Chapel and Hill Chorlton, Maer and Aston, and Whitmore Neighbourhood Development Plan

January 2019

Volume II: Maps and supporting evidence

Protecting rural character while allowing for appropriate development

your neighbourhood plan

Contents

Abbreviations

ACRE	Action with Communities in Rural England
Chorlton parish	Chapel and Hill Chorlton parish
CSS	Newcastle-under-Lyme and Stoke-on-Trent Core Spatial Strategy 2006–2026
DCLG	Department for Communities and Local Government
Defra	Department for Environment, Food and Rural Affairs
HCA	Heritage and Character Assessment
HER	Historic Environment Record
HNA	Housing Needs Assessment
HS2	High Speed 2
HTP	Housing Technical Paper
JLP	Stoke-on-Trent and Newcastle-under-Lyme Joint Local Plan
LPA	local planning authority
LTTI	limiting long-term illness
LWS	Local Wildlife Site
Maer parish	Maer and Aston parish
NA	Neighbourhood Area
NCA	National Character Area
NPPF	National Planning Policy Framework
NuL	Newcastle-under-Lyme
OAN	objective assessment of need
PRoW	Public Right of Way
RIGS	Regionally Important Geological/geomorphical Site
SBAP	Staffordshire Biodiversity Action Plan
SCC	Staffordshire County Council

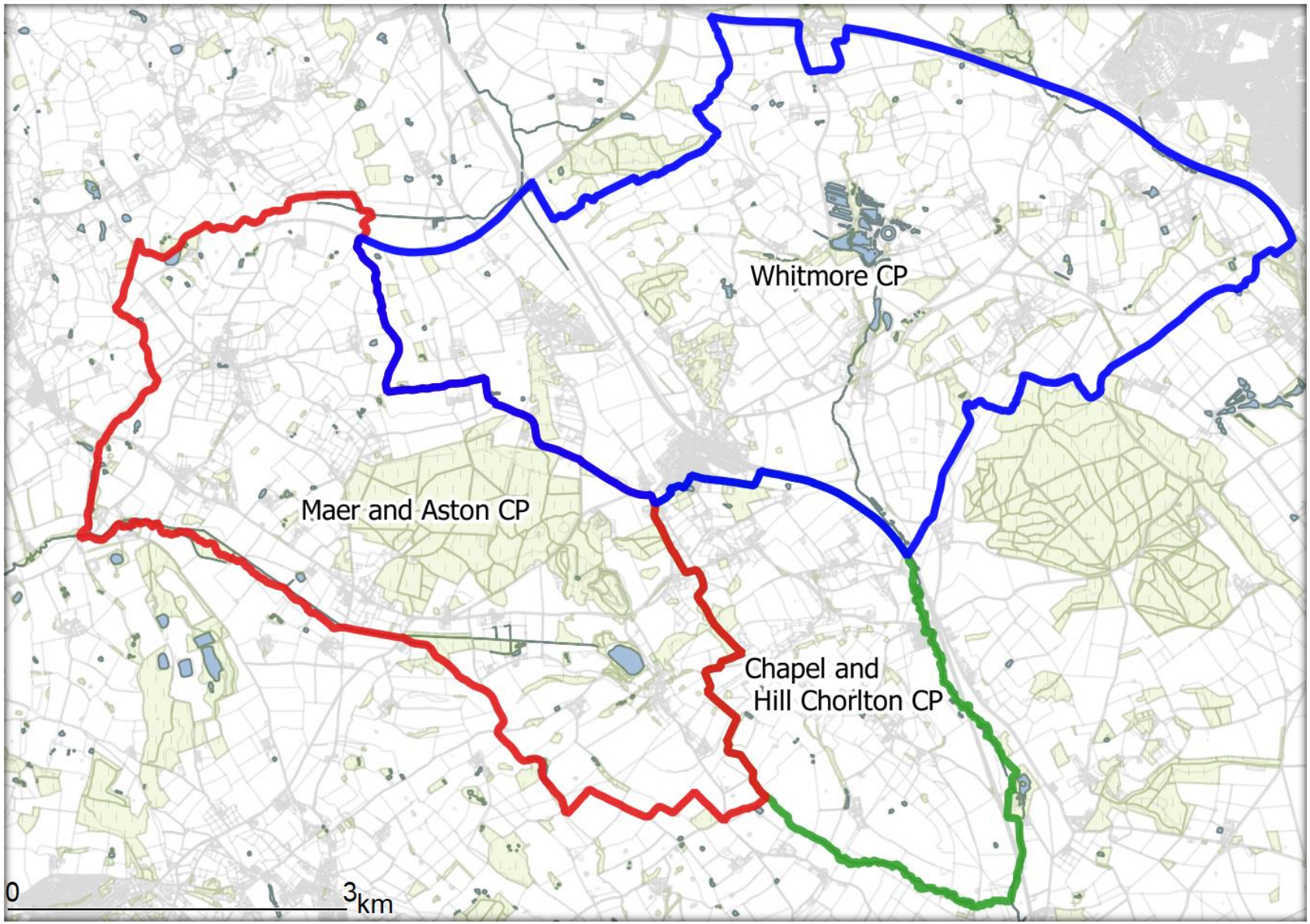
SoT	Stoke-on-Trent
SPG	Special Planning Guidance
SSSI	Site of Special Scientific Interest
SUDS	Sustainable Urban Drainage System
TCA	Townscape Character Appraisal
WCML	West Coast Mainline

List of maps

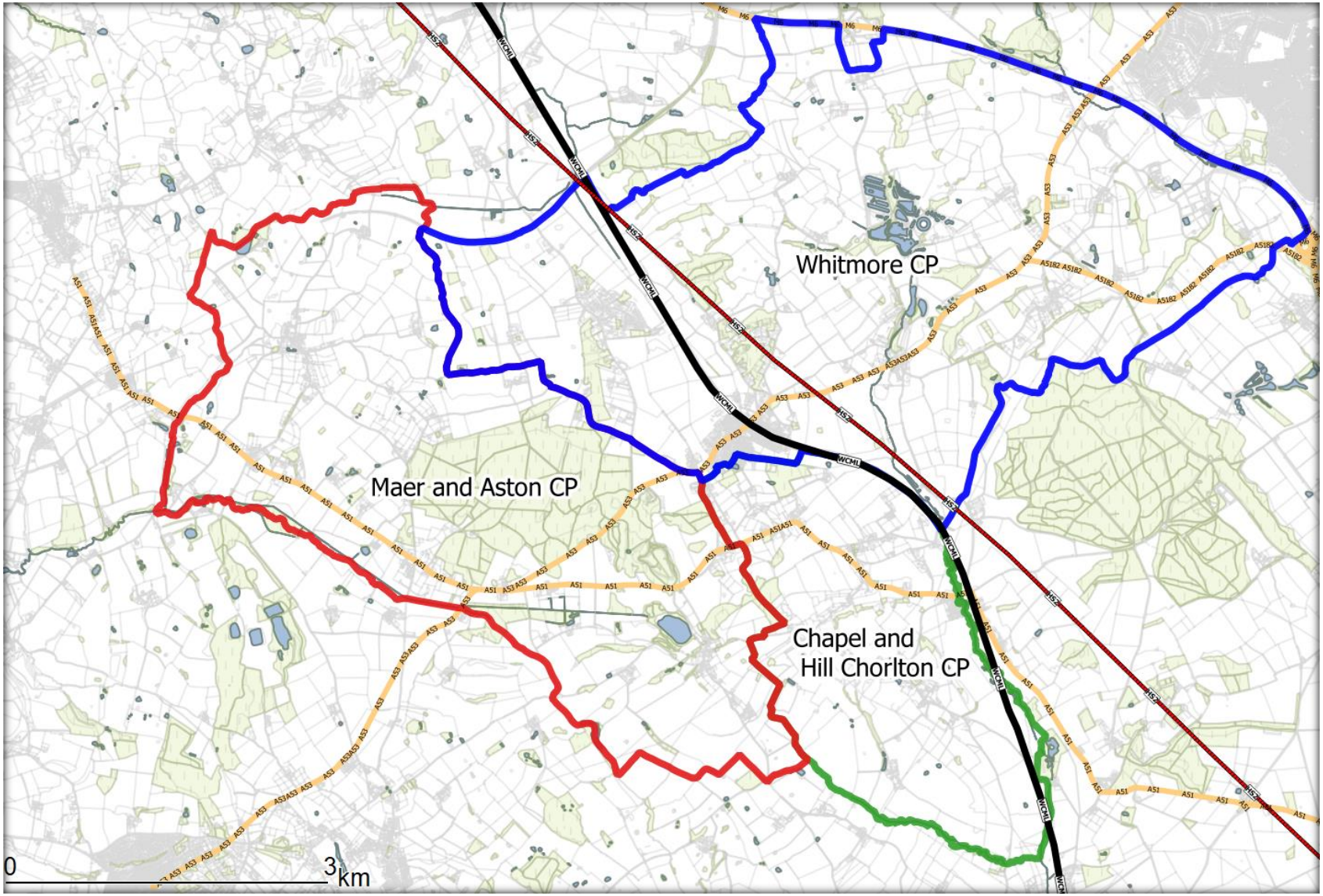
Important note regarding compliance with Ordnance Survey (OS) copyright
The lead parish council for the Neighbourhood Plan, Whitmore Parish Council, is signed up to the OS Public Service Mapping Agreement, licence number 100051157, and is authorised to publish all those maps containing OS data that are reproduced in this Neighbourhood Plan, whether acquired from third-party sources or created by the Qualifying Body

