that future development is designed to contribute positively to landscape character, focusing on local distinctiveness and being sensitive to setting. Ensure that design reflects an understanding of historic settlement pattern and traditional building materials and conserves significant heritage features. Reflect traditional building styles and incorporate traditional building materials into new development where possible. Identify the local sources of traditional building materials and establish sustainable extraction where possible. Conserve SSSI and Local Geological Sites through this work, including maintenance of access to exposures for research.
- Securing enhancements where possible, where existing development detracts from sense of place and other ecosystem services.
- Considering physical and functional links between settlements or development and the wider landscape, such as views and water flow. Manage the urban–rural fringe to contribute positively to landscape character.
- Incorporating new woodlands and tree screens into development as appropriate, taking care not to detract from the open landscape character of this NCA.
- Ensuring that there are green infrastructure links between town and country, providing access links for walkers, cyclists, less-able-bodied people and other user groups, particularly where greenspace is lacking and/or community health is poor.
- Managing canals in Aylesbury, Oxford and Swindon to provide sustainable recreation opportunities and habitat for wildlife. Integrating them into the wider network of access routes and green spaces and securing them as key corridors in the ecological network.
- Creating and managing green spaces so that they are accessible and tranquillity is maximised through for example, incorporating water features. Prioritise the creation and enhancement of greenspace where there is inadequate provision, for example in Aylesbury.
- Ensuring that development is water efficient and incorporates features such as sustainable urban drainage systems. Create and manage green spaces to store water, incorporating features such as seasonal ponds and reedbeds, which also have biodiversity interest and filter pollutants.
- Providing sufficient habitat in green spaces for local species, including nectar-rich habitat for pollinating insects. Manage these green spaces as part of an ecological network that links to gardens across a settlement.
- Engaging the public in settlement history, including guided walks to view historic buildings that use traditional building materials. Explore ideas with the public about how best to accommodate new development.

Description

Physical and functional links to other National Character Areas

Midvale Ridge National Character Area (NCA) is completely enclosed by the surrounding Upper Thames Clay Vales NCA and offers wide views across the adjacent countryside from many points. In places it is possible to see the hills of the Chilterns NCA to the south-east, the Berkshire and Marlborough Downs NCA to the south-west and the Cotswolds NCA to the north-west.

At Oxford, the Thames cuts through the ridge to flow south from its source in Gloucestershire on towards Reading and London. The Thame, a tributary of the Thames, flows along the lower reaches of the ridge in the south-eastern half of the area and joins the Thames just south of Dorchester. Much of the ridge functions as a minor aquifer, eventually feeding into the rivers Thames, Thame and Ock, also a tributary of the Thames.[5]

To the east, several major transport links between London, Oxford and the Midlands, including the M40, A40 and the Chiltern Railways line, cross the area. Although part of the city of Oxford lies within the NCA, the historical centre is in the neighbouring Upper Thames Clay Vales NCA. Many of Oxford's most notable buildings, for instance the Radcliffe Camera, are built from stone quarried on the ridge. To the west, the Great Western Community Forest stretches from Royal Wootton Bassett in the Upper Thames Clay Vales NCA to Faringdon.

Brill Windmill, a popular visitor destination for both local residents and visitors alike.

[5] Groundwater Quality Review: The Corallian, Environment Agency (April 2004)

Key characteristics

- Low, irregular wooded limestone ridge giving way to a series of isolated steep-sided tabular hills in the east which rise from the surrounding clay vales.
- Contrast between the moderately elevated limestone hills and ridges and the surrounding low-lying clay vales.
- Drained mostly by small springs and streams which run into the Thames, Thame and Ock.
- Well wooded – a third of the woodland is designated ancient woodland.
- Mixed pastoral and arable landscape with large, geometric fields divided by hedges and regularly spaced hedgerow trees punctuated by blocks of woodland.
- Fragmented but rare and important semi-natural habitats, including acid grassland, calcareous fens and flushes, wet woodland and calcareous grass heaths particularly around Frilford and Cothill.
- Evidence of previous land use such as iron-age and Romano-British settlements and ridge and furrow through to old quarries still visible in the landscape.
- Locally quarried limestone commonly used as building material for local houses.
- Settlement pattern of nucleated villages on the hill tops and along the springline with low density of dispersed settlement.
- Recreational opportunities include the Thames Path National Trail.

Southern damselfly at Cothill Fen SSSI, one of the many rare invertebrates found there.

The Midvale Ridge today

The Midvale Ridge is a low-lying, irregular outcrop of limestone rising as a distinctive feature above the surrounding flat clay vales, running westwards from the Vale of Aylesbury to Swindon. Tabular hills at its eastern end give way to a thin ridge that in some places is low and narrow, but in others stands out as a striking feature. In all directions there are sweeping views across the adjacent countryside.

The Thames cuts a steep valley at Oxford to flow south across the ridge and the Thame flows along its south-east edge. Springs and streams rising on the ridge drain into the rivers Ock and Thame. The bedrock of the NCA is very porous and much of the ridge is a minor aquifer.

The area is mainly agricultural and the landscape is one of arable fields or pasture interspersed with woodland and many small settlements. Fields are generally large and rectilinear, mostly resulting from late 18th- and 19th-century enclosure and re-organisation as well as later agricultural changes, with boundaries of hedgerows and regularly spaced hedgerow trees. A mix of heavy rendzinas, stagnogleys and lighter sandy brown earths with small areas of sandy soils form the main soil types.

The ridge has good tree cover. On moister soils, particularly around Oxford, ash, oak, hazel and field maple are common. Elsewhere, on the drier soils across the ridge, the characteristic tree types are oak and birch with significant plantations of conifers. To the east of Oxford lies Shabbington Wood, the largest surviving remnants of the former Royal Forest of Bernwood, important for the rare black hairstreak butterfly. While significant parts were managed as conifer plantations, most are now being managed to gradually return them

13th-century Great Barn at Great Coxwell owned by the National Trust.

to predominantly broadleaved woodland. Around Swindon, several new plantations of woodland have been established as part of the Great Western Community Forest project, one of 12 Community Forest projects set up across the country with the aim of regenerating areas of land in the urban fringe for recreation, biodiversity, forestry and socio-economic benefits.

On the lower slopes, where the permeable limestone meets the impermeable clay of the surrounding clay vales, water percolating through the limestone emerges in a series of springs and flushes. These support several large fens which are home to a number of rare plant and invertebrate species such as the

narrowleaved marsh orchid and the southern damselfly – both nationally rare. The largest fen, Cothill Fen, has been designated a Special Area of Conservation (SAC) for its alkaline fen vegetation.

To the south-west of Oxford, around Frilford and Cothill, are areas of calcareous grassy heaths comprising one of the most characteristic and important semi-natural habitats of the Midvale Ridge. These were once more extensive but are now greatly diminished and fragmented in character but still provide a home for several rare species of solitary bees including the girdled mining bee and the six-banded nomad bee as well as uncommon plant species such as the grass of Parnassus. Although small, the NCA is host to other areas of uncommon habitat including dry acid grassland and the only area of heathland known in Oxfordshire.

Hill top villages are a distinctive feature of the ridge. They are often clustered round a village green and are linked by small sunken lanes enclosed by low hedges. To the east, houses are built of the local limestone or sometimes red brick and timber frame with thatch or tiled roofs. In contrast, to the west houses are typically of local limestone, either Cornbrash or Corallian, with stone slate roofs. Settlements have also grown up along springlines. Isolated farmsteads mostly result from late enclosure.

The past is reflected in the landscape with the remains of Roman settlements still visible and the nationally important examples of ridge and furrow ploughing at Ashendon, Dorton, Quainton and North Marston. Windmills are a characteristic feature of the area and can be found throughout the ridge top.

Notable buildings include the barn at Great Coxwell, built at the height of the arable expansion and population growth of the 13th century, and the 19th-century manor house at Waddesdon designed by the French architect Gabriel-Hippolyte Destailleur.

The Landscape through time

The Midvale Ridge was laid down mainly during the Upper Jurassic, about 157–146 million years ago, when sands and limestones were deposited in what was then an area of coral reefs in a shallow tropical sea. Fossils found locally are evidence for an abundance of marine life in the area at that time, including many species of ammonites and marine reptiles such as plesiosaurs and ichthyosaurs. Over time the softer clay of the surrounding Upper Thames Clay Vales NCA eroded more quickly than the limestone of the ridge, leaving it today as a prominent feature. Watercourses have since laid down layers of clays, silts, sands and gravels and small areas of peat developed around the fens.

Evidence for the first significant occupation of the area during the Bronze Age is seen, for instance, in possible bronze-age round barrows found across the area, including those at Buckland. Occupation continued into the Iron Age and the Romano-British period with settlements such as the Romano-British temple complex, villa and amphitheatre at Frilford,

Oxford first developed during the Anglo-Saxon period as a fording place. From the 6th to 9th centuries the area was disputed between the Anglo-Saxon kingdoms of Mercia and Wessex with the Thames eventually forming the boundary between the two. In the early 10th century, the town was fortified to resist the attacks of Danish invaders, becoming part of the burh system established to defend Wessex.[6] From the 13th century onwards, the university colleges were established and Oxford's international reputation as a place of learning grew.

[6] *A History of the County of Oxford: Volume 4 - The City of Oxford*, Alan Crossley and C.R. Elrington (eds), Victoria County History (1979)

Throughout the region in the Middle Ages the open field system of agriculture was widespread and ridge-and-furrow earthworks can still be seen, particularly in the eastern half of the region. Enclosures and reorganisation of farmland during the 18th and 19th centuries saw the introduction of large regular fields. The area is described in Domesday Book as being well forested but in a national context the extent of woodland cover was probably low at that time. Bernwood Forest, remnants of which are still extant in the eastern half of the NCA, was a popular hunting spot for Anglo-Saxon royalty and following the Norman Conquest attained the status of a Royal Forest. The area subject to forest law was reduced over time and Bernwood Forest finally lost its legal status in 1632. The removal of legal protection also saw the reduction in forest cover.[7] A number of windmills, such as that at Brill, provide distinctive landmarks throughout the area.

Industry has also played an important part in the area's history. The clay deposits at Brill provided the material for a pottery, brick-making and tile industry.[8] Corallian Limestone was quarried at Wheatley from the 12th century and at Headington from the 15th century. In the 16th and mid-17th centuries, Oxford was famous for its tanning and woollen industries. In 1624, an Act of Parliament allowed navigation to be improved on the Thames between Burcote and Oxford and by 1790 the Oxford Canal was opened, linking the city to the rest of the canal network. During the 19th century, Oxford developed as a centre for light engineering, particularly for agricultural tools. The first steam rollers and ploughs were invented by John Allen of Oxford. The association with engineering continued with the founding of Morris Motors at Cowley in the early 20th century. The motor industry continued to be an important employer.[9]

Prior to the 19th century, Swindon had been a small market town. It was boosted by the opening of the Wiltshire and Berkshire Canal in 1810 and the North Wiltshire Canal in 1819 but the arrival of the Great Western Railway in 1840 and the subsequent decision to site the company's works there provided a spur for rapid growth. Until the early 20th century, it remained the city's largest employer.[10]

Views across to the Chilterns AONB near Ashendon.

The M40 was constructed between 1967 and 1974, later being extended to link London and Birmingham.

[7] Buckinghamshire County Council website (URL: http://apps.buckscc.gov.uk/eforms/medieval_life/history1.htm)

[8] Brill: Historic Town Assessment Report, Consultation Draft, English Heritage (undated)

[9] *A History of the County of Oxford: Volume 4 - The City of Oxford*, Alan Crossley and C.R. Elrington (eds), Victoria County History (1979)

[10] *A History of the County of Wiltshire: Volume 9*, Elizabeth Crittall (ed.),Victoria County History (1970)

Ecosystem Services

The Midvale Ridge NCA provides a wide range of benefits to society. Each is derived from the attributes and processes (both natural and cultural features) within the area. These benefits are known collectively as 'ecosystem services'. The predominant services are summarised below. Further information on ecosystem services provided in the Midvale Ridge NCA is contained in the 'Analysis' section of this document.

Provisioning services (food, fibre and water supply)

- **Food provision:** The Midvale Ridge supports a mixed pastoral/arable (mostly cereals and oil seed rape) farming system. It has historically been considered a good grain-growing area and today cereals are still the main arable produce. Sheep are the most important livestock.

- **Water availability:** The main rivers are the Thames and the Thame, but for most of its potable water the NCA is dependent on supplies from neighbouring areas including the Upper Thames Clay Vales NCA, for instance from Farmoor Reservoir. Much of the ridge is underlain by a minor aquifer and groundwater is important for supplying the fens and flushes which are notable features of the area. The rivers and groundwater within the NCA are not deemed to be over-abstracted, although the Thames catchment area as a whole is in deficit due to the shortage of supply for London in dry years.

Regulating services (water purification, air quality maintenance and climate regulation)

- **Regulating soil erosion:** More than a third of the NCA is covered by shallow, lighter and freely draining lime-rich and slightly acid soils which are at risk of both wind- and water-borne erosion, particularly where the ground is subject to continuous arable cultivation.

- **Regulating soil quality:** The heavier loamy and clayey soils which cover nearly half of the area are liable to compaction when wet. The far eastern end of the NCA, around Oving and North Marston, is in the Upper Ouse Catchment Sensitive Farming Programme area. This has the aim of improving the water quality of the Ouse (in the nearby Bedfordshire and Cambridgeshire Claylands NCA).

- **Regulating water quality:** Groundwater quality in the north-eastern half of the NCA meets the target for good chemical status under the Water Framework Directive, but in the south-western half it fails to meet this standard. The ecological status of the rivers in the NCA (which include part of the Thame, Thames and some tributaries) varies between poor and moderate as assessed under the Water Framework Directive. High phosphate levels are the main reason for this.[11] The entire NCA is within a nitrate vulnerable zone designated to protect groundwater and surface water for public water supply.[12]

Cultural services (inspiration, education and wellbeing)

- **Sense of place/inspiration:** Although the NCA is surrounded by the Upper Thames Clay Vales NCA and has many links with it, it maintains its own character. Its elevation allows wide views across the flatter surrounding countryside to the hills of the Chilterns Area of Outstanding Natural Beauty (AONB) and the Cotswolds AONB beyond. The past use of the landscape, such as the quarries at Headington and the kilns at Brill, is also evident across the NCA. It has a characteristic vernacular architecture with some buildings constructed from locally quarried stone.

[11] *Water for Life and Livelihoods: River Basin Management Plan, Thames River Basin District*, Environment Agency (December 2009)
[12] *Groundwater Quality Review: The Corallian*, Environment Agency (April 2004)

- **Sense of history**: This is provided by the evidence for medieval and earlier settlement and land use from ridge and furrow to iron-age hill forts and the rich vernacular architecture.

- **Recreation:** There are some good recreational opportunities on offer within the NCA with a range of access routes enabling visitors to explore the countryside as well as allowing residents to enjoy green spaces near where they live. However, in some parts of the NCA, such as the city of Oxford, green space is limited. The Thames Path National Trail runs through the NCA near Oxford and is well connected with other local walking routes; open access woodland is available at Shabbington Woods further east along the ridge; and there are several small but interesting nature reserves with high geological and biological interest in the vicinity of Oxford. There are also two large country parks for people to enjoy: Shotover in Oxford and Stanton Park in Swindon

- **Biodiversity:** Although only 2 per cent of the NCA is designated as a Site of Special Scientific Interest for its biodiversity interest, the NCA hosts a number of rare and important habitats including calcareous fens, calcareous heath, calcareous grassland, ancient woodland and acid grassland. The snakeshead fritillary enjoys one of its last strongholds here as does the black hairstreak butterfly. A third of the area's woodland is designated as ancient and supports important populations of uncommon and rare butterflies. There is one European designated site, Cothill Fen SAC, part of which is also a National Nature Reserve.

- **Geodiversity:** The Midvale Ridge is extremely geologically important with 16 nationally designated sites and 14 Local Geological Sites. It has provided stratigraphic evidence for the geological history of the region showing that during the Jurassic it was covered by a shallow tropical sea. Noteworthy fossils of international importance, including the holotypes for several ammonite species and prehistoric sponges, have been found here. The local limestone has been used as a source of building material since the Middle Ages, providing the stone for some of the Oxford colleges.

Volunteers cleaning a rockface at Dry Sandford Pits SSSI.