Maps

Map 1 Neighbourhood Area of Chapel and Hill Chorlton, Maer and Aston, and Whitmore

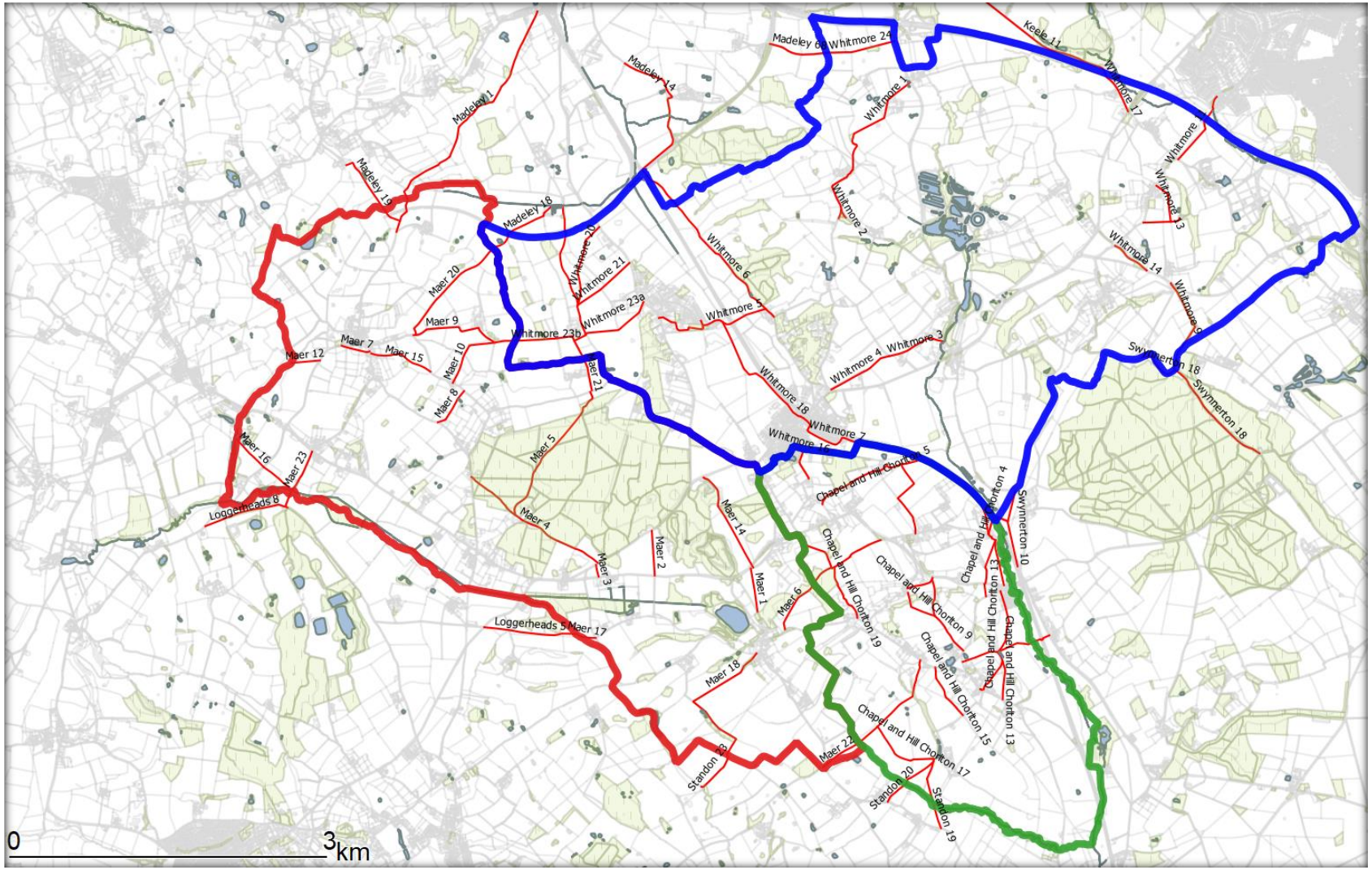


Map 2 Transport network in the NA

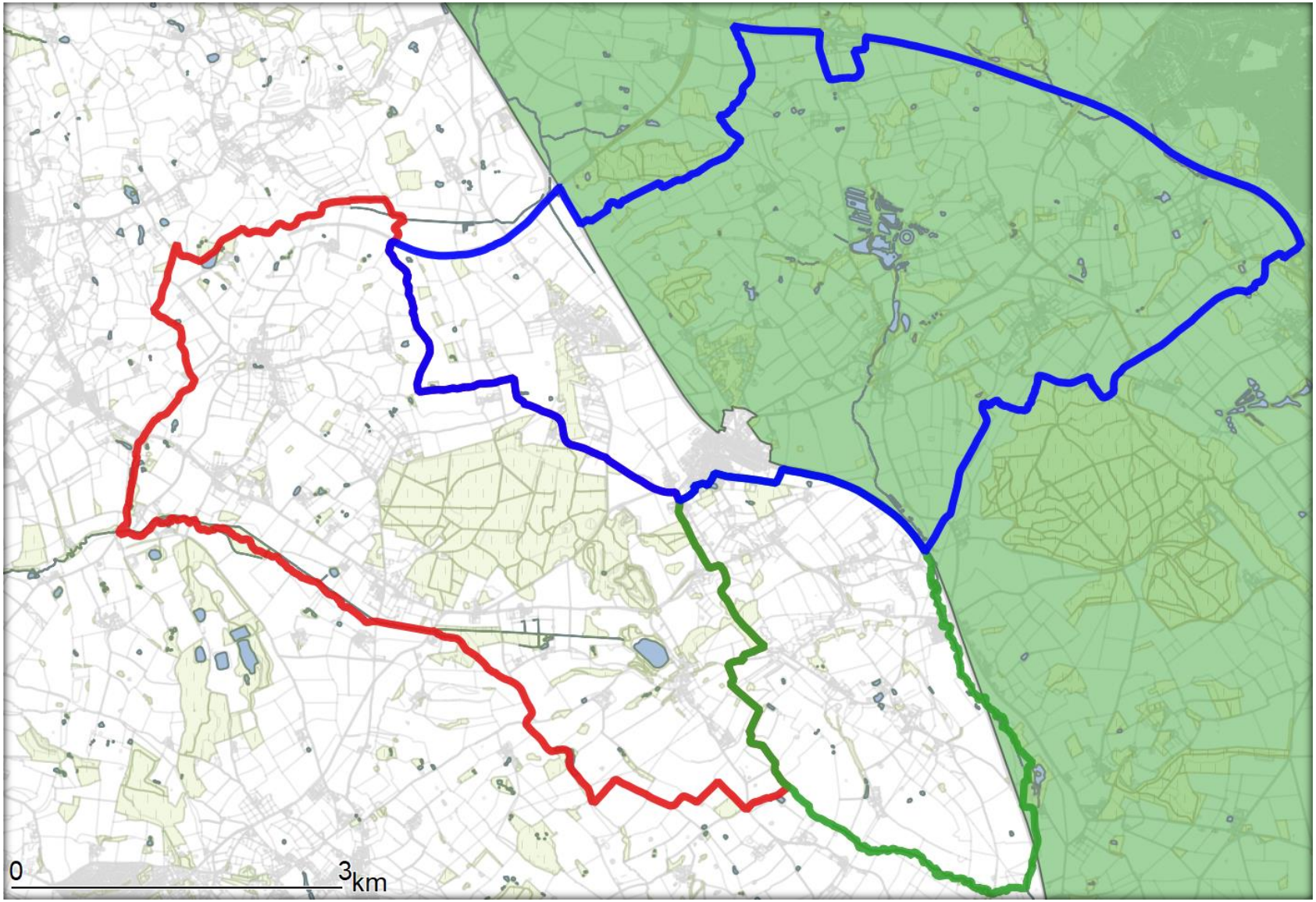


Note: West Coast Mainline: black; planned High Speed 2: red.

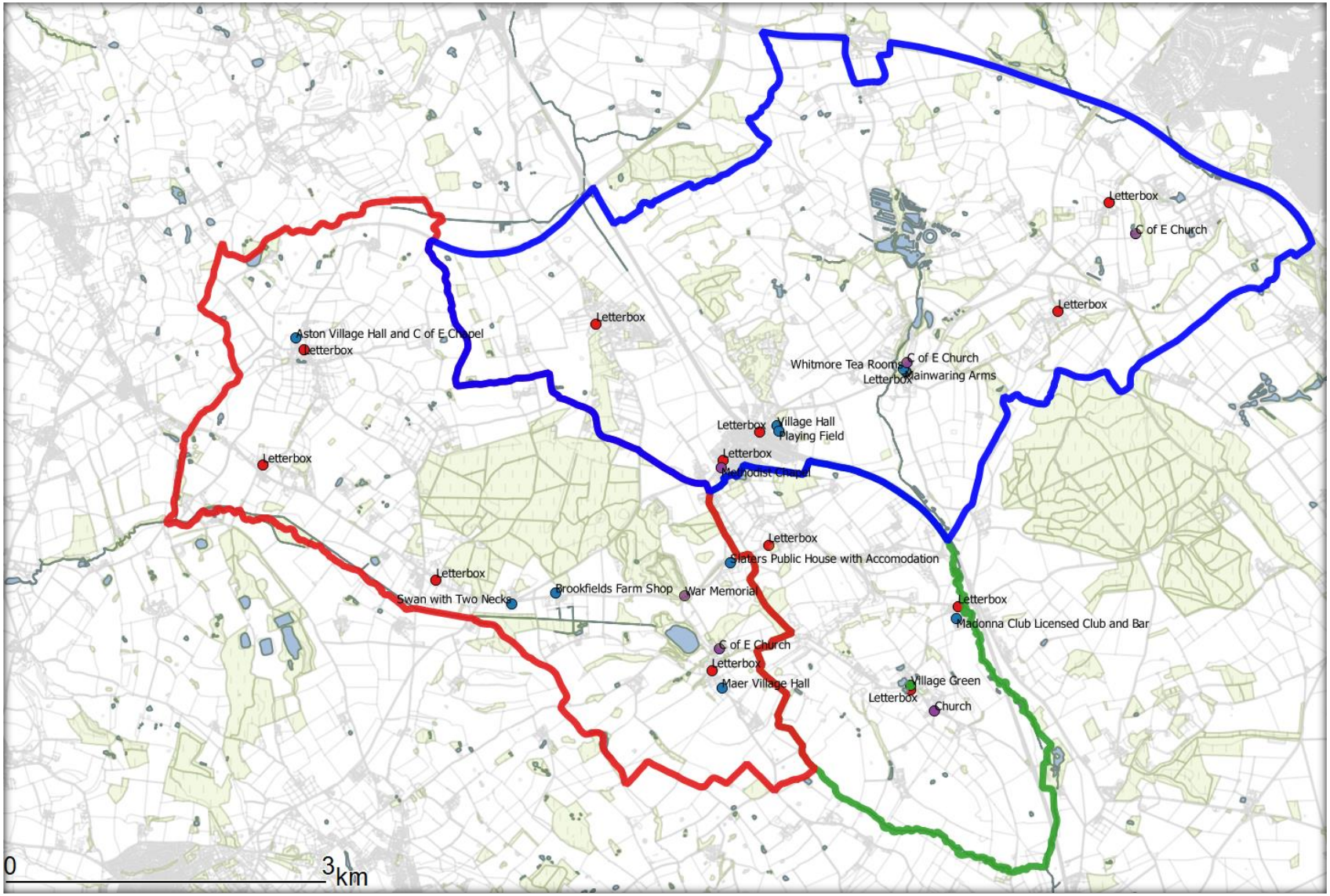
Map 3 Public Rights of Way, Bridleways and Byways Open to All Traffic in the NA



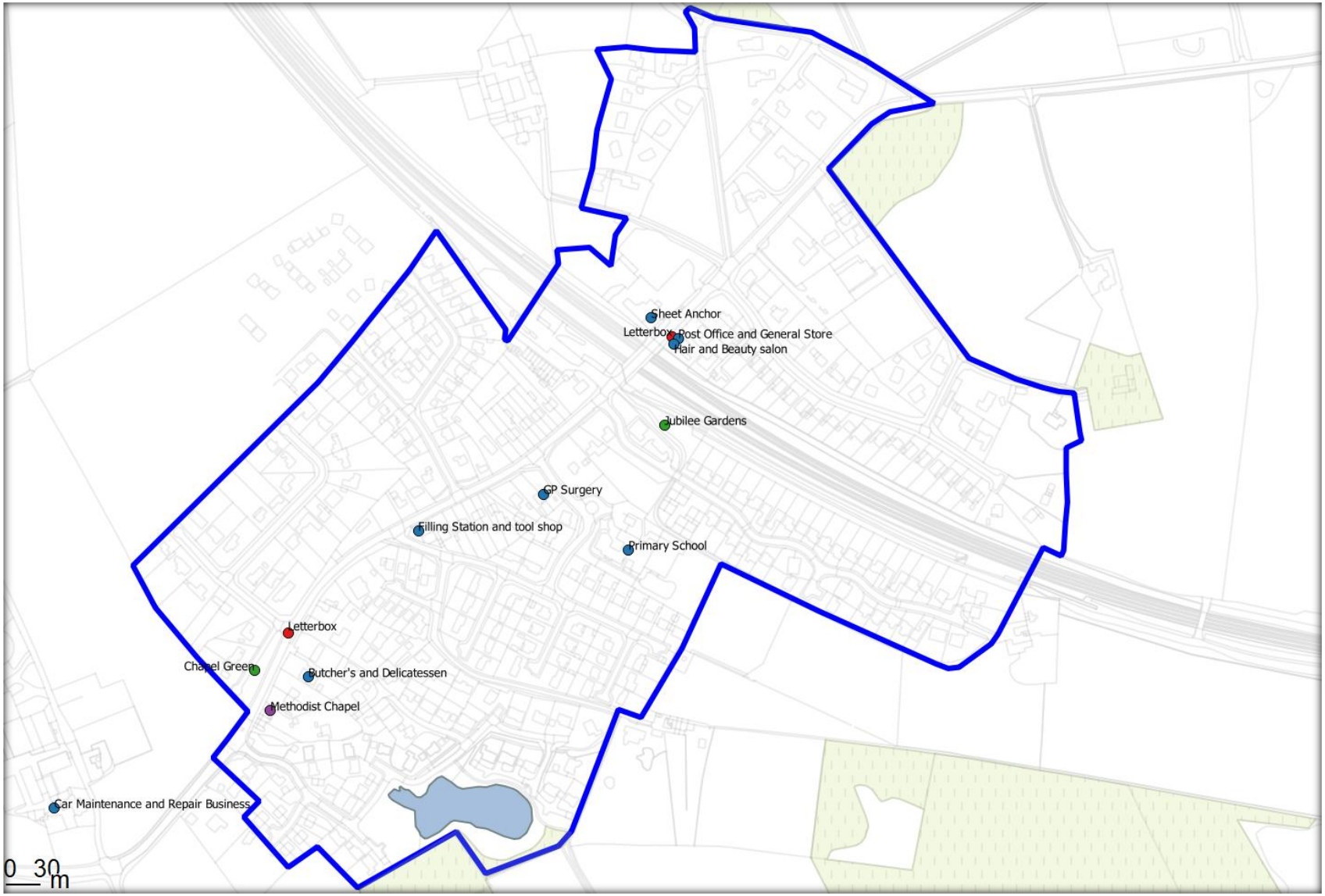
Map 4 Extent of the Green Belt in the NA