Statements of Environmental Opportunity

SEO 1: Maintain the historic environment and cultural character of the Midvale Ridge by ensuring that permitted development is well integrated to preserve local distinctiveness and sense of place and providing green space and recreational opportunities for the health and wellbeing of residents and visitors.

For example by:

- Using an understanding of the area's traditional and historic architecture, and its distinct patterns of village-based settlement, to inform appropriate conservation and use of historic buildings, and to plan for and inspire any environmentally beneficial new development which makes a positive contribution to local character.
- Preserving the characteristic network of winding sunken lanes and significant historic hedgerows by working with landowners to sustainably manage these features for their contribution to landscape character and also as wildlife corridors.
- Encouraging the use of traditional building materials such as locally quarried limestone or brick and red tile or thatch on the eastern ridge, and local Cornbrash or Corallian Limestone with stone slate roofs in the west.
- Protecting historic earthworks and monuments, such as iron-age and Romano-British settlement sites and nationally important ridge and furrow, by encouraging reversion from arable to grassland where appropriate.
- Encouraging better management and raising awareness of the area's heritage assets.
- Encouraging the restoration and management of historical parklands for their biodiversity and cultural interest.
- Promoting the restoration and maintenance of historic buildings such as windmills.
- Ensuring that the extensive views across the surrounding countryside are maintained.
- Promoting the vision of the Great Western Community Forest plan to enhance recreational and biodiversity opportunities.
- Encouraging the use of the Accessible Natural Greenspace Standard and community engagement in the planning of new developments and green infrastructure strategies to ensure that people have places to enjoy nature and experience the health, wellbeing and educational benefits that green space brings.
- Promoting green space for landscape setting as well as other benefits such as water regulation and local provision of wood fuel.
- Promoting sustainable development principles for new development associated with transport corridors and other urban and industrial expansion which make provision for green infrastructure, address flood risk mitigation, avoid any damaging impact on biodiversity and are considerate towards the character of the Midvale Ridge.
- Ensuring that development is well designed to minimise visual intrusion and noise and light pollution upon the wider landscape.

SEO 2: Manage, enhance and expand the valuable semi-natural habitats of the Midvale Ridge such as fens, grassland and calcareous heathland to benefit biodiversity, prevent soil erosion, improve water regulation and quality, support pollinators and protect and enhance wildlife corridors.

For example by:

- Managing the semi-natural habitats of the Midvale Ridge to maintain and enhance their conservation interest so that species of national and regional significance are safeguarded and where possible increased.
- Seeking to reduce habitat fragmentation by linking, re-creating and extending semi-natural habitats wherever possible and working with local planning authorities to minimise further fragmentation.
- Promoting awareness of the importance of the habitats and rare species of the Midvale Ridge among landowners and the wider public and providing advice to landowners on appropriate management.
- Promoting research and interpretation of flushes and fens and the species that they support to identify the most appropriate management practices.
- Working with farmers and landowners to establish sustainable land management practices in the areas surrounding important semi-natural habitat such as fen to regulate water quality, prevent soil erosion and encourage pollinators, such as providing flower-rich wide buffer strips, beetle banks and infield grass areas.
- Advising the Environment Agency, local authorities and landowners to ensure that water abstraction has the minimum impact on designated wetland habitat, minimising its effect on biodiversity and water quality.
- Working with local authorities and extraction companies to ensure that mineral extraction is considered and managed sustainably to avoid detrimental impacts on semi-natural habitats, for example through interruption of groundwater flows. Where possible, encourage the linking and extension of semi-natural habitats through the restoration of exhausted minerals sites.

SEO 3: Manage and enhance the woodland cover and expand areas of native broadleaved woodland to benefit landscape character and biodiversity, for carbon sequestration, to prevent soil erosion, improve water quality, supply renewable fuel and to provide access and recreation opportunities.

For example by:

- Ensuring that all woodlands particularly those of high conservation value, including wet woodland and ancient woodland sites, are managed appropriately to maintain and enhance their wildlife value, for example by restoring rotational coppice management where suitable to provide a source of biomass fuel and good habitat for woodland butterflies.
- Promoting opportunities for biomass energy provision with local markets, particularly wood fuel, to support the local economy while improving biodiversity.
- Supporting the Forestry Commission and other land managers in developing a co-ordinated approach to deer management to enhance biodiversity, sense of place and tranquillity.
- Encouraging the planting of new native woodland where this fits in with local character and will extend or link existing woodlands to prevent fragmentation, provide ecological networks, aid the prevention of soil erosion by reducing overland flows and improve water quality (by absorbing nutrients and particulates).
- Promoting the gradual restoration of Plantations on Ancient Woodland Sites with indigenous species, where possible.
- Strengthening ecological networks by linking patches of woodland with hedgerows, where possible, especially where the woodland is on an ancient woodland site.
- Promoting the restoration and expansion of woodland within the Great Western Community Forest, managed through community involvement to contribute especially to the sustainable development of Swindon, providing a local recreational, educational, wildlife and biomass resource.
- Maximising the opportunities for people to increase their knowledge and understanding of local woodlands, to take part in their management and to enjoy visiting them for recreation and health purposes while at the same time safeguarding biodiversity.

SEO 4: Maintain and enhance the National Character Area's internationally important geological heritage for the educational benefits it provides, its contribution to a sense of place and history and to increase recreational opportunities.

For example by:

- Promoting awareness of the National Character Area's significant Cretaceous and Jurassic geological heritage among educational establishments and the wider public to link the local community to their geological heritage.
- Linking the rights of way network, particularly from Oxford, to geological sites to increase health and educational opportunities and to promote a sense of place and sense of history.
- Working with landowners to ensure that important geological sites are appropriately managed, for instance keeping the faces of important exposures clear of vegetation so that they can be easily studied.
- Working with landowners to encourage access for geologists to working quarries.
- Identifying opportunities to promote geological sites as visitor destinations.
- Seeking to ensure that access to important exposures for research is maintained once quarries are no longer in use.
- Planning for the restoration of quarries and mineral workings for educational use and biodiversity benefit once they are no longer in use.
- Working with quarry owners, operators and local geology groups to record features of interest during mineral extraction and quarrying.

The "dreaming spires" of Oxford from Boars Hill.

APPENDIX D: OWLS Information

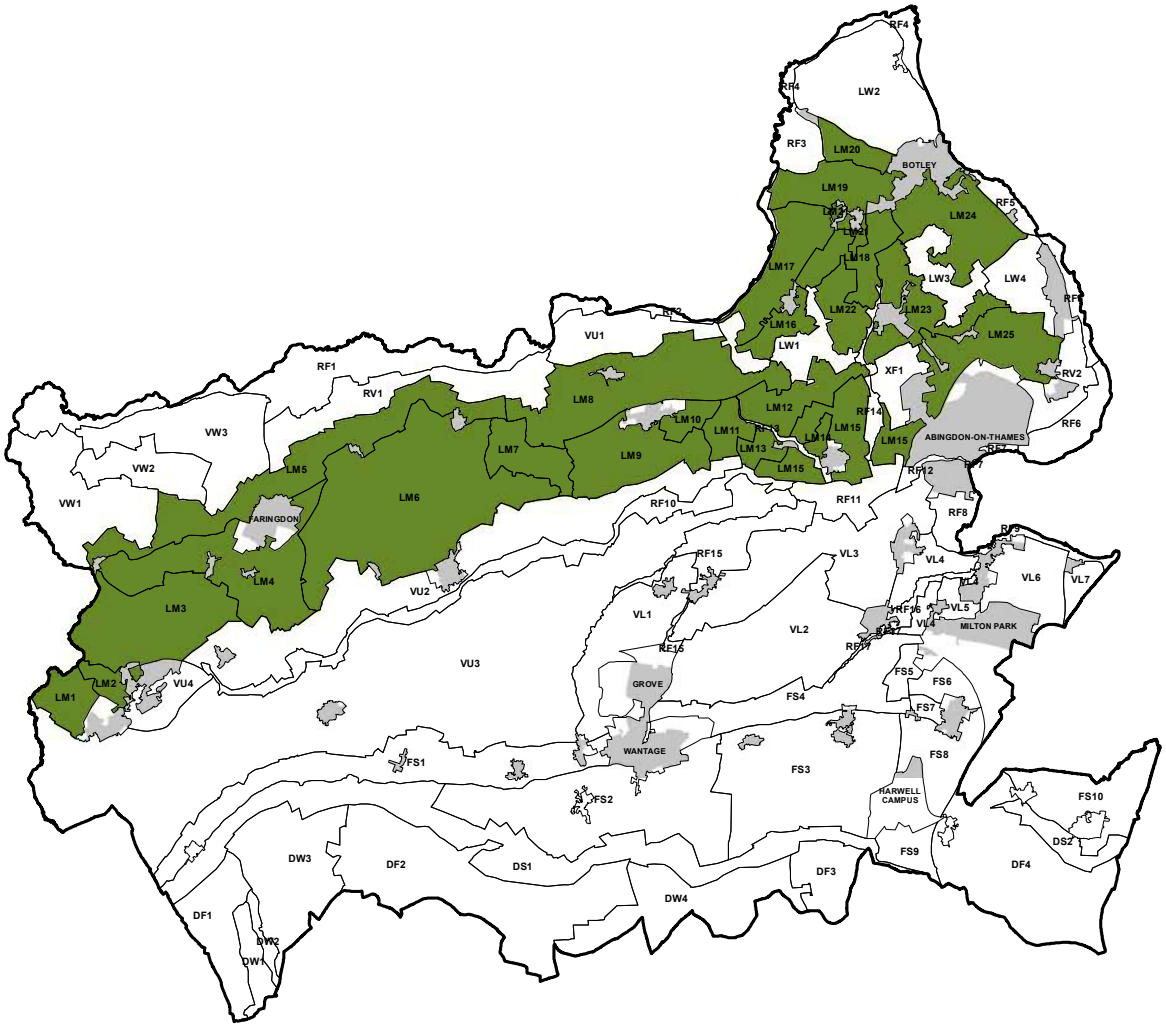
Table D.1: *Descriptions of the Local Character Areas, as designated in the OWLS, found within Cumnor Parish.*

Landscape Types	Local Character Area	Landscape Description
River Meadowlands	Upper Thames (UT/4)	The area covers the floodplain of Upper Thames. It consists mainly of small to medium-sized semi-improved grass fields, wet and unimproved neutral grassland and flood meadows such as Port Meadow. Fields are bounded by ditches and overgrown, gappy hawthorn hedges. At the western end of the river corridor there are poplar shelterbelts surrounding arable fields, and some arable land is located along the northern section of the river to the west of Cassington and to the north of Buscot. Trees bordering the river and ditches are a prominent landscape feature. Willows and hawthorn border the River Thames and willows, alder and ash line the ditches. In parts, the corridor is reinforced by poplar plantations and small blocks of semi-natural wet woodland. Scattered hedgerow trees, including willow, ash and dead elm add to the tree cover. In areas of intensive arable farming that extend down to the river bank, there are no watercourse trees and the hedges are lower with fewer hedgerow trees. The large area of open water at Farmoor Reservoir, which is also used for water sports, is a dominant landscape feature in the locality.
Rolling Farmland	Appleton (CR/7)	The area is dominated by large, geometric arable fields and some large fields of improved grassland. They are enclosed by hawthorn and elm hedges. Towards the north, where the land slopes steeply into the Upper Thames Vale, some of the fields with semi-improved grassland are bounded by small blocks of ancient woodland and overgrown hedges. Hedgerow trees of oak, ash and dead elm are thinly scattered throughout the area, and where hedges have been removed they are the only structural elements remaining in the landscape. They are denser along parish boundaries. Discrete large blocks of ancient woodland, such as Pusey Common Woodland and Appleton Upper Common, are locally prominent. Significant parts of these woods have been planted with conifers. Occasionally, small deciduous and mixed plantations add structure to an otherwise open landscape. There is also a dense corridor of willows and some oak bordering the stream at the eastern boundary of the area. The field pattern is generally in a poor condition, with hedges frequently low, fragmented and in many places removed altogether. This results in a large-scale, open landscape with views which are confined locally by the large woods and rolling landform.
	Dry Sandford (CR/8)	The area has large open arable fields to the west of Sandford Brook and smaller fields of semi-improved grassland to the east. The arable fields are enclosed by a fragmented pattern of low hawthorn and elm hedges with few hedgerow trees, resulting in an open landscape. Where grassland dominates, the hedges are often tall, thick and species-rich, with shrubs such as dogwood, spindle, wild privet and field maple, particularly along roadsides. Hedgerow trees are also more prominent in this area, and wet secondary woodland and calcareous fen next to Sandford Brook are a notable feature. To the south, the landscape is dominated by Abingdon

		airfield. There is a small patch of acid grassland at the edge of the airfield, and part of it is enclosed by species-rich hedges that include spindle, dogwood and wild privet.
Terrace Farmland	Whitley Copse (UT/25)	Small fields of improved and semi-improved grassland dominate this area. They are bounded by gappy hedges of hawthorn with some elm and goat willow. Hedgerow trees, mainly ash, oak and crack willow, are a prominent landscape feature. There is also a small block of ancient semi-natural oak-ash woodland.
	Wytham (North) (UT/28)	This is an intensive landscape of medium to large-sized open arable fields. They are enclosed by hedges with species such as elm, hawthorn and elder. They are in generally good condition along roadsides but have largely been removed elsewhere. The lack of hedgerow trees also emphasizes the open character of the area. There are a few small tree clumps around the University Research Station.
Vale Farmland	Farmoor (CR/11)	The area has both arable land and grassland and fields vary in size. They are enclosed by intensively maintained, gappy hawthorn hedges. Tree cover is largely confined to scattered hedgerow trees of oak, sycamore and a few pollarded willows bordering ditches.
Wooded Estatelands	Tubney (CR/6)	The area has a geometrically-shaped pattern of medium to large-sized fields with a mixture of arable cropping and semi-improved pasture. There are also large fields dominated by pig farming to the north of Marcham and there are some orchards around Fyfield. Acid grassland interspersed with heather and gorse is a significant feature at Frilford Heath Golf Course. Woodland cover is very prominent in this area and consists of large blocks of ancient woodland, including Tubney Wood, and a number of different sized mixed plantations. Fields are enclosed by thorn and elm hedges with a scattering of elm, oak, sycamore, poplar and willow. These become sparser where arable cropping is dominant. However, a much more prominent feature is the dense corridors of poplars and pollarded willows bordering streams and ditches. Hedges are generally tall and overgrown, but where they enclose arable land they are intensively maintained and, in some cases, removed altogether and replaced by fences. There are small parklands with semi-improved grassland and mature trees at Besselsleigh School, Sheepstead Park and Kingston Bagpuize House.
	Cumnor Hill (CR/9)	The area has a mix of land uses including medium-sized, semi-improved grass fields and larger arable fields. There are remnants of calcareous grassland on the steeper slopes adjacent to the Thames floodplain. Woodland dominates the landscape, particularly towards the east where there are very large blocks of ancient woodland including Kennington and Radley woods. The minor valleys and small streams, bordered by belts of dense scrub and wet woodland, are distinctive features that add diversity to the landscape. The streams are often species-rich, with significant patches of reedswamp vegetation. Fields are enclosed by thorn and elm hedges, but there are also some species-rich hedges with shrubs such dogwood, spindle and wayfaring tree close to the ancient woodland. Hedgerow trees of oak, ash and dead elm are also more prominent in the vicinity of ancient woodland, but are almost absent towards the west, where arable cropping predominates. Hedges are generally taller and in better condition in the eastern part of the area and are very low, fragmented or replaced by fences in the west.

	Appleton Lower Common Wood (UT/15)	The area has medium and large-sized fields with a mix of land uses, although large arable fields dominate. Small, mainly deciduous plantations are dotted throughout the landscape and small to medium-sized blocks of ancient woodland with ash and some oak also contribute to the woodland cover. Fields are enclosed by woods, hawthorn and elm hedges. The hedges are generally in poor condition and fragmented in many places, particularly where they enclose arable fields. They are often taller where they surround pastureland. Hedgerow trees, mainly ash, dead elm and oak, are sparsely scattered throughout. They are denser where they border ditches, and comprise a mix of crack and shrub willow, dead elm, ash and oak.
Wooded Farmland	Boars Hill (CR/10)	This is a prominent and heavily wooded hill. I t is covered by large interlocking blocks of ancient and secondary oak-ash woodland enclosing small irregular fields of semi-improved grassland. The latter is interspersed with patches of gorse on the steeper slopes. Ornamental gardens, and small mixed plantations with species such as Scots pine that are an integral part of these large gardens, are a characteristic feature of the area. Hedges are generally not a prominent element in the landscape but, where they do occur, they are frequently overgrown and gappy.
Wooded Hills	Wytham Hill (CR/12)	Wytham Hill is dominated by large, interlocking blocks of ancient semi-natural oak and ash woodland. Other land uses are mixed, generally being a combination of small grass fields and larger arable fields. They are largely enclosed by the woodland and tall, intact hawthorn hedges with scattered hedgerow trees of oak, ash and dead elm. At the eastern side of the hill there is Wytham Park with its sheep-grazed pasture.

APPENDIX E: Vale of White Horse Landscape Character Assessment Information



LANDSCAPE TYPE LM: CORALLIAN LIMESTONE RIDGE WITH WOODLAND

Landscape Character Areas

LM1	West Shrivenham Corallian Limestone Ridge with Woodland
LM2	Pennyhooks Corallian Limestone Ridge with Woodland
LM3	North Watchfield Corallian Limestone Ridge with Woodland
LM4	Coleshill to Faringdon and Fernham Corallian Limestone Ridge with Woodland
LM5	Coleshill to Buckland Corallian Limestone Ridge with Woodland
LM6	Faringdon to Pusey Corallian Limestone Ridge with Woodland
LM7	Pusey Limestone Corallian Ridge with Woodland
LM8	Hinton Waldrist to Fyfield Corallian Limestone Ridge with Woodland
LM9	Lovell's Court Farm to Pickwick Farm Corallian Limestone Ridge with Woodland
LM10	Kingston Bagpuize to Woodhouse Corallian Limestone Ridge with Woodland
LM11	South Fyfield Corallian Limestone Ridge with Woodland
LM12	Tubney to Cothill Corallian Limestone Ridge with Woodland
LM13	Frilford West Corallian Limestone Ridge with Woodland
LM14	Sheepstead Corallian Limestone Ridge with Woodland

LM15	Marcham Corallian Limestone Ridge with Woodland
LM16	South Appleton Corallian Limestone Ridge with Woodland
LM17	Appleton to Cumnor Corallian Limestone Ridge with Woodland
LM18	Bradley Corallian Limestone Ridge with Woodland
LM19	Whitley Copse to Chawley Corallian Limestone Ridge with Woodland
LM20	Farmoor to Botley Corallian Limestone Ridge with Woodland
LM21	Cumnor Corallian Limestone Ridge with Woodland
LM22	Bessels Leigh Corallian Limestone Ridge with Woodland
LM23	Henwood to Corallian Bayworth Limestone Ridge with Woodland
LM24	Chawley to South Hinksey Corallian Limestone Ridge with Woodland
LM25	Abingdon to Kennington Corallian Limestone Ridge with Woodland

LANDSCAPE TYPE LM: CORALLIAN LIMESTONE RIDGE WITH WOODLAND

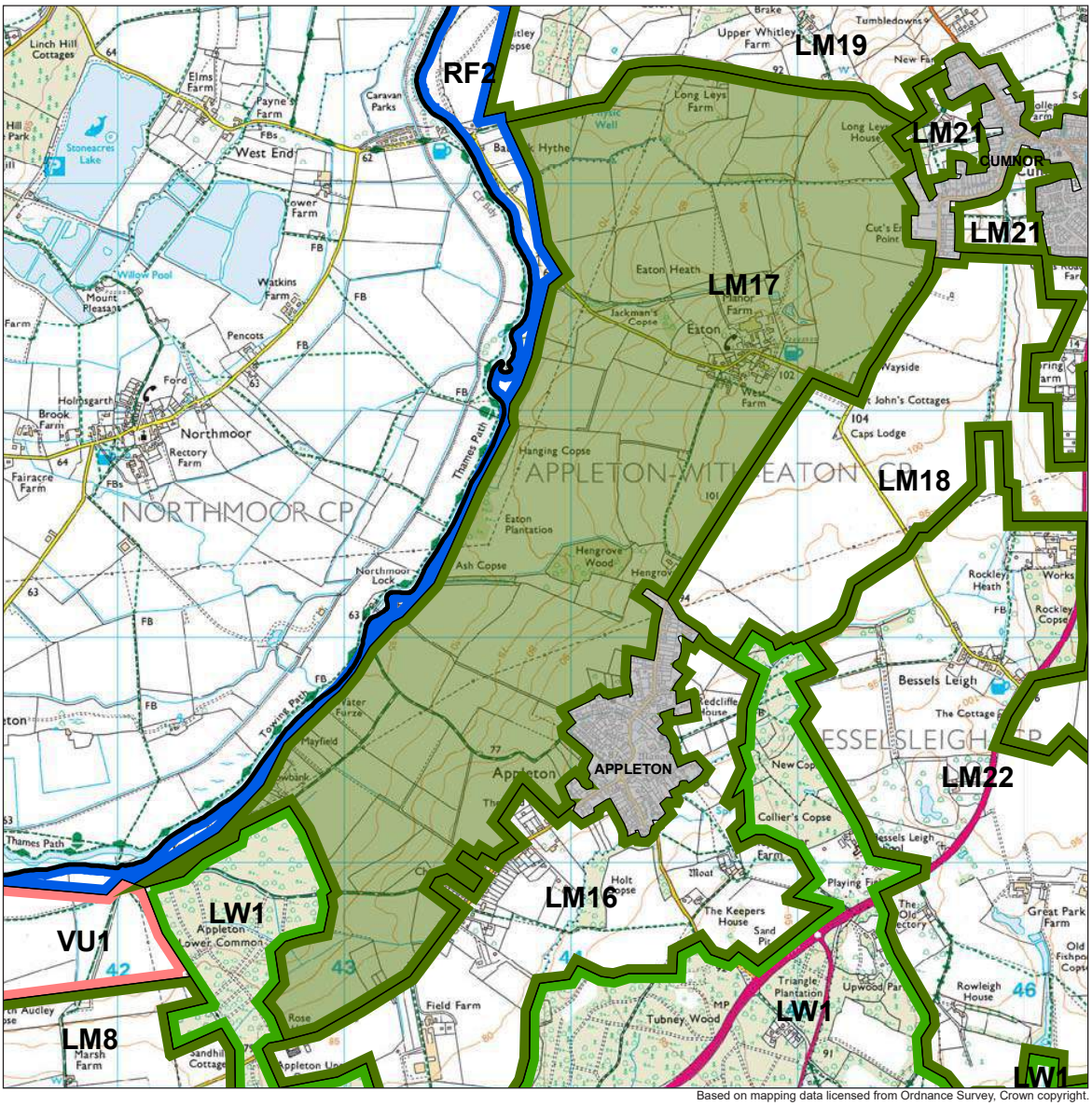
Location and Boundaries

The Corallian Limestone Ridge with Woodland Type stretches east-west through the northern half of the District. The Landscape Type is located between the Vale landscape associated with the River Ock (to the south), and the Vale and valley floor landscapes associated with the River Thames (to the north). The Type is defined by its topography, underlying geology, land use and more limited tree cover compared to the Wooded Ridge (Type LW), with boundaries following easily recognisable features including roads, woodland edges and field boundaries. The Landscape Type is approximately 3 miles (5km) from the North Wessex Downs AONB at its closest point to the south.

Key Characteristics

- Underlying Corallian Limestone contributes to form a low ridge which protrudes above the clay and alluvial landscapes to the north and south.
- The north facing slopes of the ridge are relatively steep, whilst the south facing slopes are gentler and form a transition to the Upper Vale to the south.

- The Corallian Limestone Ridge features a mixture of relatively large scale arable and pastoral farmland, with areas of estate land, and smaller scale parcels of land including paddocks associated with settlement.
- There are dispersed blocks of significant woodland across the landscape, including areas of ancient woodland.
- The hedgerow network along field boundaries varies, but there is a greater intactness than other Types within the District. Hedges frequently contain mature trees such as Oaks.
- Minor watercourses flow from the ridge towards the Thames and Ock.
- There are areas of rare semi-natural habitats including fens, wet woodland, and calcareous grass heaths, including fens around Frilford and Cothill.
- There are nucleated settlements, of varying size, across the Corallian Limestone Ridge, as well as scattered large country house and farmsteads, often located on high points with views over the Vale landscapes to the north and south.
- The eastern end of the Corallian Limestone Ridge has intervisibility with the city of Oxford, and the Downs are frequently seen on the horizon to the south.



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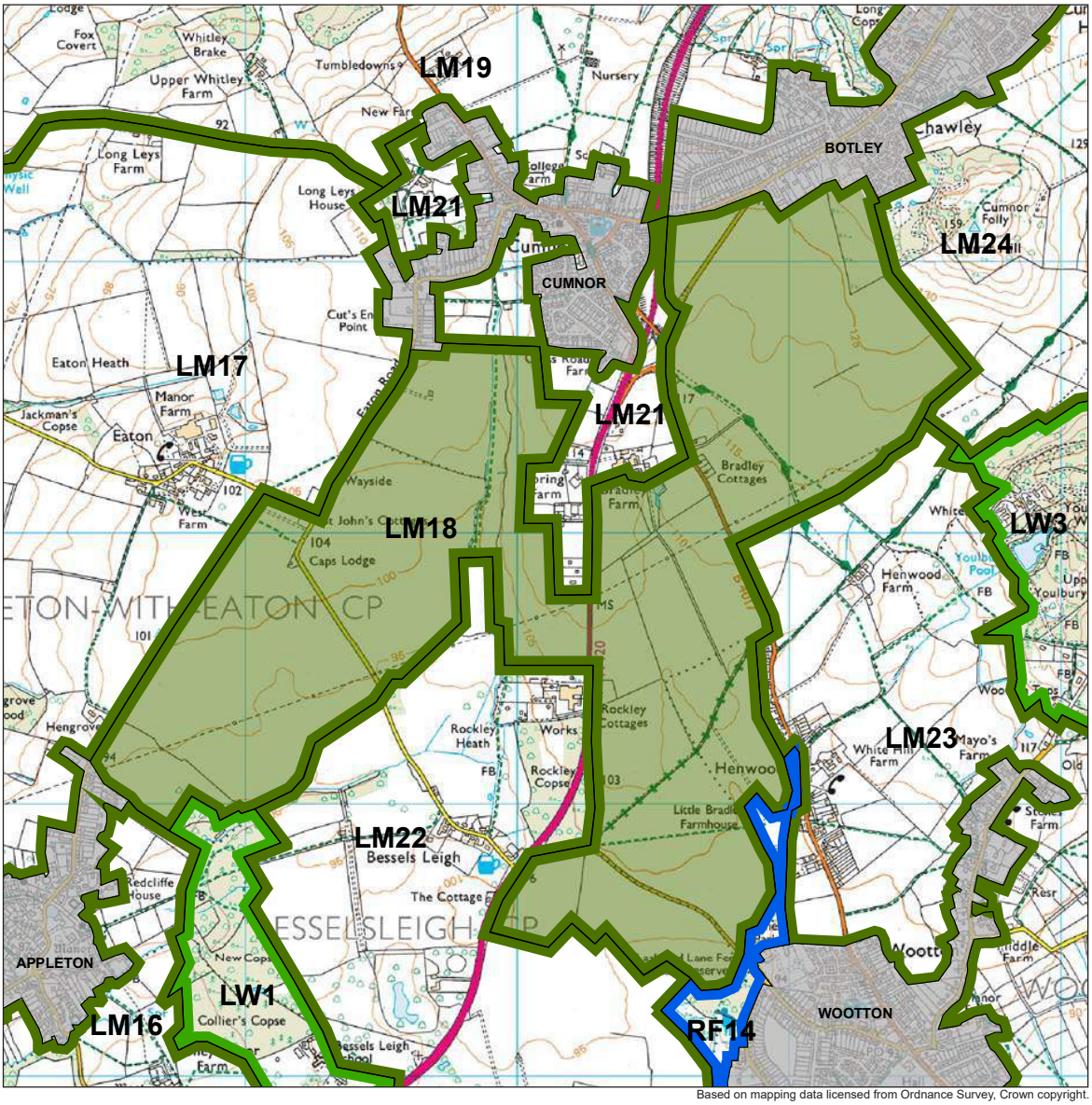
LM17: APPLETON TO CUMNOR CORALLIAN LIMESTONE RIDGE WITH WOODLAND

Location and Boundaries

The Appleton to Cumnor Corallian Limestone Ridge with Woodland Character Area is located within the north-eastern part of the District, to the south-west of Cumnor. The Character Area is formed from north-west facing slopes between the top of the ridge and the Thames floodplain. Boundaries follow identifiable features on the ground where possible, including roads and the edge of woodland. The Character Area is relatively distant from the North Wessex Downs AONB to the south.

Key Characteristics

- The Character Area is underlain predominately by Sandstone, Siltstone and Mudstone bedrock geology of the Hazelbury Bryan Formation.
- The area is located on north-west facing slopes within the wider northern side of the Corallian Limestone ridge, between the River Thames floodplain to the west and more elevated, ridge top Character Areas to the east.
- The area abuts the Thames at approximately 65m AOD and rises to approximately 100m AOD towards the top of the ridge.
- The area consists predominately of medium scale arable fields, classified as a combination of grade 2, 3 and 4 agricultural land.
- Hengrove Wood and Ash Copse are small blocks of ancient woodland within the centre of the Character Area, but there are few other areas of woodland, in contrast to the Character Area to the north which has numerous small blocks of ancient woodland, and the wooded Character Area to the south-west.
- There is a relatively intact network of hedges, including hawthorn and elm, along field boundaries. The network breaks down in places, although individual mature trees, such as oaks, often remain.
- A line of pylons passes along the lower, western end, of the slopes.
- The small village of Eaton is located towards the centre of the Character Area, but otherwise the area has very limited settlement. Eaton has a number of listed buildings including some which abut directly onto the wider countryside.
- A rural lane, Bablock Hythe Road, connects to Eaton, and passes through the Character Area, but internal vehicle access elsewhere is limited to private tracks.
- There are public rights of way, including bridleways and a footpath, towards the south and central parts of the area, but the northern part of the Character Area has limited public access.
- The Character Area forms a setting to parts of the conservation areas within Cumnor and Appleton with abut the area to the east.
- The Character Area is relatively open in places, with views over boundary vegetation from the north-west facing slopes, looking across the Thames Vale to the west.
- The fieldscapes across the area are identified as having either post medieval or modern history.
- This is a rural landscape, with a sense of peace and tranquillity generally, and a degree of remoteness away from the edges of settlement such as Appleton and Cumnor.