Map 5a Community facilities in the wider NA

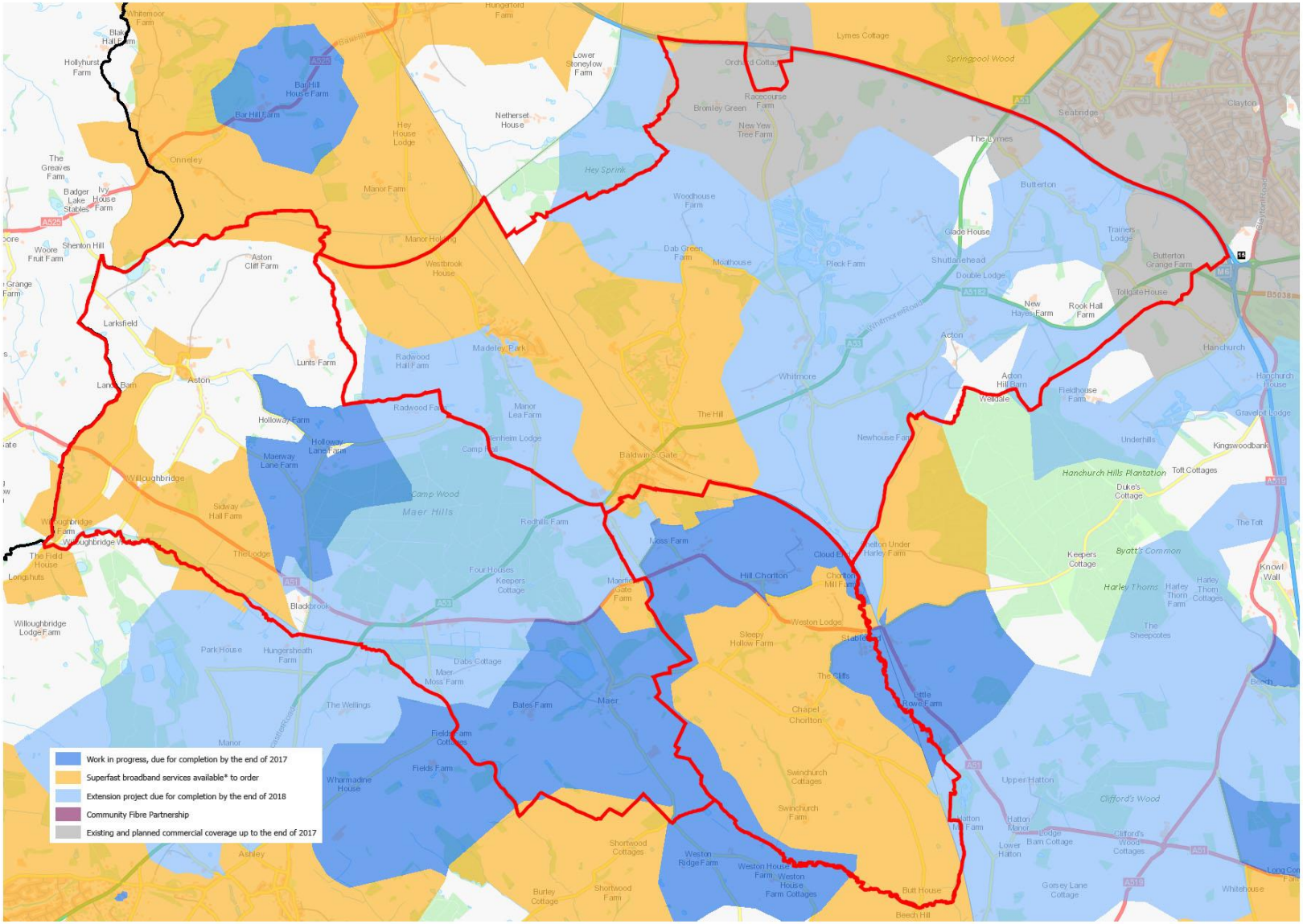


Map 5b Community facilities in Baldwins Gate



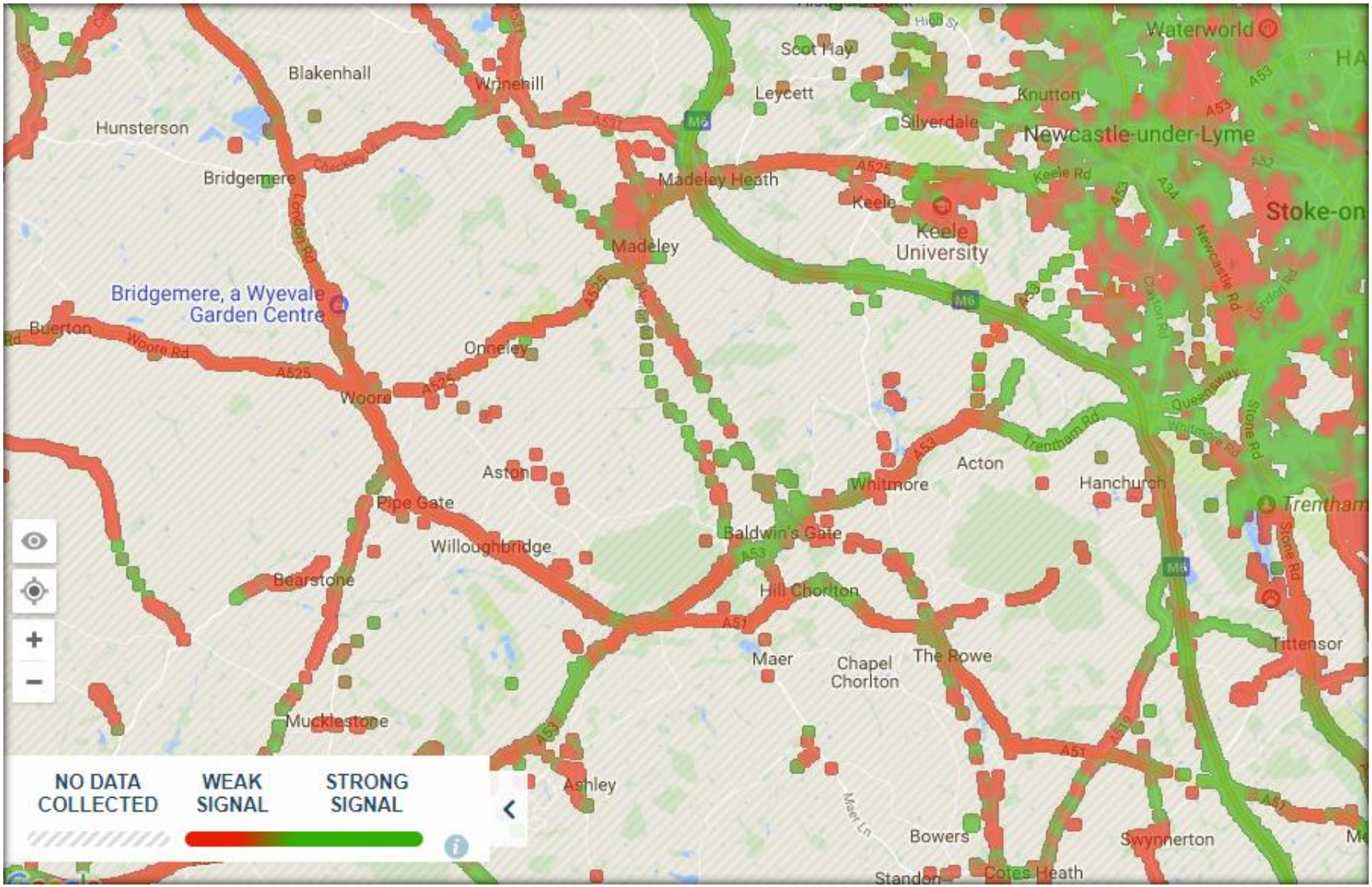
Map 6 Superfast broadband rollout in the NA

Source: www.superfaststaffordshire.co.uk



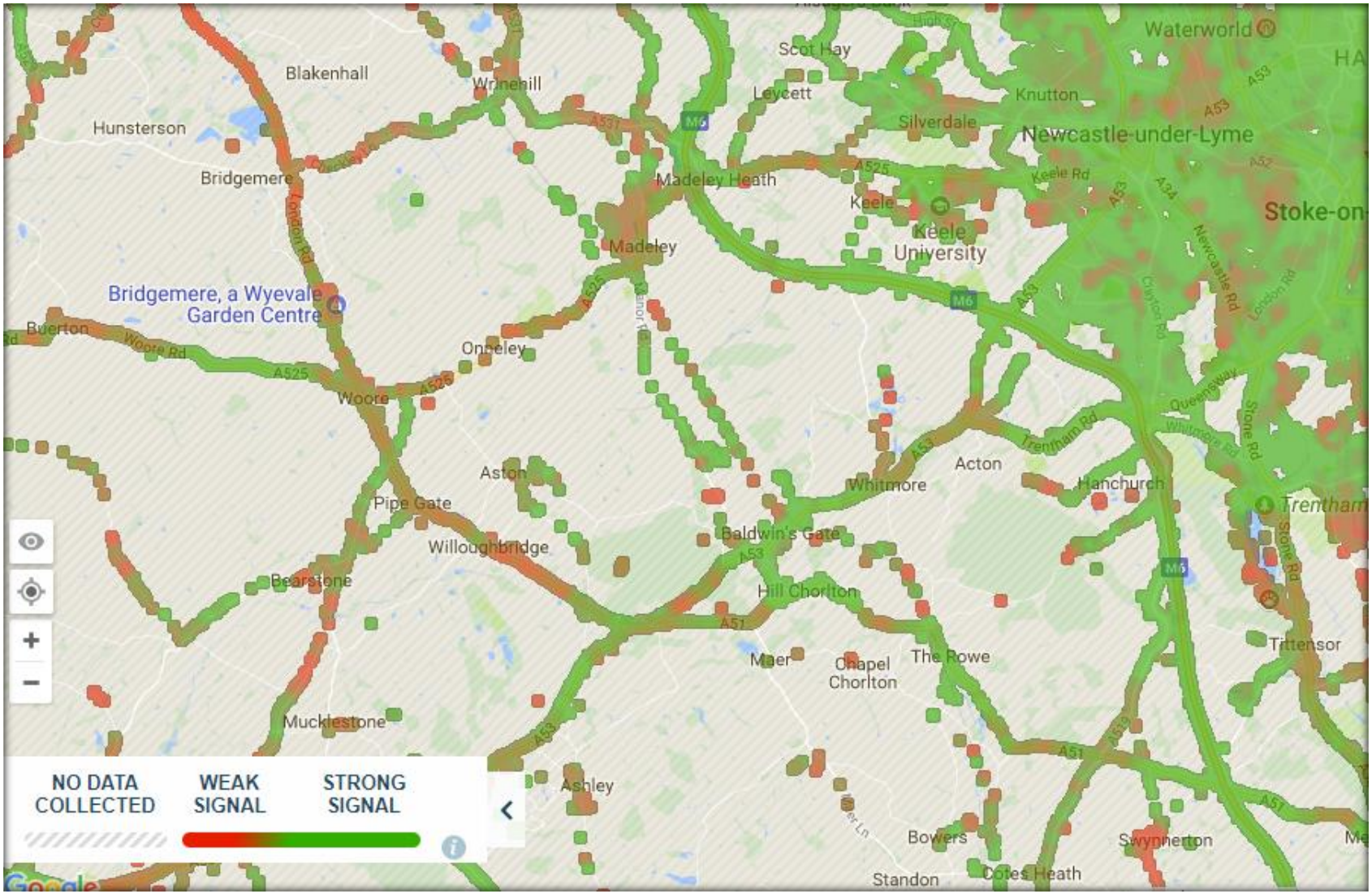
Map 7a 2G/3G mobile coverage in the NA at 19 September 2017