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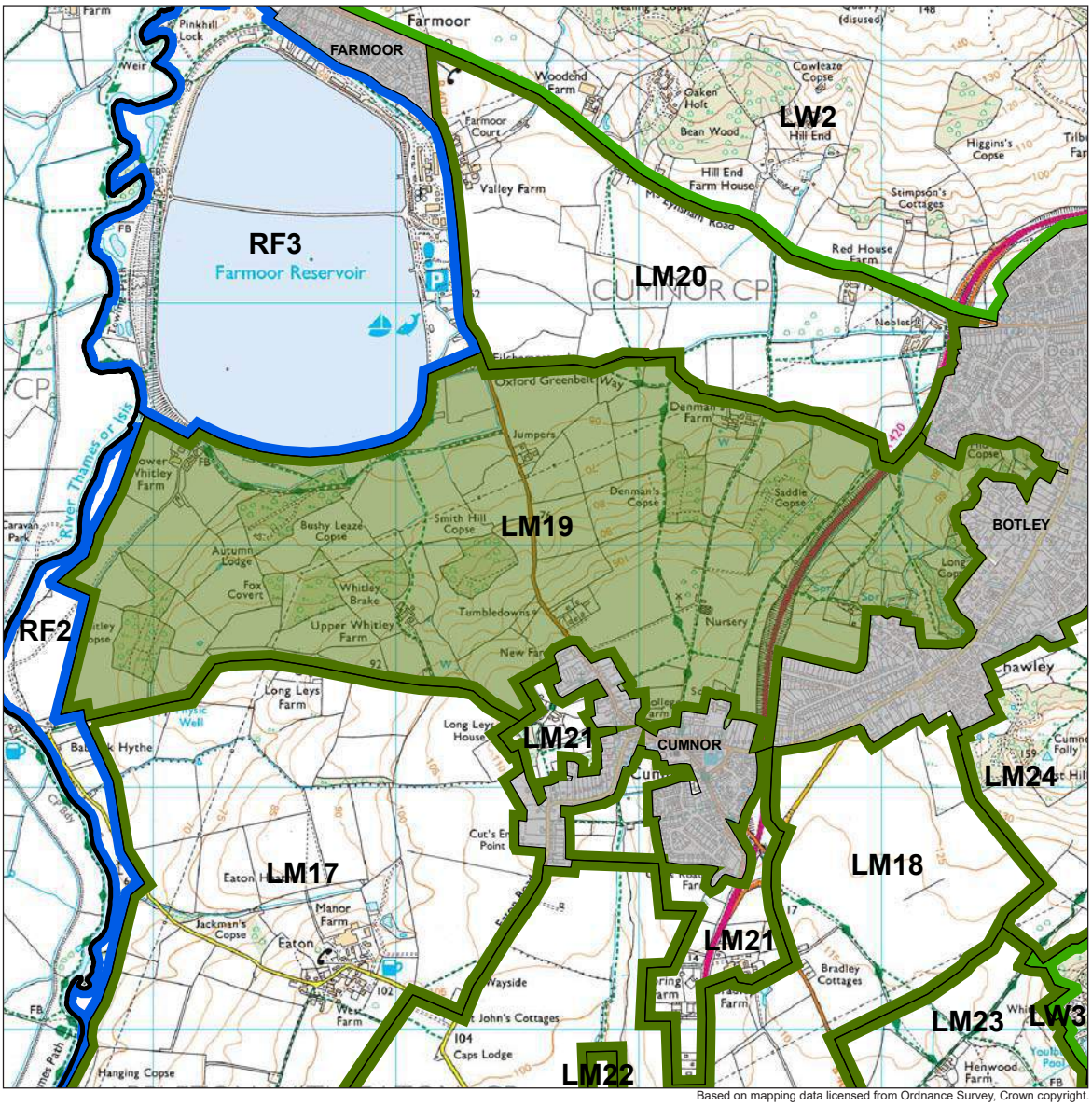
LM18: BRADLEY CORALLIAN RIDGE LIMESTONE RIDGE WITH WOODLAND

Location and Boundaries

The Appleton to Cumnor Corallian Limestone Ridge with Woodland Character Area is located within the north-eastern part of the District, to the south-west of Botley. The area is defined by its extent of large scale, open, arable fields, with limited woodland and settlement, in contrast to surrounding smaller scale, more vegetated areas. Boundaries follow identifiable features on the ground, including roads and field boundaries. The Character Area is relatively distant from the North Wessex Downs AONB to the south.

Key Characteristics

- The Character Area is underlain by varying bedrock geology, including an area of Stanford Limestone Formation.
- The landform is gently south facing overall, and falls subtly towards a watercourse which flows south through the middle of the Character Area. The area rises to a maximum height of approximately 130m AOD towards the foot of the Hurst Hill, which is adjacent to the north-east.
- The area consists of large scale, open, arable fields.
- The western and southern parts of the Character Area are mainly classified as grade 2 agricultural land, the north-eastern part of the Character Area is mainly grade 3.
- Hedges are absent or limited along some field boundaries. Other field boundaries have broken lines of vegetation or low clipped hedges.
- The area is devoid of any significant woodland internally, although riparian vegetation associated with Sandford Brook, adjacent to the south-eastern edge of the area, separates the Character Area from Wootton.
- A line of plyons crosses east-west through the middle of the Character Area.
- There is very limited settlement within the Character Area, although the area abuts Botley, and parts of Cumnor to the north.
- The large scale arable fields form part of the gap which separates Botley and Cumnor from Appleton and Wootton, and vegetation filters the edges of the settlements.
- The Character Area forms the immediate southern setting to Botley, although the southern edge of Botley is filtered by boundary vegetation either side of Oxford Road.
- The Character Area is a limited part of the wider southern setting to the conservation area and listed building within Cumnor, to the north-west.
- Roads, including the A420, and public rights of way, including the Oxford Greenbelt Way Long Distance Path, transverse broadly north-south across the area.
- The area is relatively open, with views across the arable farmland, over the low hedges. Woodland atop Hurst Hill is noticeable over boundary vegetation to the north-east. Tree cover surrounding the Character Area restricts distant views in place, although there are occasional long distant views of the Downs and the North Wessex Downs AONB on the horizon to the south.
- The landscape across the area is identified as having either post medieval or modern fieldscapes.
- The is a large scale landscape, with large open fields, relatively undisturbed by development. However, human influences such as roads and pylons temper the sense of remoteness and tranquillity.



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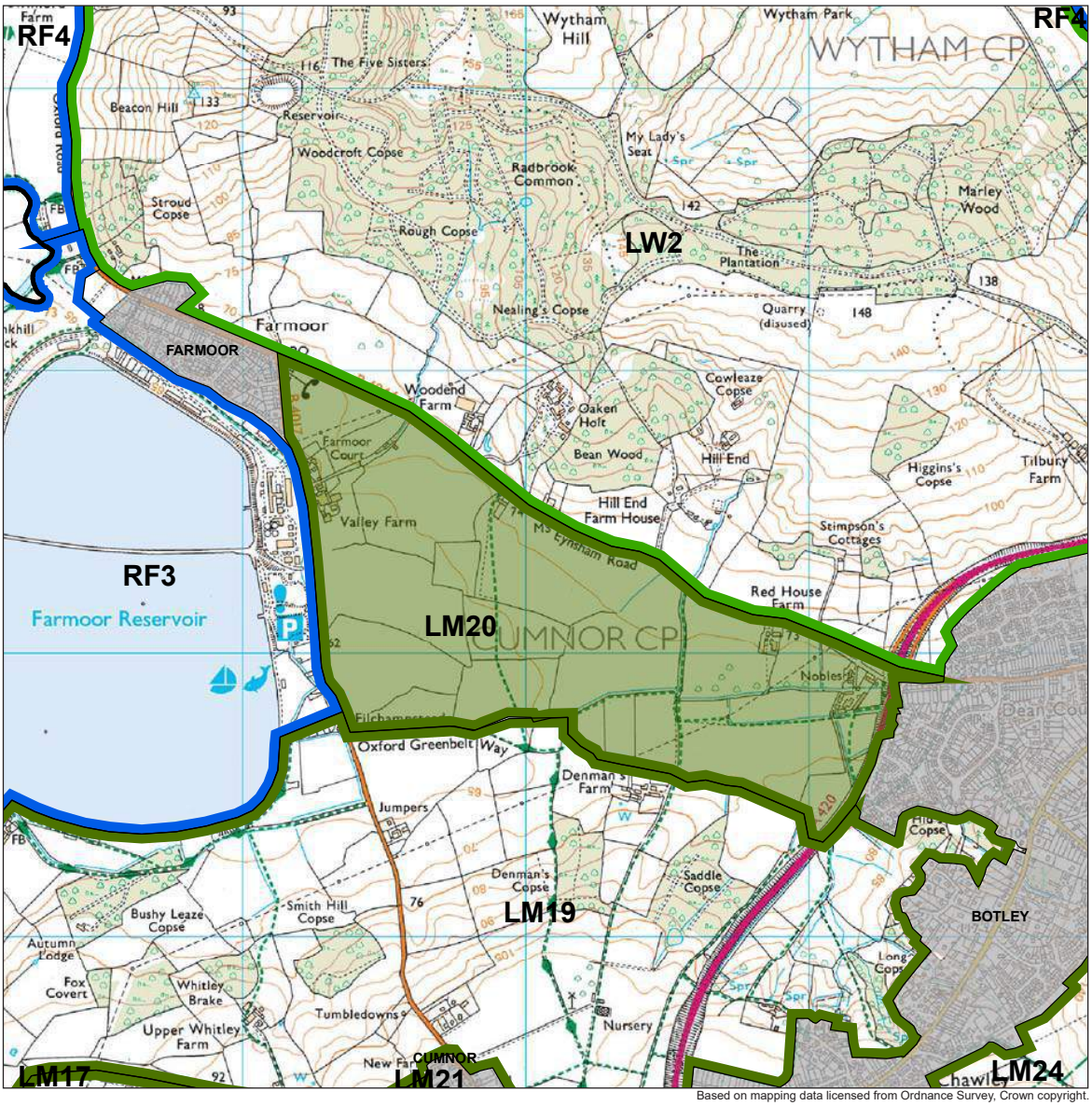
LM19: WHITLEY COPSE TO CHAWLEY CORALLIAN LIMESTONE RIDGE WITH WOODLAND

Location and Boundaries

The Whitley Copse to Chawley Corallian Limestone Ridge with Woodland Character Area is located within the north-eastern part of the District, to the west of Botley. The area consists of north facing slopes, bounded by the Thames floodplain to the west and settlement to the east, and contrasts with less wooded areas to the north and south, and flatter, lower, land to the north. Boundaries follow identifiable features on the ground where possible, including roads, field boundaries and the edges of settlement. The Character Area is relatively distant from the North Wessex Downs AONB to the south.

Key Characteristics

- The Character Area is underlain by a combination of Stanford Limestone Formation, Hazelbury Bryan Sandstone, Siltstone and Mudstone Formation, and Oxford Clay Formation and West Walton Mudstone Formation on the lower slopes to the west.
- The landform predominately consists of north facing slopes, which fall from the flatter hill top which reaches a height of approximately 110m AOD within the south-eastern corner of the Character Area. To the west, the slopes turn to face the Thames.
- The area contains an irregular pattern of medium scale pastoral and arable fields, interspersed with a considerable number of blocks of woodland.
- Field boundaries are lined with a network of hedges and occasional hedge trees. Hedges vary in quality, and include low clipped hawthorn hedges as well as more substantial lines of vegetation including mature trees such as oak and sycamore.
- A significant proportion of the woodland is recorded as ancient woodland, and fields are classified as a mixture of grade 2, 3 and 4 agricultural land.
- Pylons cross through the middle of the Character Area.
- Internally, settlement is limited to occasional isolated small groups of dwellings and scattered farmsteads.
- The area abuts the western edge of Botley and the northern edge of Cumnor. The western end of Botley is largely obscured from the wider landscape by layers of vegetation to the east of the A420, which passes through the eastern end of the Character Area, partially in cutting, and edged with planting.
- The Character Area provides the northern setting to Cumnor, including its conservation area and listed buildings within an area identified as having medieval history. The north edge of the village is filtered by tree cover, although buildings, including the tower of St Michael's Church, are visible from the adjacent upper part of the Character Area.
- The B4017 travels down the slope between Cumnor and Farmoor, and there are public rights of way, including part of the Oxford Greenbelt Way Long Distance Path. However, parts of the Character Area to the west have limited public access.
- The north facing slopes have wide views north over the Thames Vale, including Farmoor Reservoir, as well as views of rising ground including wooded Wytham Hill on the horizon to the north. There are panoramic views north from the B4017, after leaving the built up area of Cumnor at the southern edge of the Character Area.
- Lower Whitley and Upper Whitley farms have listed buildings.
- The area is identified as having a mixture of post medieval and modern fieldscapes.
- This is a rural landscape with distinctive views framed by woodland. There is a sense of peace and tranquillity from public rights of way as they pass between blocks of woodland away from development. Human influences including pylons, roads and settlement reduce the sense of remoteness.



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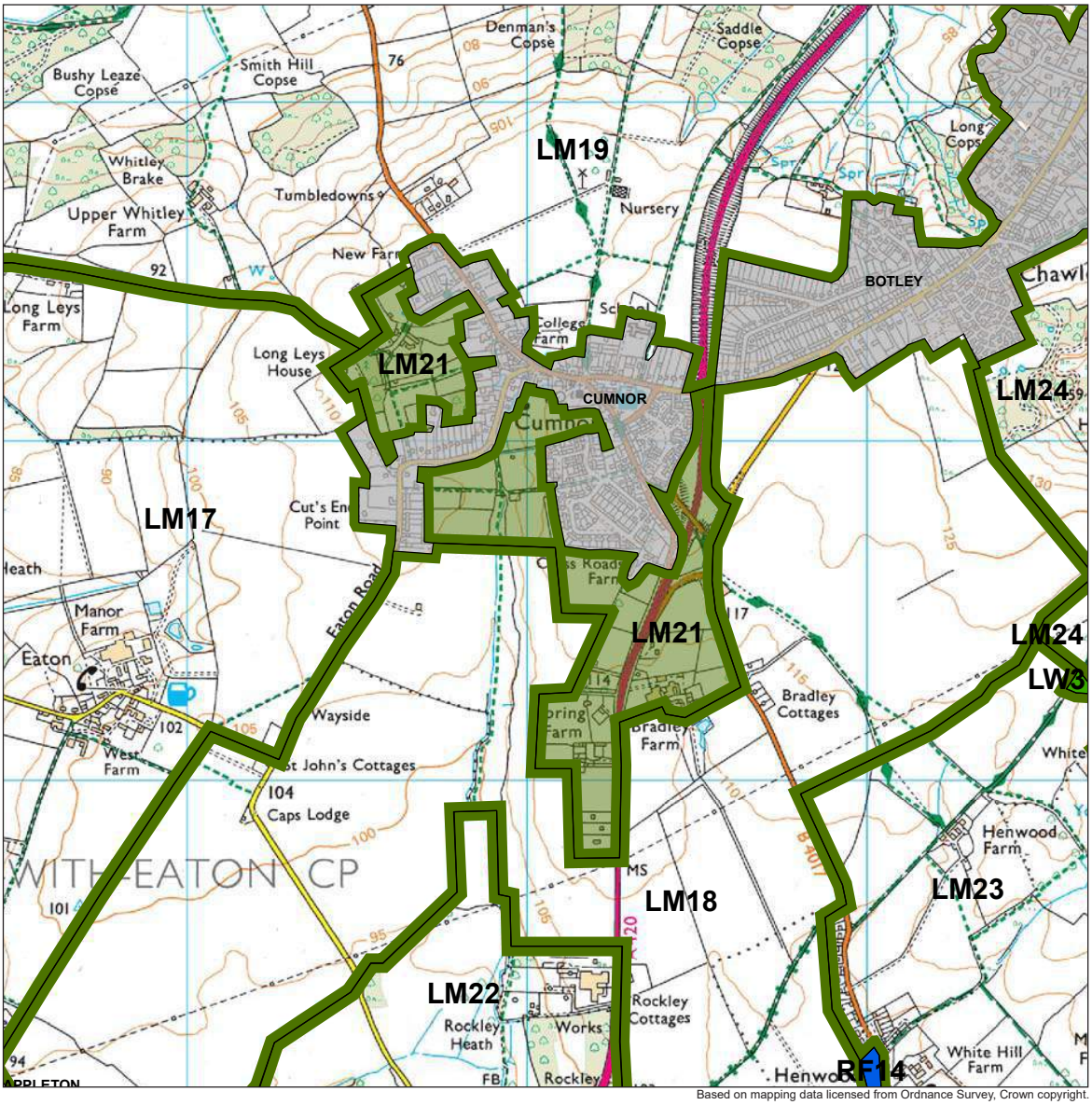
LM20: FARMOOR TO BOTLEY CORALLIAN LIMESTONE RIDGE WITH WOODLAND

Location and Boundaries

The Farmoor to Botley Corallian Limestone Ridge with Woodland Character Area is located within the north-eastern part of the District, to the east of Farmoor. The area is defined by the foot of north facing slopes to the south, the reservoir and settlement at Farmoor to the west, and the edge Botley to the east. The northern edge of the area follows the B4044 road at the foot of slopes which climb to the north. The Character Area is distant from the North Wessex Downs AONB to the south.