Source: https://opensignal.com



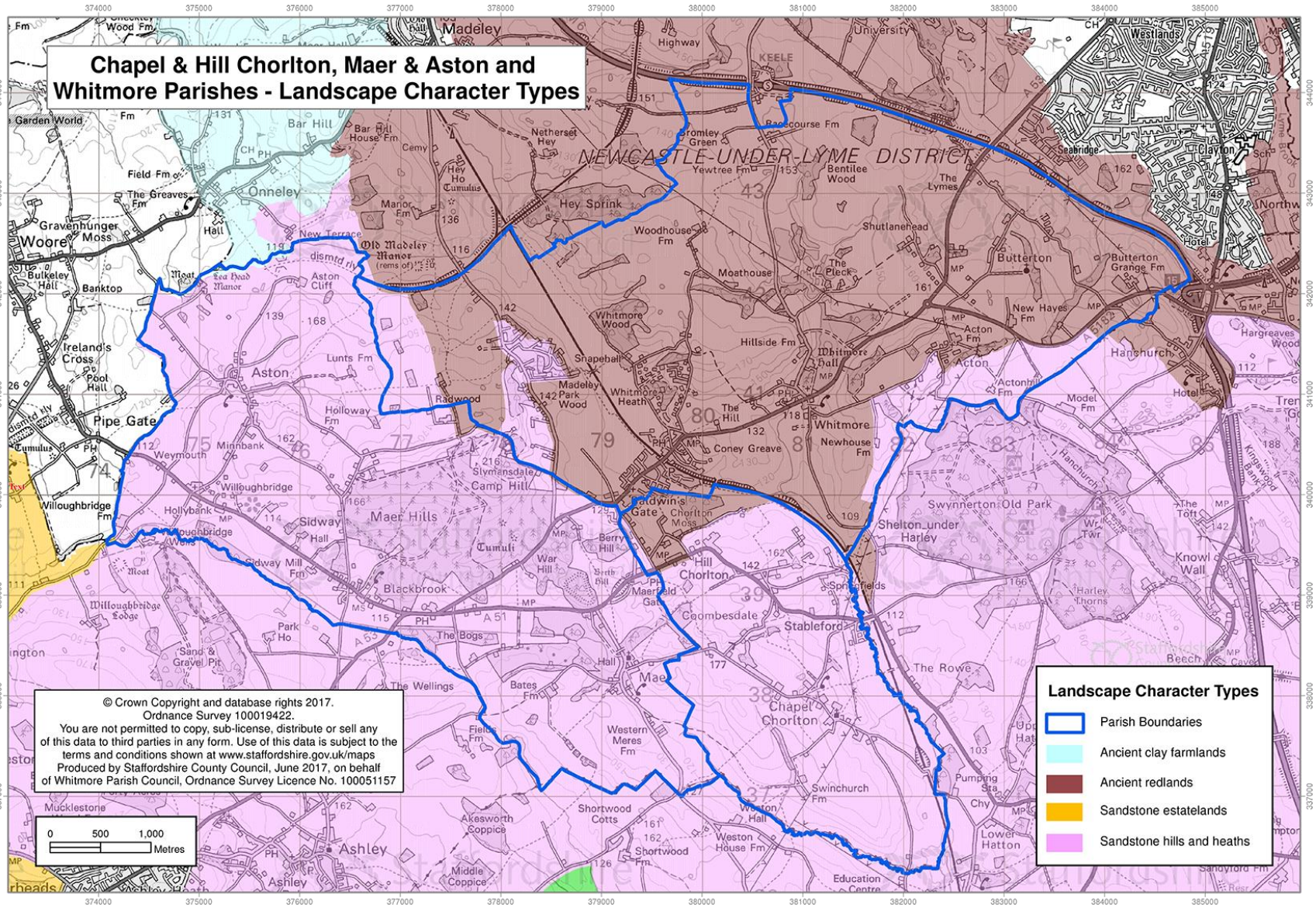
Map 7b 4G mobile coverage in the NA at 19 September 2017

Source: https://opensignal.com



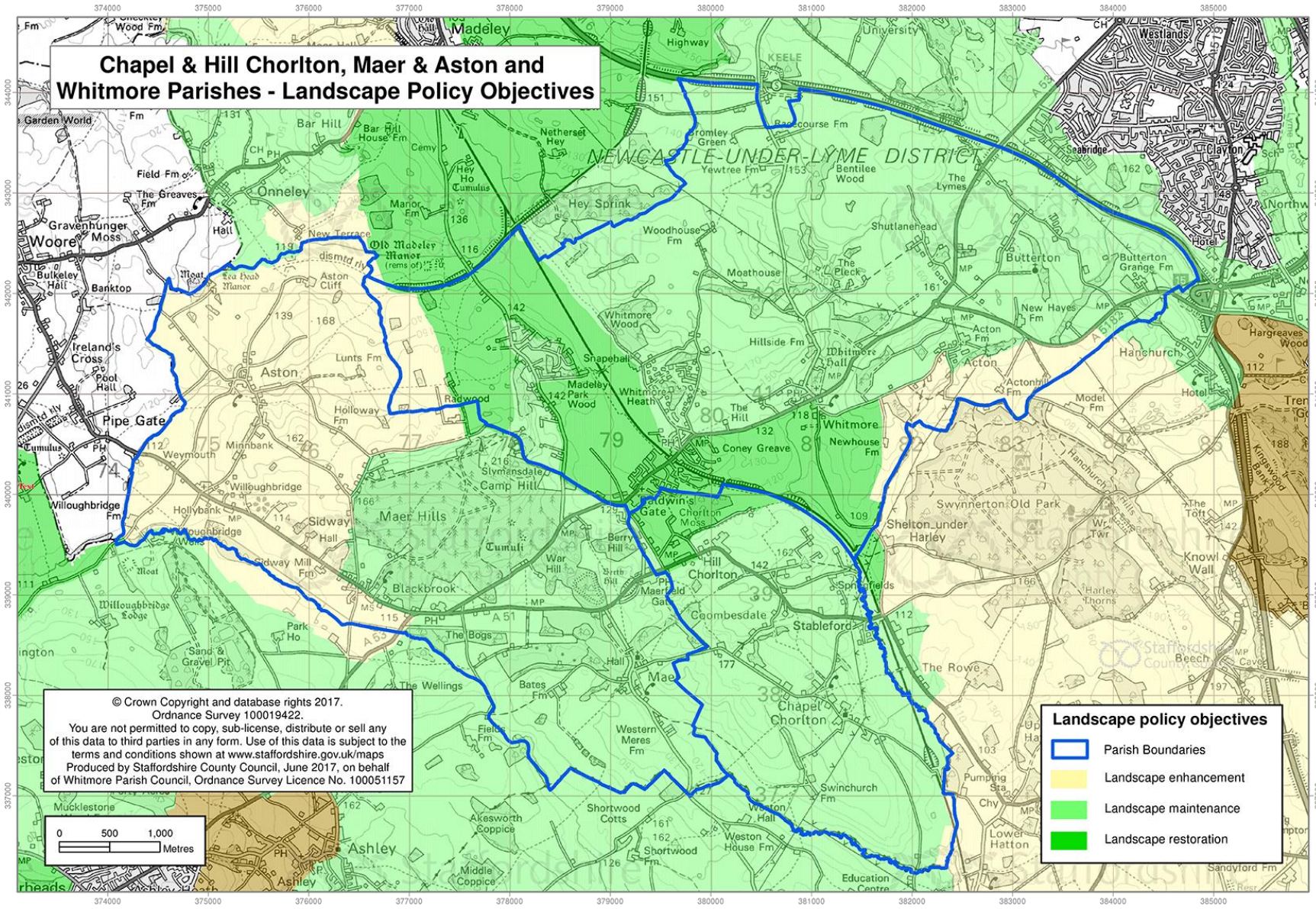
Map 8 Chapel and Hill Chorlton, Maer and Aston, and Whitmore Parishes: landscape character types

Source: Map prepared by Staffordshire County Council for Whitmore Parish Council. For enlargement see http://bit.ly/2ELuraz



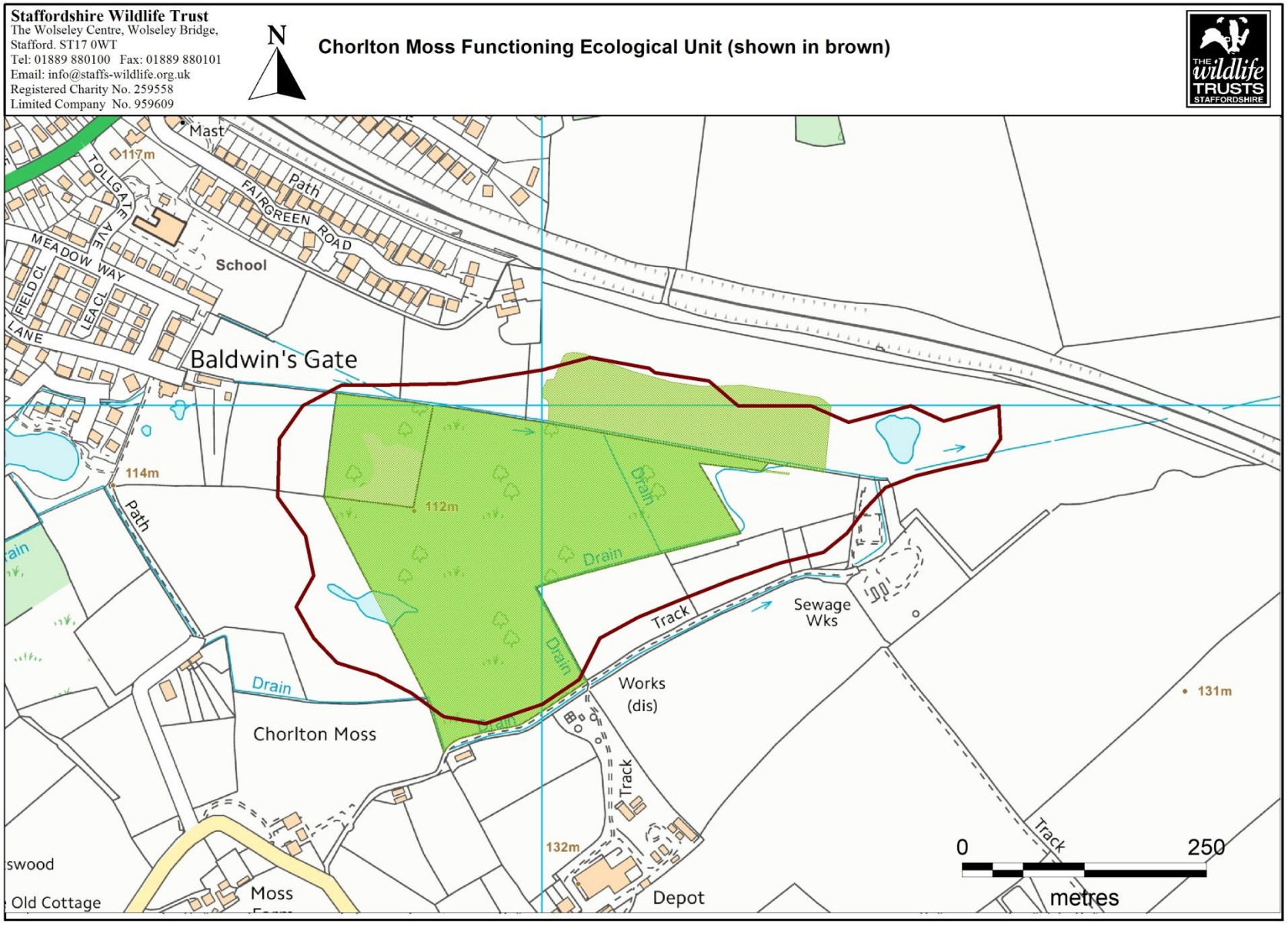
Map 9 Chapel and Hill Chorlton, Maer and Aston, and Whitmore Parishes: landscape policy objectives

Source: Map prepared by Staffordshire County Council for Whitmore Parish Council. For enlargement see http://bit.ly/2EIJ9Pm



Map 10 Functional Ecological Unit of lowland raised bog at Chorlton Moss (for methodology see facing page)

Source: Reproduced courtesy of Staffordshire Wildlife Trust and Staffordshire Ecological Record



Visualising Landscape-Scale Conservation: Methodology for Mapping Extant Meres & Mosses in the Relevant National Character Area(s)[1]

Matt Jones
Wetland & Farm Adviser – Meres & Mosses LPS / NIA

Having explored the application of the 'Lawton principles' to the Meres and Mosses landscape, and drawn some conclusions regarding a way forward [2], it was decided that this should be mapped to allow visualisation of the implications and help in the prioritisation of future work. The following sets out the methodology employed.

Two key elements were mapped – suggested 'Functional Ecological Units' and then their catchments. The mapping of both elements is primarily based on topography, with use being made of lidar data. Lidar is a remote sensing technique whereby an airborne survey using lasers generates detailed topographic data (known as a Digital Terrain Model (DTM)). With approximately 70% coverage of the Meres & Mosses landscape, this is a valuable tool.

Mapping of the Functional Ecological Units (FEUs) started with the identification of extant sites:-

1) All designated sites, SSSIs and County Wildlife Sites, that are either a mere or a moss were included. [Note: no Wildlife Site data has been sourced for Wales to date.]
2) Beyond the designated sites, use was made of a detailed peat soils map for the area. From this dataset a distinction was made between likely moss peats and extensive areas of likely fen peat associated with some of the river valleys - the latter were ignored for this mapping exercise [3]. The moss peat sites were then reviewed using aerial photography and divided into two categories: destroyed and de-graded. The former are sites under arable, intensive grassland or other land use, where any relict habitat, and potentially even the peat itself, have been lost – these were excluded. The de-graded sites are those supporting some form of relict habitat (e.g. extensive grassland, rush pasture or woodland) offering potential for restoration – these were taken forward as FEUs. [Note: no detailed peat soils data is available for Wales.]
3) Finally the 1:10,000 scale OS base map was scanned for names alluding to meres and mosses. All waterbodies specifically called "Mere" were included in the mapping, but sites with names suggestive of meres (e.g. Black Lake) were ignored. A few sites were identified called "Moss" – however, because these were not shown on the peat soils map, these were excluded.

For each potential FEU (a total of 344 have been identified within the landscape) the lidar data was manipulated to show land within a nominal 3 metres elevation of the lowest point on the site. The FEU was then defined as the obvious basin around the lowest point – i.e. the land where it should be possible to restore hydrological function and therefore a wetland habitat mosaic (generally a nominal 1.0 - 1.5 metres above the lowest point on the site). Where no lidar data was available, the likely boundary of the FEU was estimated from the peat soils data and aerial photography.

Subsequently, for each FEU, the lidar was re-analysed at a broader scale to identify the catchment feeding the core wetland area. Where no lidar data was available, basic contour data was used to estimate the extent of catchments. In the majority of cases these are discrete catchments, although it should be noted that where there is a direct hydrological link between FEUs, there is a resultant 'nesting' of catchments.