Key Characteristics

- The Character Area is underlain predominately by the Oxford Clay Formation and West Walton Formation Mudstone bedrock geology.
- A lower, flatter, area within the overall ridge, which falls very gently towards Farmoor Reservoir at approximately 65m AOD. Contained by wooded slopes to the north and south.
- The Character Area consists predominantly of large scale arable fields, with some smaller areas of pasture and tree cover at the eastern and western ends of the area.
- Fields are classified as grade 3 and 4 agricultural land.
- There is limited woodland within the main body of the area, but there is a relatively intact network of hedgerows along field boundaries.
- Pylons cross the eastern and western ends of the Character Area.
- There is limited settlement internally, other than occasional small pockets of housing and isolated farmsteads.
- The Character Area abuts Farmoor and the large Farmoor reservoir to the west, and the A420 road and Botley to the east. The area forms a gap between Farmoor and Botley, with boundary vegetation filtering views of the settlement edges and providing visual separation between the two settlements.
- The B4044 borders the Character Area to the north. Internal vehicle access is limited to tracks.
- Public rights of way connect across most parts of the area and link to the Oxford Greenbelt Way Long Distance Path to the south.
- Views of surrounding wooded hills are prominent to the north and south, and form a wooded horizon.
- Valley Farm, Red House Farm and Nobles contain listed buildings.
- The area is identified as having a mixture of post medieval and modern fieldscapes.
- This is a rural, relatively unsettled area, with a keen sense of place, contained by the slopes to the north and south. Pylons and traffic along the B4044 are detracting features, however there is a degree of peace and tranquillity along footpaths within the middle of the area.



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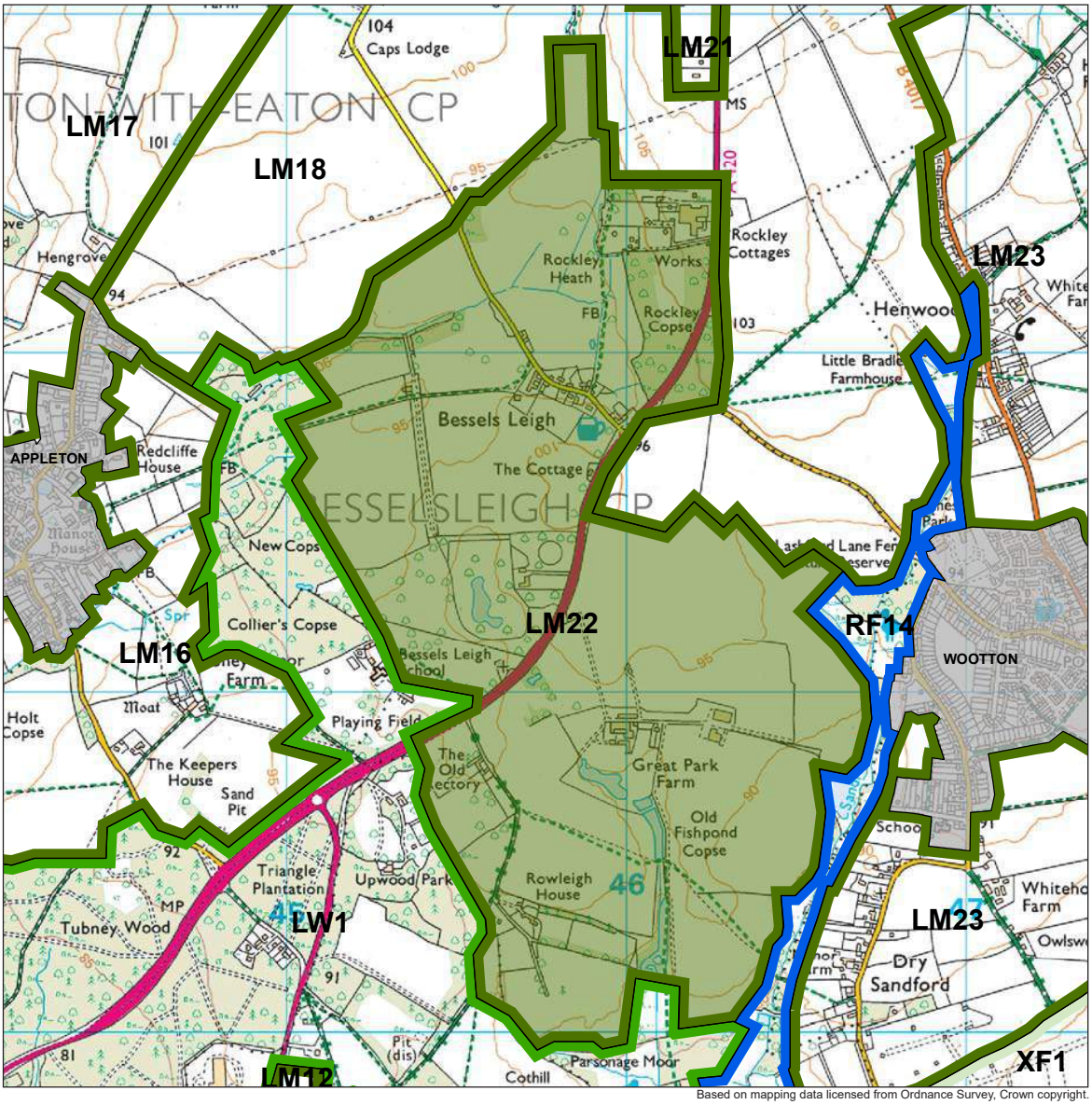
LM21: CUMNOR CORALLIAN LIMESTONE RIDGE WITH WOODLAND

Location and Boundaries

The Cumnor Corallian Limestone Ridge with Woodland Character Area consists of two small areas on the edge of Cumnor, located within the north-eastern part of the District. The area consists of small, enclosed parcels of land, associated with the edge of Cumnor, in contrast to surrounding, larger scale, more open, fields. Boundaries follow the edge of settlement and field boundaries. The Character Area is distant from the North Wessex Downs AONB to the south.

Key Characteristics

- The Character Area is predominantly underlain by Stanford Limestone Formation, and Kingston Sandstone Formation bedrock geology.
- The Character Area consists of two small areas associated with the edge of Cumnor. The landform falls from approximately 120m AOD, down towards a watercourse which flows to the south of Cumnor.
- The areas include a pattern of small scale, well enclosed fields on the edge, or within, Cumnor conservation area, and consists of small pastoral fields, paddocks, a cricket pitch, and large gardens, with thick belts of boundary vegetation and tree groups.
- The Character Area incorporates the A420, which cuts through the eastern edge of the area, and includes the junction with the B4017.
- There are occasional low density dwellings, and a small area of development associated with Spring Farm and Bradley Farm, located off the A420, at the southern end of the area.
- Public rights of way cross the fields, linking parts of Cumnor and the Oxford Greenbelt Way Long Distance Path, and providing dog walking routes to local residents.
- The Character Area provides the immediate treed setting to western and southern parts of the Cumnor conservation area and its listed buildings, with the area penetrating towards the centre of Cumnor, reaching the rear of properties along the High Street.
- Vegetation along field boundaries and roads enclosures the area and limits the distance of views within the area.
- Bradley Farmhouse, at the south-eastern edge of the Character Area, is grade II listed.
- A small area to the north of Spring Farm is designated as a Site of Special Scientific Interest for its palaeogeographic value.
- The area is identified as having a combination of post medieval and modern fieldscapes. The small, well enclosed, fields within the northern part of the Character Area adjacent to Cumnor are recorded as medieval, and there is a ridge and furrow field located off Appleton Road.
- Tree cover encloses the area and provides a buffer between the built up area and the wider countryside. There is a degree of tranquillity within the enclosed spaces, although human influences, including the adjacent settlement, limit the sense of remoteness.



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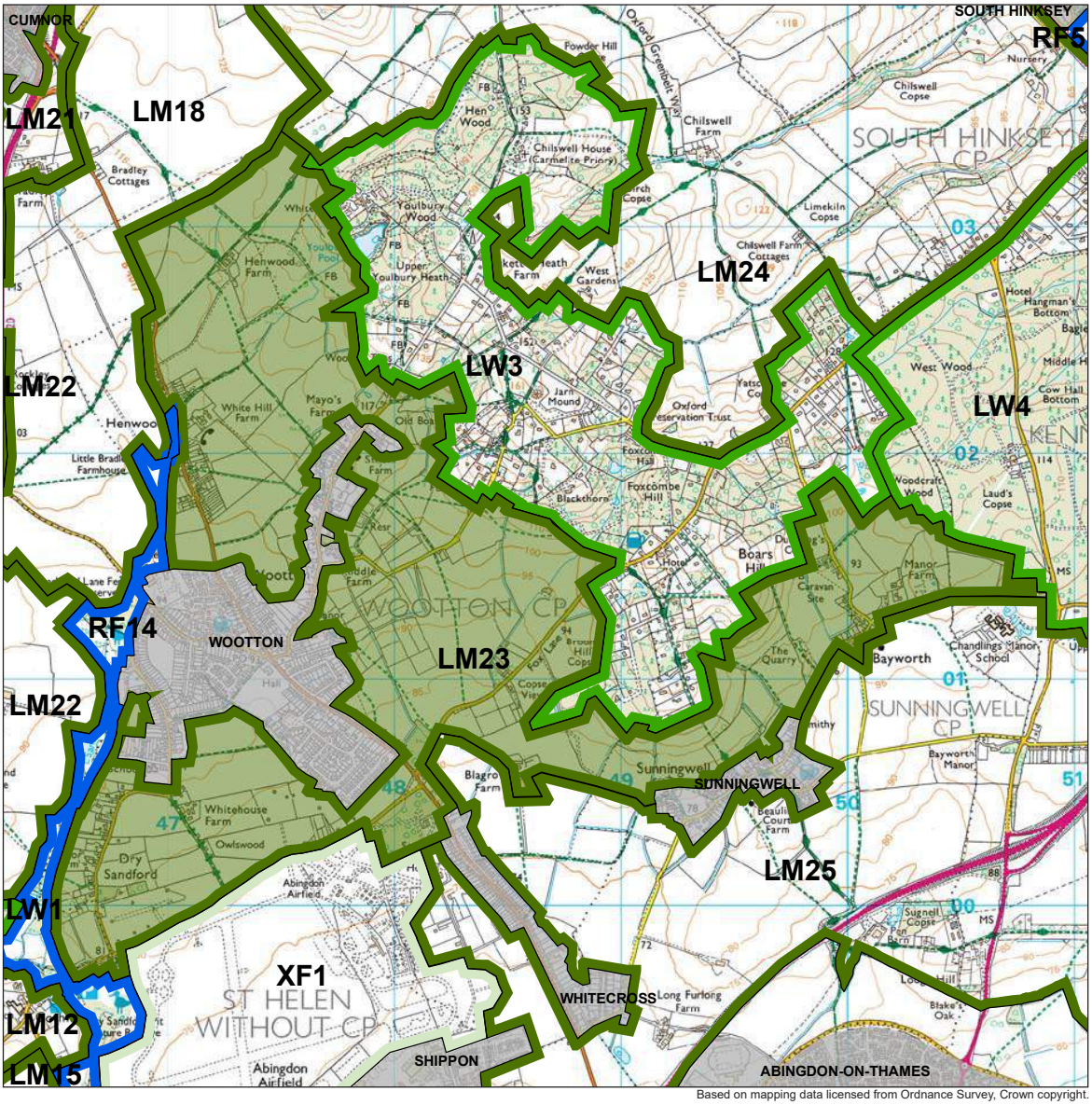
LM22: BESSELS LEIGH CORALLIAN LIMESTONE RIDGE WITH WOODLAND

Location and Boundaries

The Bessels Leigh Corallian Limestone Ridge with Woodland Character Area is located within the north-eastern part of the District, to the west of Wootton. The area is contained by woodland to the south and west, abuts the floodplain associated with Sandford Brook to the east, and contrasts with larger scale, more open, arable fields to the north. Boundaries follow identifiable features on the ground, including field boundaries, roads and the edges of woodland. The Character Area is relatively distant from the North Wessex Downs AONB to the south.

Key Characteristics

- The Character Area is predominantly underlain by Stanford Limestone Formation, and Kingston Sandstone Formation bedrock geology.
- The area is on the gentler, southern side of the wider ridge. Landform falls from approximately 100m AOD within the centre of the Character Area, down towards water bodies towards the south and east.
- Ponds are located in broad depressions within the gently rolling topography. Sandford Brook and its riparian vegetation edges the Character Area to the east.
- There are large arable fields, remnant parkland, and occasional small pastoral fields.
- The landscape is classified as grade 2 and 3 agricultural land.
- The area is relatively well treed, with lengths of intact boundary vegetation, parkland style tree cover, and occasional woodland, including ancient woodland to the north at Rockley Copse.
- However, some internal fields have lost their hedgerows.
- Bessels Leigh is a hamlet located towards the centre of the Character Area, and there are occasional scattered dwellings including farmsteads and large houses elsewhere.
- Tree cover along Sandford Brook to the east separates the Character Area from settlement to the east, including Wootton and Dry Sandford.
- Tree cover within the area, combined with woodland to the west, helps form a gap which separates Wootton and Dry Sandford from Appleton.
- The A420 crosses through the middle of the Character Area edged with roadside vegetation, and connects to the lane off which Bassels Leigh is located. Elsewhere, vehicle access is limited to tracks.
- A fairly limited number of public rights of way provide walking access to the north-west and south-east.
- Views are frequently obscured by vegetation, although there are open views across the larger arable fields.
- The Church of St Lawrence, located off the A420, within the western part of the area, is a grade II* listed building, and gate piers of a former manor house, nearby to the south of the church, are grade II listed. There are also grade II listed cottages within Bessels Leigh.
- The lakes to the south of Great Park Farm are identified as having medieval history.
- Overall this is a rural area, although human influence such roads, settlement and parkland gentrification, reduce the sense of tranquillity and remoteness.



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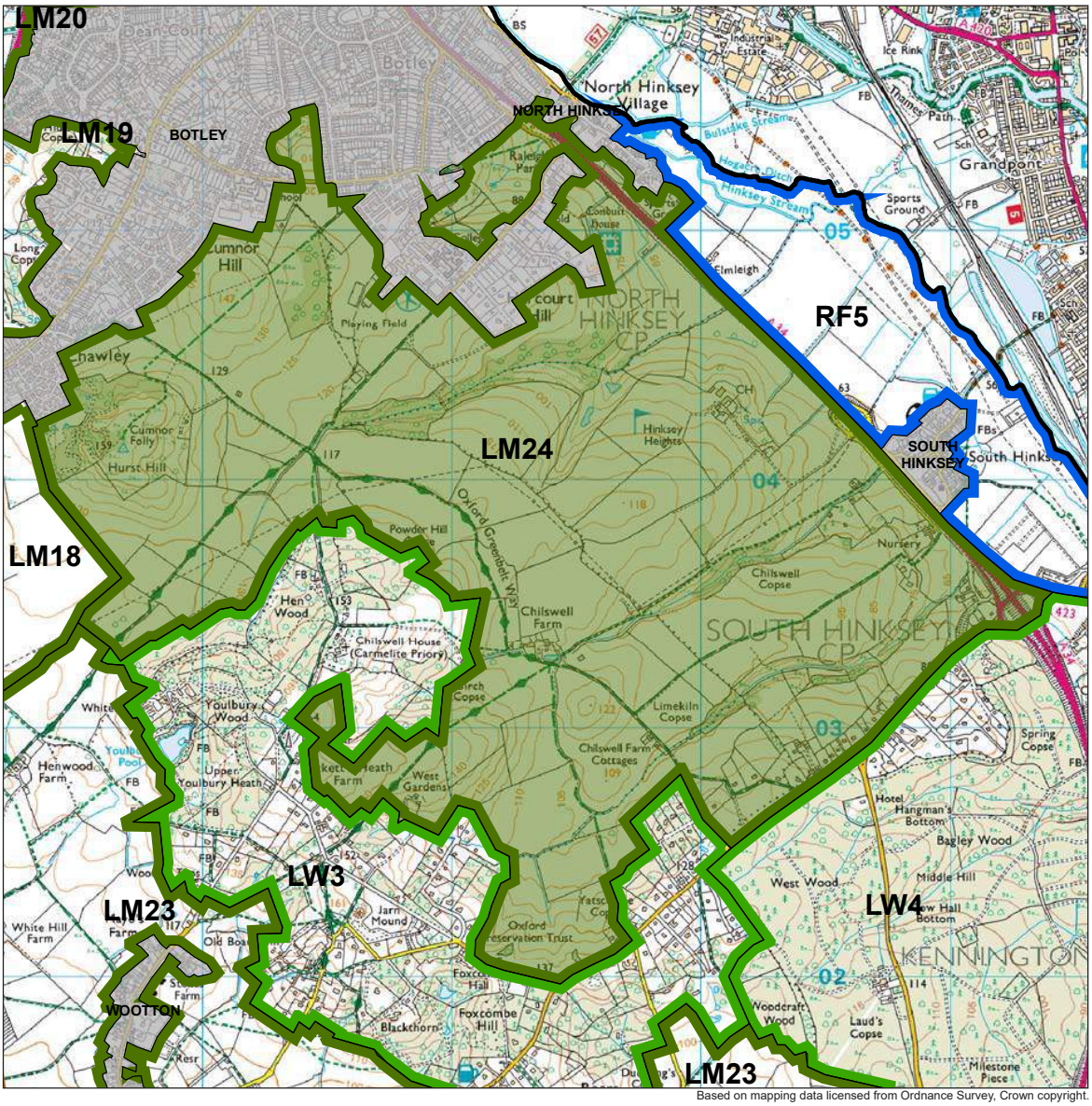
LM23: HENWOOD TO BAYWORTH CORALLIAN LIMESTONE RIDGE WITH WOODLAND

Location and Boundaries

The Henwood to Bayworth Corallian Limestone Ridge with Woodland Character Area is located within the north-eastern part of the District, to the north-west of Abingdon. The area consists of small to medium scale parcels of land on the southern and western slopes to Boars Hill. The area is contained by a combination of settlement, Flood Zone, woodland and Abingdon airfield, and contrasts which larger scale arable fields elsewhere along the wider ridge. The Character Area is relatively distant from the North Wessex Downs AONB to the south.

Key Characteristics

- The Character Area is predominantly underlain by the Stanford Limestone Formation, and Ampthill Clay Formation and Kimmeridge Clay Formation bedrock geology.
- The majority of the area is classified as grade 3 agricultural land.
- The southern and western slopes up to Boars Hill form the Character Area, with landform reaching up to approximately 105m AOD.
- The area consists of sloping, small to medium scale, arable and pastoral fields, with small areas of settlement spread along the road network. An area of paddocks associated with horse keeping is adjacent to the eastern edge of Wootton.
- The area includes the hamlets of Henwood, Dry Sandford and Bayworth, and other small groups of dwellings and farmsteads, within the Character Area, and Sunningwell adjacent to the east.
- The area is vegetated with occasional small blocks of woodland, and frequent dense boundary hedges and trees.
- The Character Area wraps around the edges of Wootton, providing the majority of its rural setting.
- The area also abuts the northern edge of Abingdon airfield. An overgrown hedge with occasional gaps along the north side of Honeybottom Lane, provides a limited degree of separation between the Character Area and the airfield to the south.
- There are listed buildings at Henwood Farm at the northern end of the Character Area.
- Roads consist mainly of hedge and tree lined lanes.
- A network of public rights of way, including part of the Oxford Greenbelt Way Long Distance Path to the north, provide access to most parts of the Character Area.
- Tree cover restricts views in places. However, there are relatively distant views across the larger arable fields where gaps in vegetation allow, including views of Boars Hill to the east. There are views of settlement edges filtered by trees, and occasional long distance glimpses of the Downs to the south, particularly from more elevated vantage points from the northern edge of the Character Area. There are views to the south-west, including views of Abingdon Airfield, and the Vale landscape beyond, from the Oxford Greenbelt Way Long Distance Path.
- The majority of the area has post medieval and modern fieldscapes. Dry Sandford and Bayworth have medieval areas.
- This is a rural area, with a sense of peace and tranquillity along footpaths away from development. However, generally low-key human influence and views of nearby settlement limit the sense of remoteness in most areas.



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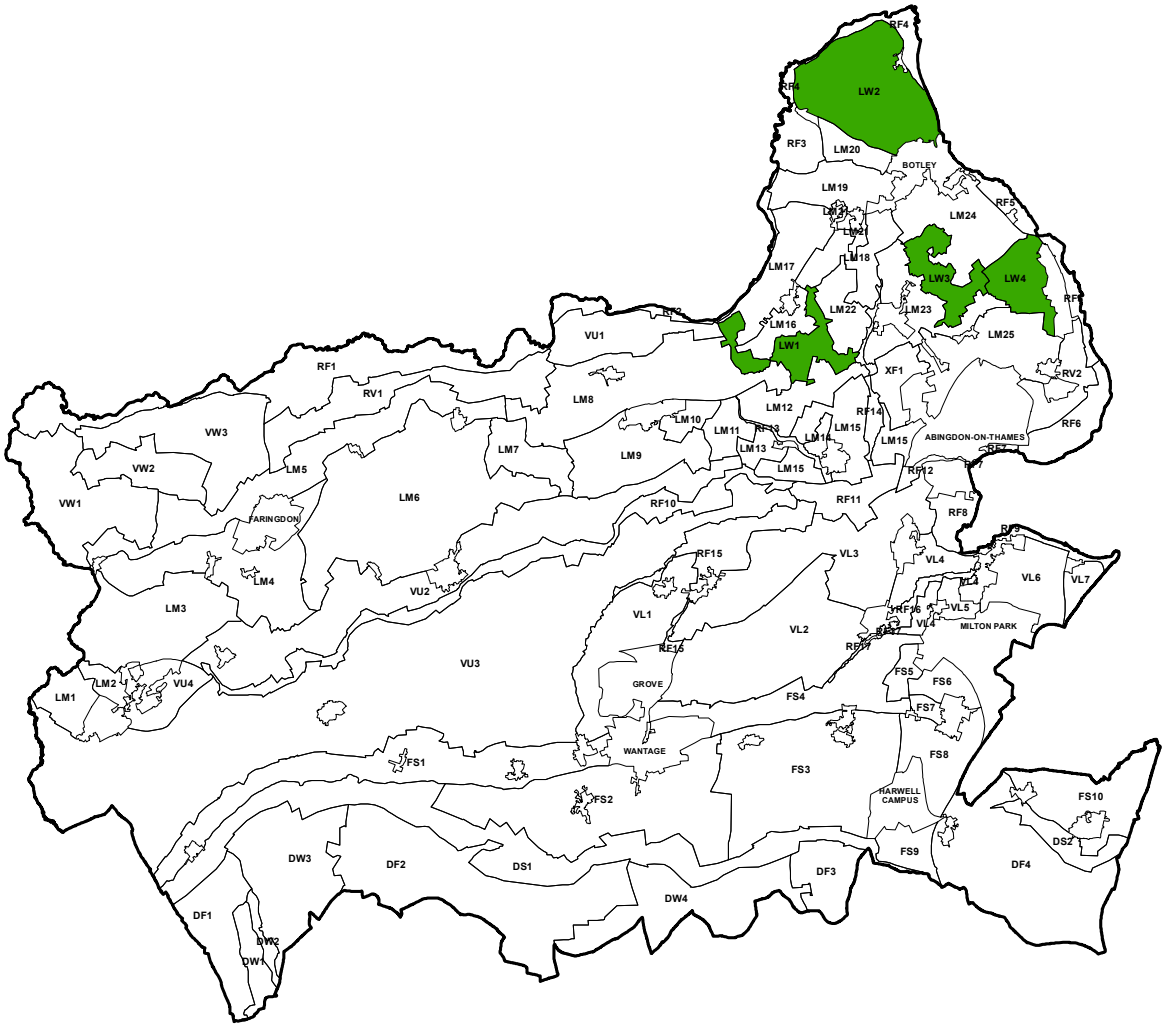
LM24: CHAWLEY TO SOUTH HINKSEY LIMESTONE RIDGE WITH WOODLAND

Location and Boundaries

The Chawley to South Hinksey Corallian Limestone Ridge with Woodland Character Area is located at the north-eastern edge of the District, to the south of Botley. The area is formed from the northern slopes of Boars Hill, contained by woodland to the south, the Thames floodplain to the east, and settlement to the north. The Character Area is relatively distant from the North Wessex Downs AONB to the south.

Key Characteristics

- The Character Area is predominantly underlain by Stanford Limestone Formation, and Ampthill Clay Formation and Kimmeridge Clay Formation Mudstone bedrock geology.
- The majority of the area is classified as grade 3 agricultural land.
- The Northern slopes up to Boars Hill form the Character Area, and include high points at Hurst Hill and Cumnor Hill, up to a height of approximately 150m AOD. The topography is relatively complex, with local valleys and ridges descending down the wider hill slope.
- The area consists of an irregular pattern of predominantly pastoral fields, with occasional larger arable fields, interspersed with a number of woodland blocks, including bands of riparian woodland along watercourses which flow east along minor valley features towards the Thames.
- There is limited settlement within the area, including occasional farmsteads, and a length of low density, ribbon, housing development along the roads which adjoin the area to the south.
- The Character Area includes Hinksey Heights golf course, which covers a relatively large area towards the centre of the Character Area.
- Lines of pylons cross through the area.
- Botley abuts the Character Area to the north. A combination of adjacent tree cover and relatively complex topography obscures the settlement edge in views from less elevated parts of the Character Area.
- The A34 dual carriageway abuts the area to the north-east, and connects to roads which border the Character Area to the south-east. However there are no main roads within the main body of the Character Area.
- Rights of way, including the Oxford Greenbelt Way, cross most parts of the area, and provide a significant recreational resource.
- There are views from rights of way along elevated locations on the north-east facing slopes, including views along the minor valley features and towards Oxford.
- Views include the ‘dreaming spires’ of Oxford, as painted from Hinskey Hill by William Turner. The Oxford Preservation Trust owns land in the area in order to protect green spaces and views, including Chilswell Fields towards the south of the Character Area.
- The slopes provide a wooded backdrop in views from settlements to the east.
- The conservation area at North Hinksey Village is separated from the main body of the Character Area by the A34.
- Hurst Hill towards the east of the area is designated as a Site of Special Scientific Interest for its mosses and liverworts, and geological interest.
- There are a limited number of listed buildings, including at Chilswell Farm.
- The area consist of a mixture of post medieval and modern fieldscapes.
- Limited settlement and a combination of complex topography and woodland provide a distinctive landscape with a sense of peace and tranquillity, and a degree of remoteness, in certain areas. Detracting features such a pylons, golf activity and distant views of settlement reduce the sense of remoteness in other parts of the Character Area.



LANDSCAPE TYPE LW: WOODED CORALLIAN LIMESTONE RIDGE

Landscape Character Areas

LW1	Appleton Lower Common to Parsonage Moor Wooded Corallian Limestone Ridge
LW2	Wytham Hill Wooded Corallian Limestone Ridge
LW3	Powder Hill to Boars Hill Wooded Corallian Limestone Ridge
LW4	West Kennington Wooded Corallian Limestone Ridge

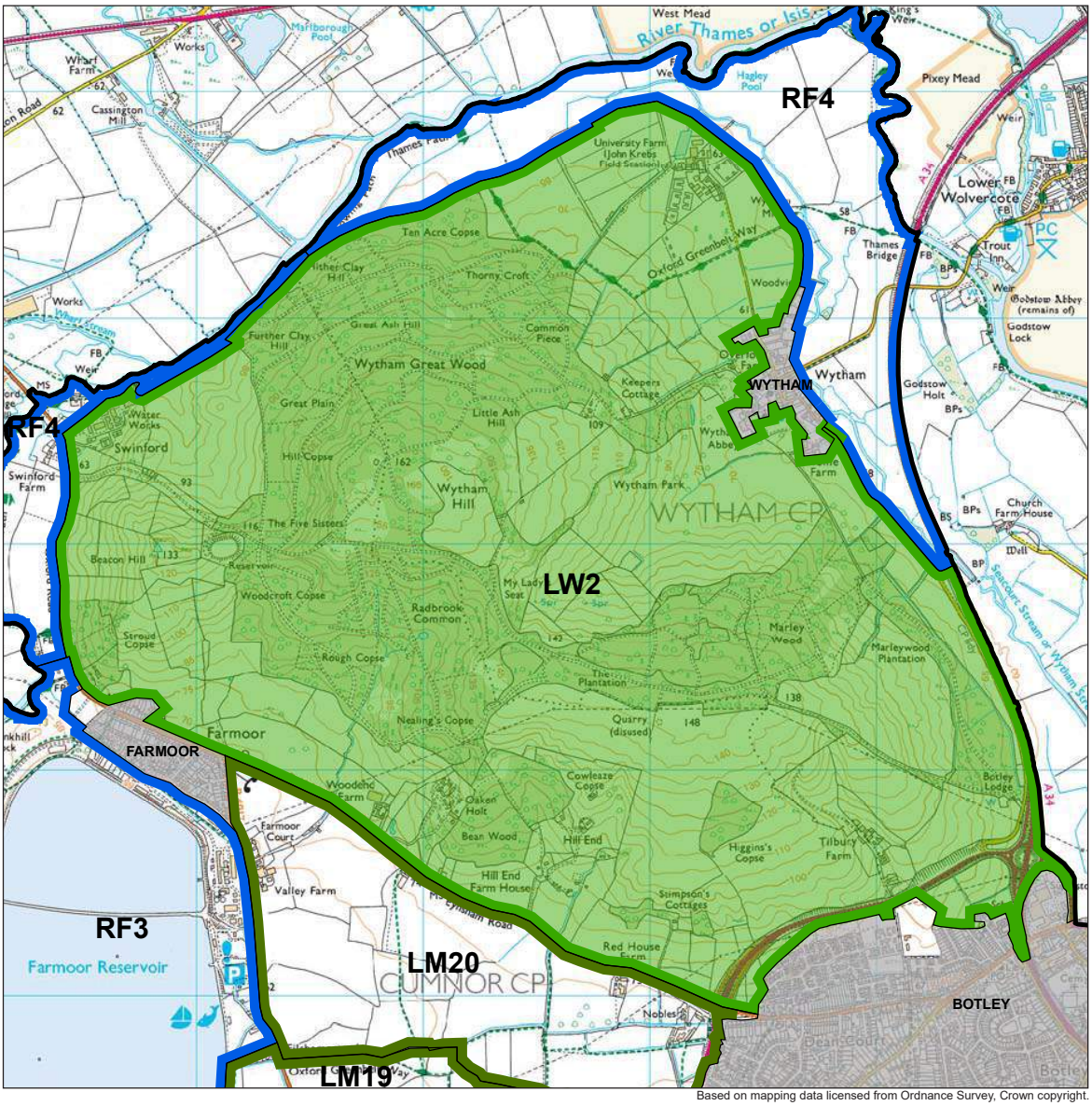
LANDSCAPE TYPE LW: WOODED CORALLIAN LIMESTONE RIDGE

Location and Boundaries

The Wooded Corallian Limestone Ridge Type includes substantial areas of woodland located towards the eastern end of the Corallian Limestone Ridge, between the Vale landscape associated with the River Ock to the south, and the Vale and valley floor landscape associated with the River Thames to the north. The Wooded Corallian Limestone Ridge is defined by the extent of woodland cover, its topography, and underlying geology. The boundaries follow easily recognisable features including roads, woodland edges and field boundaries. The Wooded Corallian Limestone Ridge forms a backdrop to the west of Oxford and is relatively distant from the North Wessex Downs AONB to the south.

Key Characteristics

- The Wooded Corallian Limestone Ridge is primarily underlain by corallian limestone which protrudes above the clay and alluvial landscapes to the north and south.
- The Type includes extensive tracts of woodland which are predominantly ancient woodland, such as the Oak dominated Bagley Wood, and Wytham Woods with their mixture of ancient semi-natural woodland, secondary woodland, plantations, and calcareous grassland.
- There are occasional parcels of pastoral and arable fields within the woodland.
- The density of woodland breaks down in places, giving way to groups of low density dwellings set within surrounding tree cover, in particular around Boars Hill.
- The Woodland is prominent in the local landscape, located on high ground including Wytham Hill to the north-west of Oxford, Boars Hill to the south-west of Oxford, and on the north side of the ridge near Appleton.
- The woodland frames views out from high points, with intervisibility with the Lower Vale landscapes to the north and south, Oxford to the east, and the Downs on the horizon to the south.



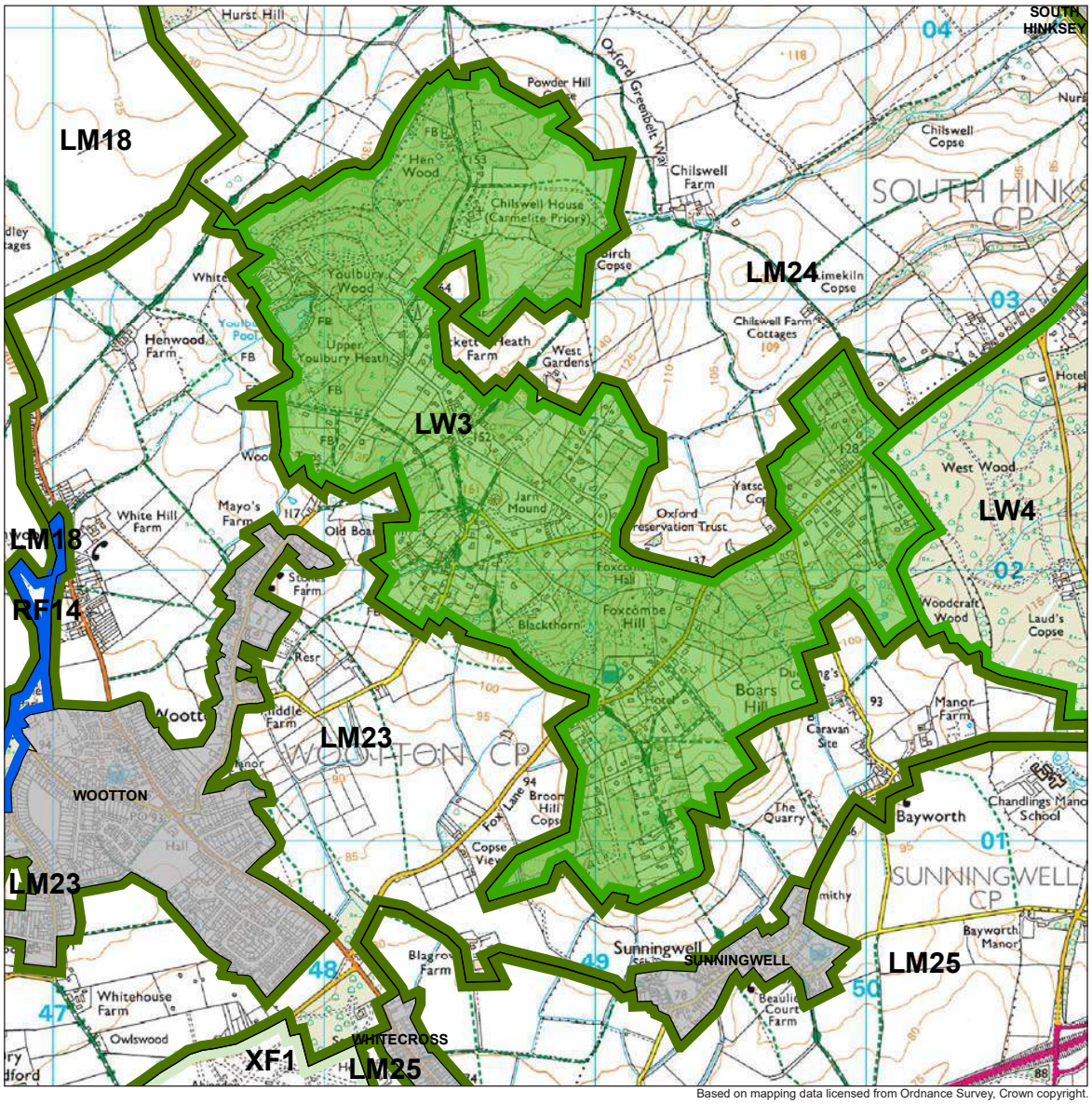
LW2: WYTHAM HILL WOODED CORALLIAN LIMESTONE RIDGE

Location and Boundaries

The Wytham Hill Wooded Corallian Limestone Ridge Character Area is located at the northern end of the District, to the north-west of Botley. The Character Area is defined by its woodland and topography, and is contained by the floodplain associated with the River Thames, settlement edges and less elevated parts of the wider ridge to the south-west. Boundaries follow roads, settlement edges, the edges of woodland and the floodplain associated with the River Thames. The Character Area is distant from the North Wessex Downs AONB to the south.

Key Characteristics

- The Character Area is predominantly underlain by the Stanford Limestone Formation bedrock geology.
- The Character Area consists of extensive tracts of oak and ash woodland interspersed with areas of parkland and medium to large scale arable fields, located prominently on Wytham Hill, above the Thames Vale to the north, east and west.
- The landform reaches a maximum height of approximately 165m AOD towards the centre of the Character Area, and falls to meet the Thames to the north-east and north-west.
- The majority of the woods are recorded as ancient woodland, with areas likely to date from Saxon times.
- There are occasional intact hawthorn hedges, along arable field boundaries outside areas of woodland.
- The Wytham Woods are designated as a Site of Special Scientific Interest consisting of a complex of ancient woodland, wood pasture, common land and old limestone grassland on a variety of soils. The site has an exceptionally rich flora and fauna.
- There is very limited settlement within the woods. However, the Character Area includes a university field station to the north, water works to the north-west and scattered farmsteads elsewhere.
- The busy A34 and A420 edge the area to the east and south.
- The area abuts the village of Wytham, located at the foot of Wytham Hill, on the edge of the Thames floodplain to the east. The slopes to the west of the village provide a wooded backdrop to the Wytham conservation area, and its listed buildings.
- The slopes also provide a northern backdrop to Botley. The wooded slopes are prominent in the cone of views from Oxford to the east, and there are view across to Oxford in the opposite direction.
- The Oxford Greenbelt Way Long Distance Path cross through the northern part of the are, however there are no public rights of way through the woodland. The woods are open to the public by permit.
- The area has a combination of post medieval and modern fieldscapes.
- The tree cover creates a sense of intimacy, and away from human influences there is a keen sense of peace and tranquillity.



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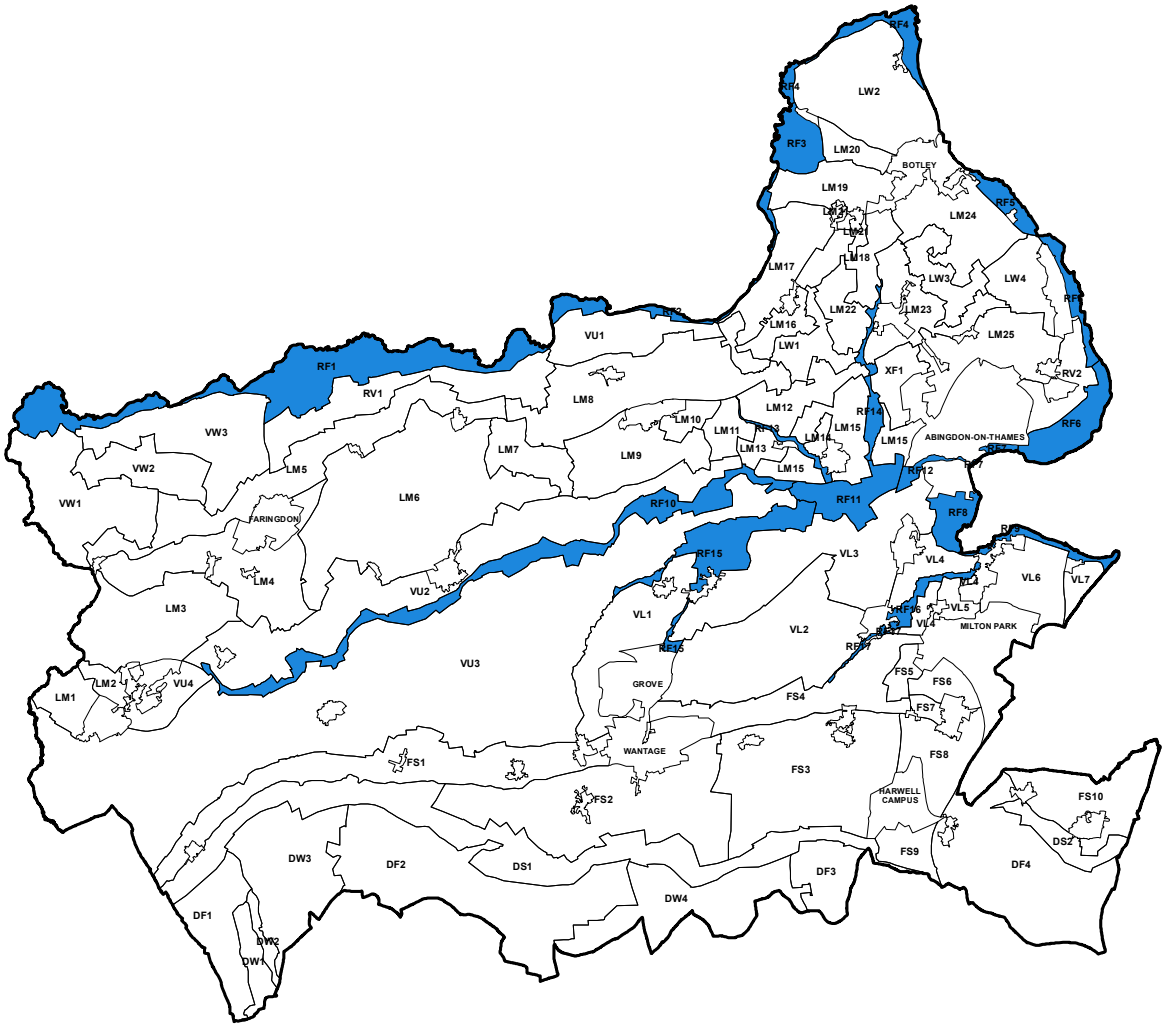
LW3: POWDER HILL TO BOARS HILL WOODED CORALLIAN LIMESTONE RIDGE

Location and Boundaries

The Powder Hill to Boars Hill Wooded Corallian Limestone Ridge Character Area is located within the north-eastern part of the District, to the north of Abingdon. The Character Area is defined by its extent of woodland mixed with settlement within the wider Corallian Limestone ridge. Boundaries mainly follow the edges of woodland. The Character Area is relatively distant from the North Wessex Downs AONB to the south.

Key Characteristics

- The Character Area is predominantly underlain by the Lower Greensand Sandstone Group bedrock geology.
- The Character Area consists of extensive areas of mixed deciduous and coniferous woodland, including oak, ash and scots pine, on the hill tops and upper slopes surrounding Boars Hill.
- The landform reaches a maximum height of approximately 160m AOD at Jarn Mound.
- Occasional spring feed streams flow along minor valley features within the wider slopes, along with the occasional pond, such as at Youlbury Wood.
- Some significant parts of woodland, such as Hen Wood to the north, and Yatscombe Copse to the east, are recorded as ancient woodland.
- Numerous gaps in the woodland occur across the majority of the Character Area, within which significant areas of low density dwellings are located.
- A large Scout camp with associated buildings is located within Youlbury Wood, within the north-western part of the area.
- There are a few grade II listed buildings within the area, including Youlbury House to the north, and Foxcombe Hall further south.
- Various minor roads and public rights of way, including part of the Oxford Greenbelt Way Long Distance Path, criss-cross through the woodland, connecting the areas of settlement.
- From the edges of the woodland, such as along Berkeley Road, on the central eastern side of the Boars Hill, there are distinctive long range views of the spires and rooftops of Oxford to the east. Jarn Mound is an historic viewpoint, set within associated gardens on Boars Hill, although tree cover now restricts the majority of distant views from the mound.
- The area provides a wooded backdrop in views towards the hill.
- Tree cover gives the area a secluded, enclosed feel. In the spring large parts of the woodland are carpeted with Bluebells, giving distinctive interest to the woodland.
- The majority of the landscape is identified as having modern fieldscapes.
- There is a sense of peace and tranquillity within the woodland, however the sense of remoteness is limited in many areas due to the presence of dwellings and roads.



LANDSCAPE TYPE RF: RIVER FLOODPLAIN

Landscape Character Areas

RF1	St John's Bridge to Newbridge Thames River Floodplain
RF2	Newbridge to Lower Whitley Thames River Floodplain
RF3	Farmoor Reservoir Thames River Floodplain
RF4	Swinford to Wytham Thames River Floodplain
RF5	North Hinksey to Radley Thames River Floodplain
RF6	Radley to Abingdon Thames River Floodplain
RF7	Abingdon Thames River Floodplain
RF8	Abingdon to Sutton Courtenay Thames River Floodplain
RF9	Sutton Courtenay to Appleford Thames River Floodplain
RF10	Longcot to Garford Ock River Floodplain
RF11	Garford to Abingdon Ock River Floodplain
RF12	Abingdon Ock River Floodplain
RF13	West Marcham River Floodplain
RF14	Sandford Brook River Floodplain

RF15	Childrey Brook and Letcombe Brook River Floodplain
RF16	Mill Brook and Ginge Brook River Floodplain
RF17	East Hendred Brook River Floodplain

LANDSCAPE TYPE RF: RIVER FLOODPLAIN

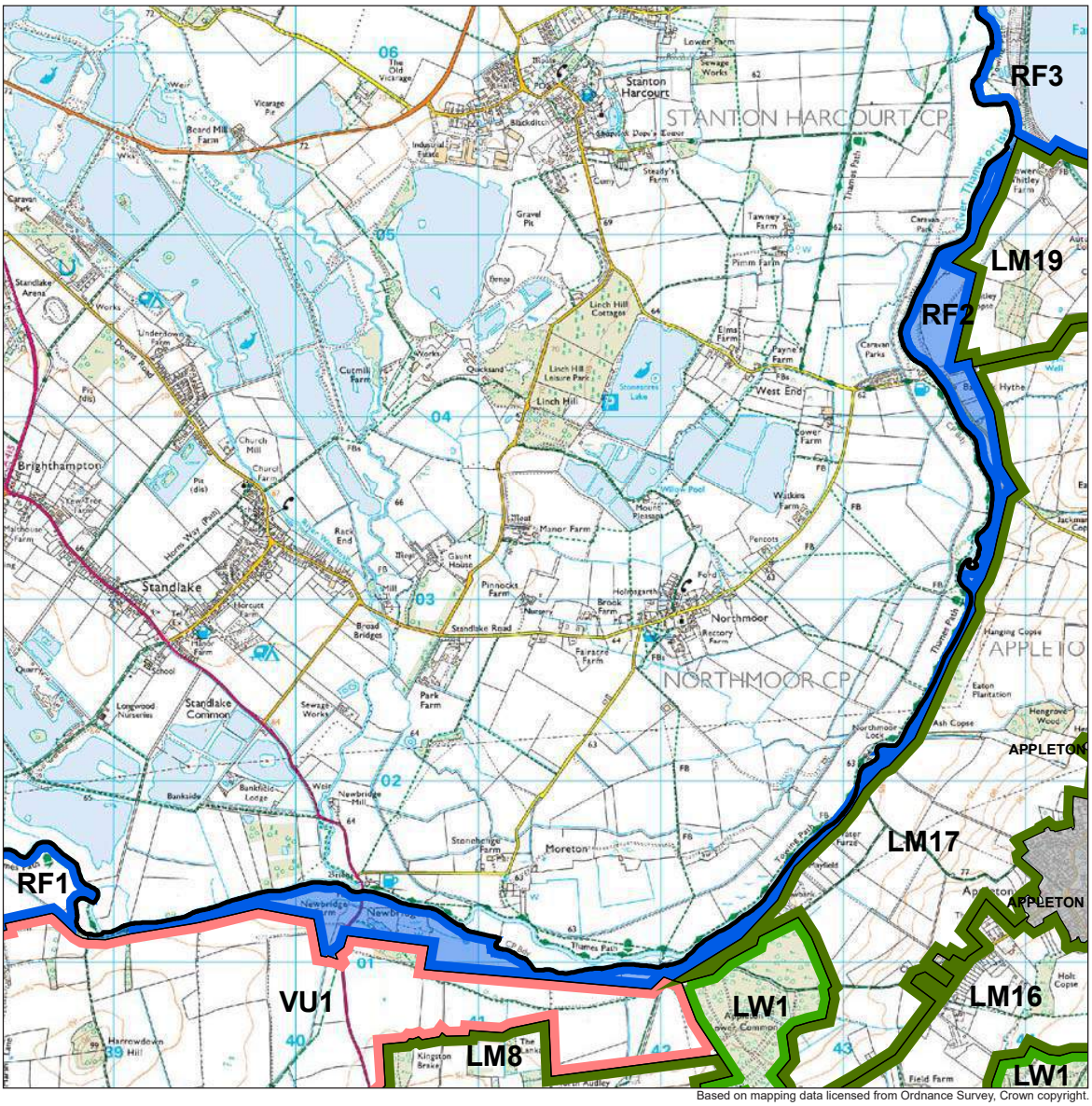
Location and Boundaries

The River Floodplain consists of low lying river terraces and valley bottoms following the courses of a number of rivers and streams that flow through the District. In particular, the Landscape Type includes the River Thames as it winds along the northern and north-eastern boundaries of the district, and the River Ock which flows west to east through the centre of the Vale towards the River Thames. Boundaries are generally determined by the edge of the floodplain, as defined by the Environment Agency's Flood Zone 2, which equates to land having between 1 in 100 and 1 in 1000 annual probability of river flooding. However the area has be extended or reduced depending on the extent of characteristic features such as landform, land use and vegetation. The boundaries are generally taken to the nearest recognisable identifiable feature such as field boundaries and roads, but in some limited instances, such as where there are no nearby recognisable features on the ground, the boundaries follow a contour.

Key Characteristics

- Low lying level areas of floodplain situated on alluvial deposits.
- There is the presence of open water in the form of rivers, with channels, streams and brooks.
- Land use is generally pastoral, often with wet meadows, including those used for grazing, with tree species including willow and alder. Woodland is limited within the floodplain.
- In areas along the Thames the river is enlivened by the movement and colour of boats navigating the waterways. Sections of the Thames Path National Trail cross through the District.

- Farmoor is a large reservoir, filled from the adjacent River Thames, which provides further opportunities for waterborne recreation.
- In some instances there are surrounding urban influences, including housing, roads and utilities associated with settlements such as Abingdon and Kennington. Gravel extraction has occurred within the Thames floodplain at the north-eastern edges of the District, resulting in water filled pits.
- Elsewhere, such as along the majority of the River Ock, the route of watercourses are peaceful, semi-enclosed and sparsely settled other than at river crossings.



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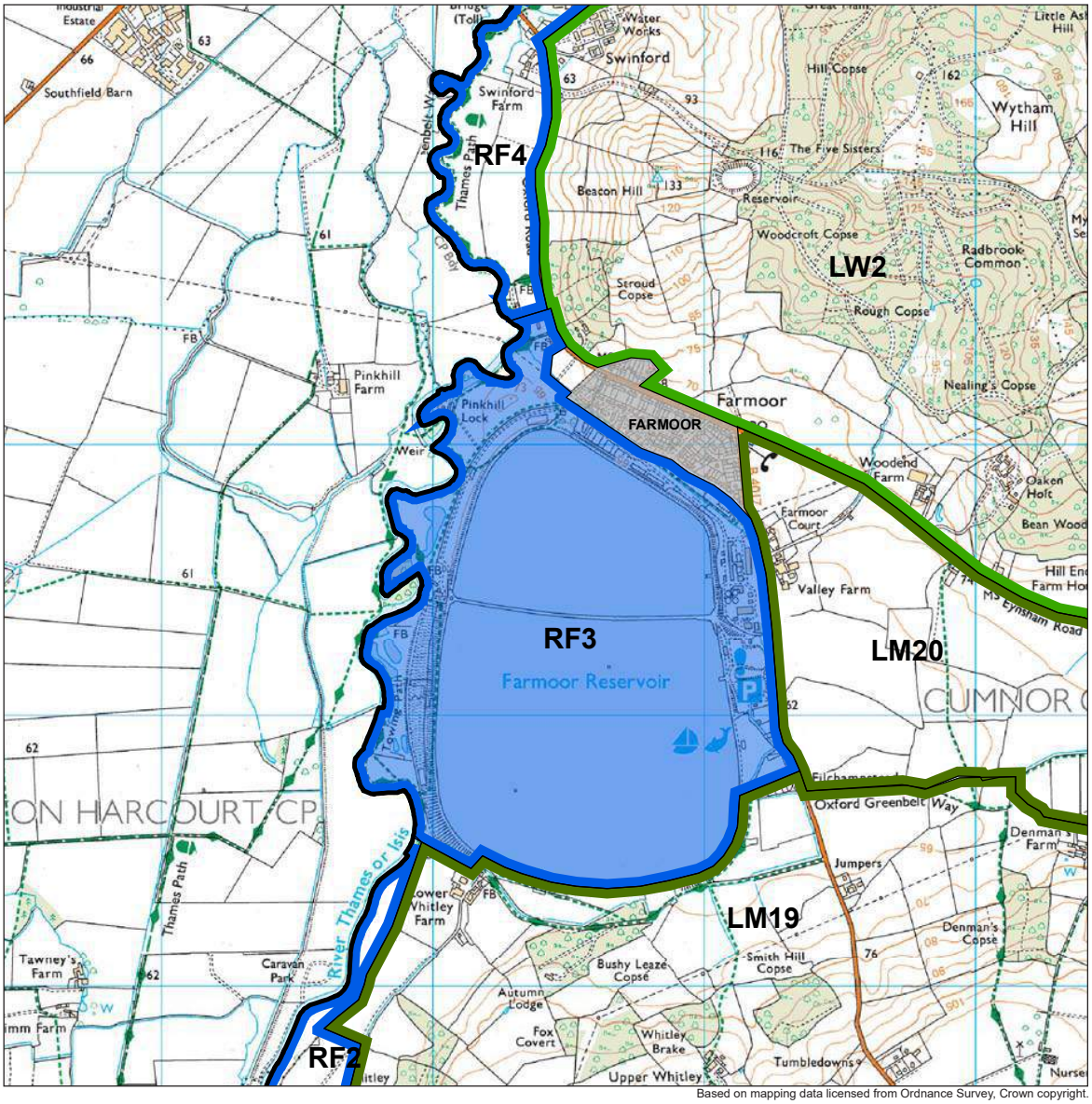
RF2: NEWBRIDGE TO LOWER WHITLEY THAMES RIVER FLOODPLAIN

Location and Boundaries

The Newbridge to Lower Whitley Thames River Floodplain Character Area is located along the northern edge of the District. The Character Area includes the floodplain associated with the southern and eastern sides of the River Thames. The area is confined to a narrow strip by the District boundary, which follows the course of the river. Boundaries incorporate Flood Zone 2 generally, however the southern and eastern edges of the Character Area are taken to logical alignments taking into account changes in landscape character, along identifiable features on the ground where possible.

Key Characteristics

- The Character Area is underlain by Oxford Clay Formation Mudstone bedrock geology, with Alluvium of Clay, Silt, Sand and Gravel superficial deposits.
- The Character Area includes a narrow strip of flat river floodplain, confined by the rising ground of the Limestone Corallian Ridge and Upper Vale to the south and east, and the District boundary to north and west, which predominately follows the course of the River Thames.
- The area predominately consists of pastoral fields and riparian vegetation, such as willow, alder and ash trees.
- There is very limited settlement on the floodplain, with just a small number of dwellings at the River crossings, including the road bridge at Newbridge and footbridge to the north-east of Appleton Lower Common. There is a pub at Newbridge.
- The A415 passes north-south through the western end of the Character Area and crosses the Thames at Newbridge. Elsewhere, vehicle access predominantly consists of narrow tracks.
- A few public rights pass through the area, with connections to the Thames Path National Trail where road and foot bridges cross the Thames.
- Pylons cross the area to the east.
- The Thames is navigable, with waterborne craft adding relaxed activity and colour to the winding river course, including at Northmoor lock.
- Newbridge is an ancient monument, and the adjacent Maybush public house is a grade II listed building.
- The Thames is visible from sections of the Thames Path along its banks. There are views across adjacent fields to the nearest intervening vegetation, with the wooded slopes of the Corallian Limestone Ridge forming an elevated backdrop in views to the south and east.
- Views of pylons are a detractive feature, but the sparsely settled, rural area has a sense of peace and tranquillity away from settlement. Boating activity reduces the sense of remoteness in places along the Thames.



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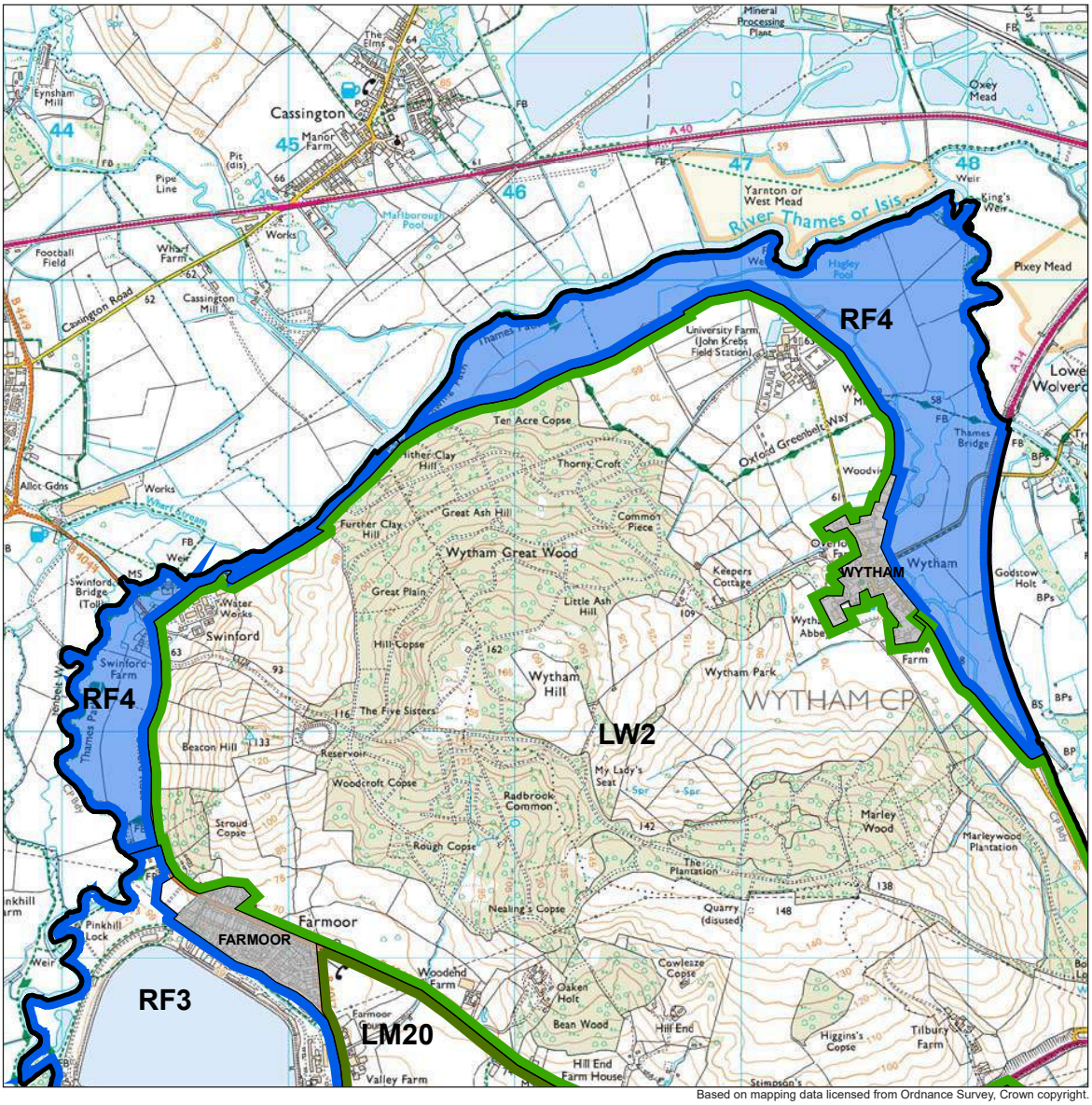
RF3: FARMOOR RESERVOIR THAMES RIVER FLOODPLAIN

Location and Boundaries

The Farmoor Reservoir Thames River Floodplain Character Area is located at the northern end of the District. The Character Area includes the reservoir itself and the floodplain associated with the eastern side of the River Thames. The area incorporates Flood Zone 2 generally, but is confined to the west by the District boundary, which predominately follows the course of the river.

Key Characteristics

- The Character Area is underlain by Oxford Clay Formation Mudstone bedrock geology.
- The area is part of the flat river floodplain, however the sloping sides of the reservoir are raised up above the surrounding ground level.
- The Character Area incorporates the large water body of the reservoir itself, sections of the Thames and adjacent grassland and scrub to the west, and the water treatment works and sailing club, adjacent to the east and north of the reservoir.
- There are tree groups and areas of scrub, but no significant areas of woodland. The rough ground on the eastern edge of the Thames is marked by small scale excavation, with depressions forming ponds.
- Tree cover along the northern edge of the reservoir prevents intervisibility with the majority of Farmoor and provides a treed southern setting to the village.
- There are few dwellings in the Character Area, although there are numerous structures related to the water treatment works and sailing club, along with areas of car parking and boat storage.
- The Thames is navigable, with waterborne craft adding relaxed activity and colour to the winding river course, including at Pinkhill Lock.
- The Thames Path National Trail passes through the area along the Thames and connects to other public rights of way, including routes alongside the edge of the reservoir.
- The reservoir provides significant recreational opportunities, including sailing and fishing.
- There are views across the large waterbody of the reservoir from the top of the surrounding embankment, including from the public footpath adjacent to the south-western edge of the reservoir. Slopes to the north and south which face the reservoir, provide a wooded, or partially wooded backdrop on the horizon. In the opposite direction, the reservoir is a prominent feature in views from the elevated locations which overlook the area to the north and south.
- Towards the north-west of the area is the Pinkhill Meadow nature reserve.
- This is a relatively contained area due to the slopes to the north and south, tree cover to the west and the structures to the east. However, those structures, and human activity, prevent a sense of remoteness. The landscape outside the Character Area, beyond the Thames to the west, is unsettled and highly rural, and lends a senses of the peace and tranquillity to locations along the riverbank within the western part of the Character Area.



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RF4: SWINFORD TO WYTHAM THAMES RIVER FLOODPLAIN

Location and Boundaries

The Swinford to Wytham Thames River Floodplain Character Area is located at the northern tip of the District, below Wytham Hill. The Character Area includes the floodplain associated with the southern side of the River Thames. The area is confined to the north by the District boundary, which follows the course of the river. Boundaries incorporate Flood Zone 2 generally, however the southern edge of the Character Area is taken to a logical alignment taking into account changes in landscape character, along identifiable features on the ground where possible.

Key Characteristics

- The Character Area is underlain by Oxford Clay Formation Mudstone bedrock geology, with Alluvium of Clay, Silt, Sand and Gravel superficial deposits.
- The Character Area includes a varying width of flat river floodplain, confined by the rising ground of Wytham Hill to the south, and the District boundary to north, which follows the course of the River Thames.
- The area predominately consists of pastoral fields, some of which are relatively large grazed fields with significant gaps in boundary vegetation. Closer to the north-eastern foot of Wytham Hill are small areas of rough grass enclosed by tree cover, including wet grassland alongside the meandering Seacourt Stream, and the Wytham Ditches and Flushes, which connect with the Thames.
- These areas provide a treed setting to parts of Wytham and its conservation area, and Wytham Mill, which abuts the area to the west.
- There are also mature riparian trees and shrubs along the banks of the Thames, although some stretches of the river are relatively open.
- There are locks with boating activity at Swinford and King's Weir.
- There is very limited settlement on the floodplain, with just a few dwellings associated with the farmstead at Swinford Farm, where Swinford toll bridge carries the B4044 across the Thames.
- To the north of Wytham, the Character Area abuts the eastern edge of the university field station
- A lane connecting to Wytham, cuts through the south-eastern corner of the area, but there is limited vehicle access elsewhere. Public rights of way are also limited internally, however the Thames Path National Trail runs along the edge of the Thames and connects with the Oxford Greenbelt Way.
- The A34 dual carriageway, elevated above the floodplain, abuts the eastern edge of the Character Area along the District boundary. Road traffic is visible through gaps in roadside vegetation.
- Wytham Hill frequently forms a wooded backdrop in views across the area. In the opposite direction, there are views across the Thames and pasture on the opposite bank, towards the nearest tree cover.
- The Wytham Ditches and Flushes are designated as a Site of Special Scientific Interest for their species-rich eutrophic aquatic and fen flora.
- Unsettled areas, particularly to the north, have a sense of peace and tranquillity, although human influence including occasional views of settlement, and the university field station, limit the sense of remoteness.

Ecological Services

Green Infrastructure

Landscape and Visual Impact Assessment

Landscape Character Assessment

Habitats Regulations Assessment

Strategic Environmental Assessment

Sustainability Appraisal

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