---

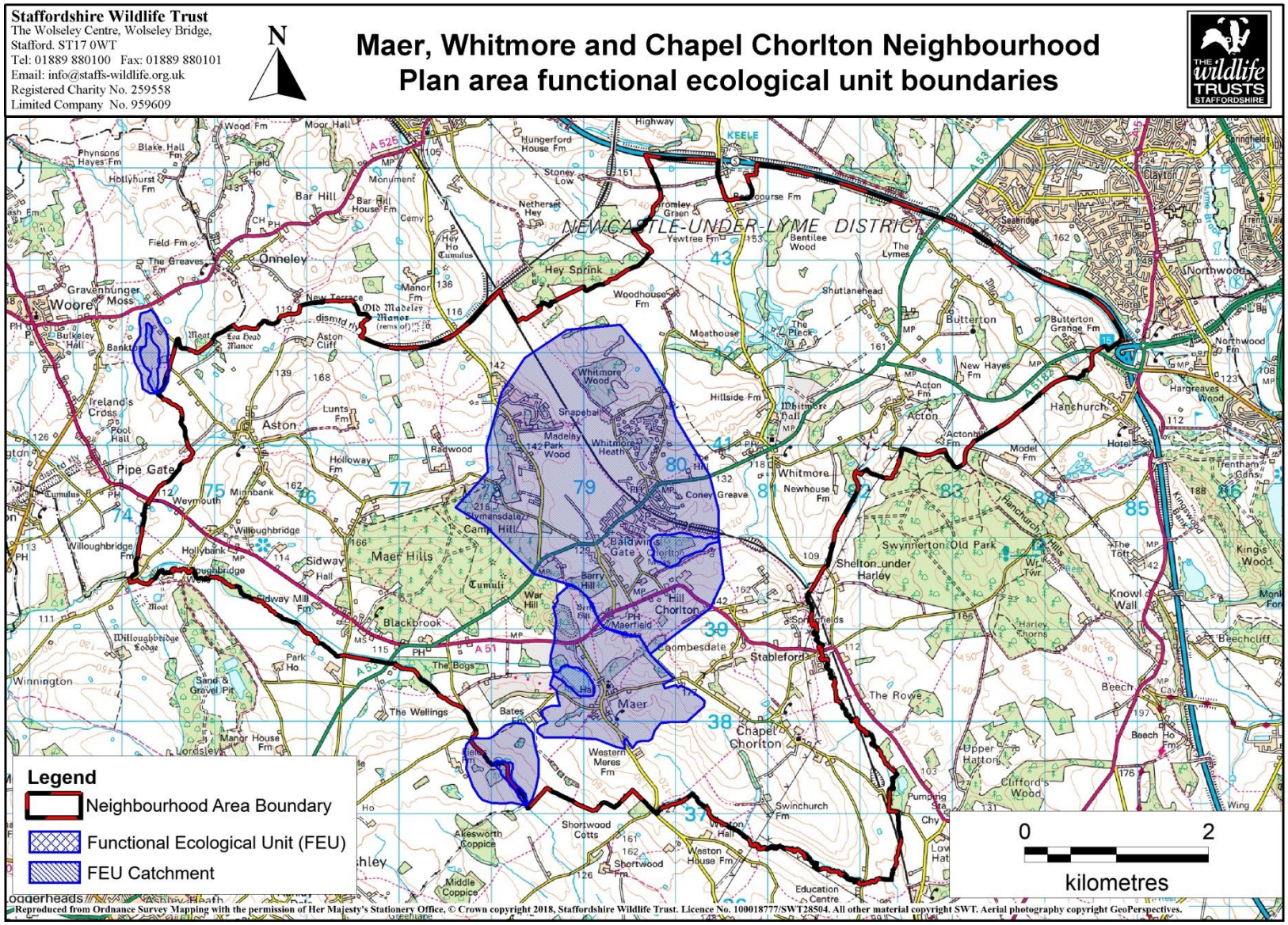
[1] 61 Shropshire, Staffordshire & Cheshire Plain (England) + 14 Maelor (Wales)

[2] http://www.themeresandmosses.co.uk/files/uploads/docs/Meres%20&%20Mosses%20British%20Wildlife%20Article%20-%20Final%20Version.pdf

[3] While complementing the Meres and Mosses, these areas are not internationally important, support a different range of wetland habitats (and species) and require a potentially different landscape-scale conservation approach.

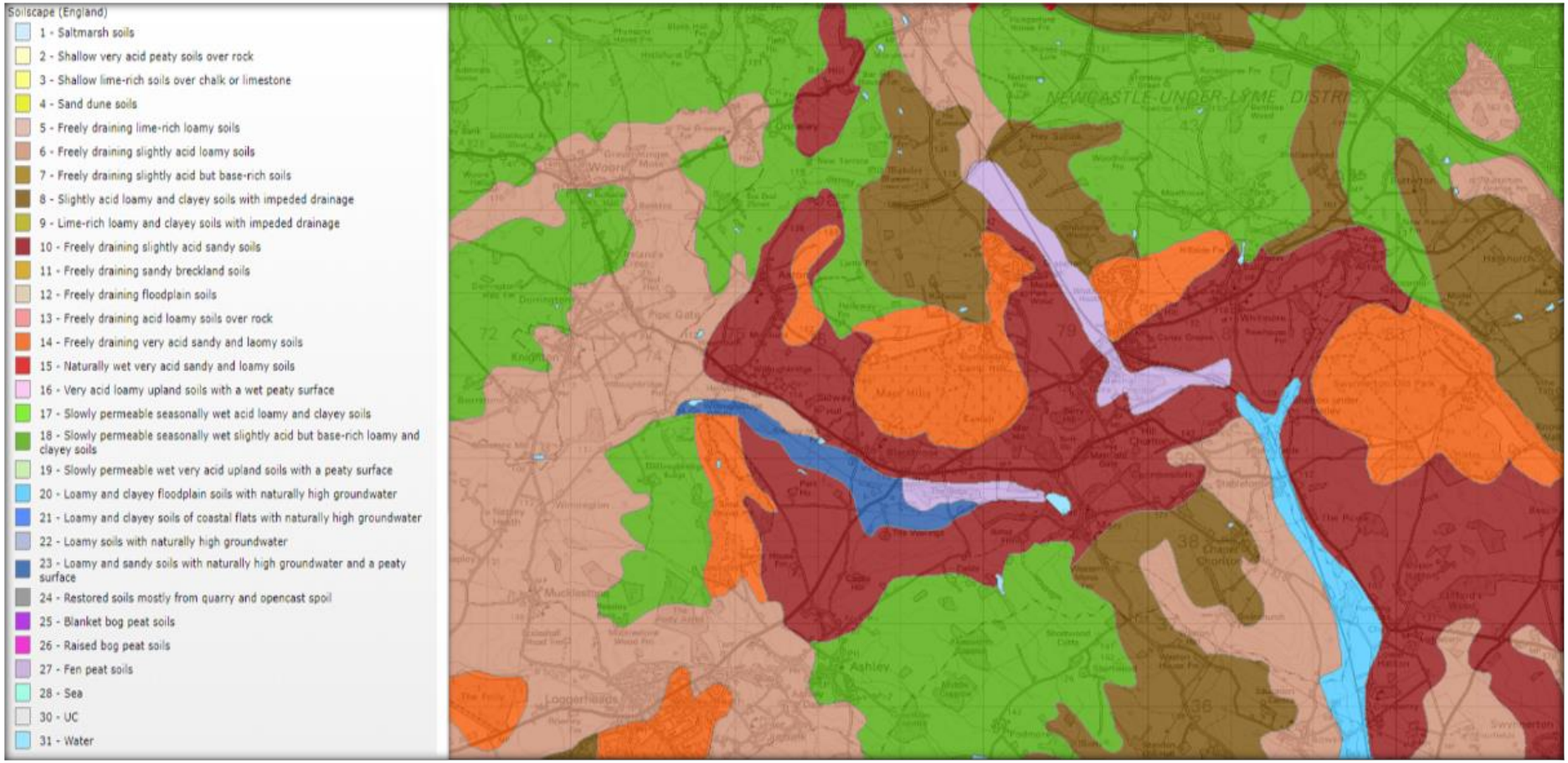
Map 11 Functional Ecological Units of Meres and Mosses sites in the NA and their water catchments: Chorlton Moss LWS, Maer Pool SSSI and New Pool and Oak Wood LWS (for methodology see preceding page)

Source: Reproduced courtesy of Staffordshire Wildlife Trust and Staffordshire Ecological Record. For enlargement see http://bit.ly/2D7RhDw



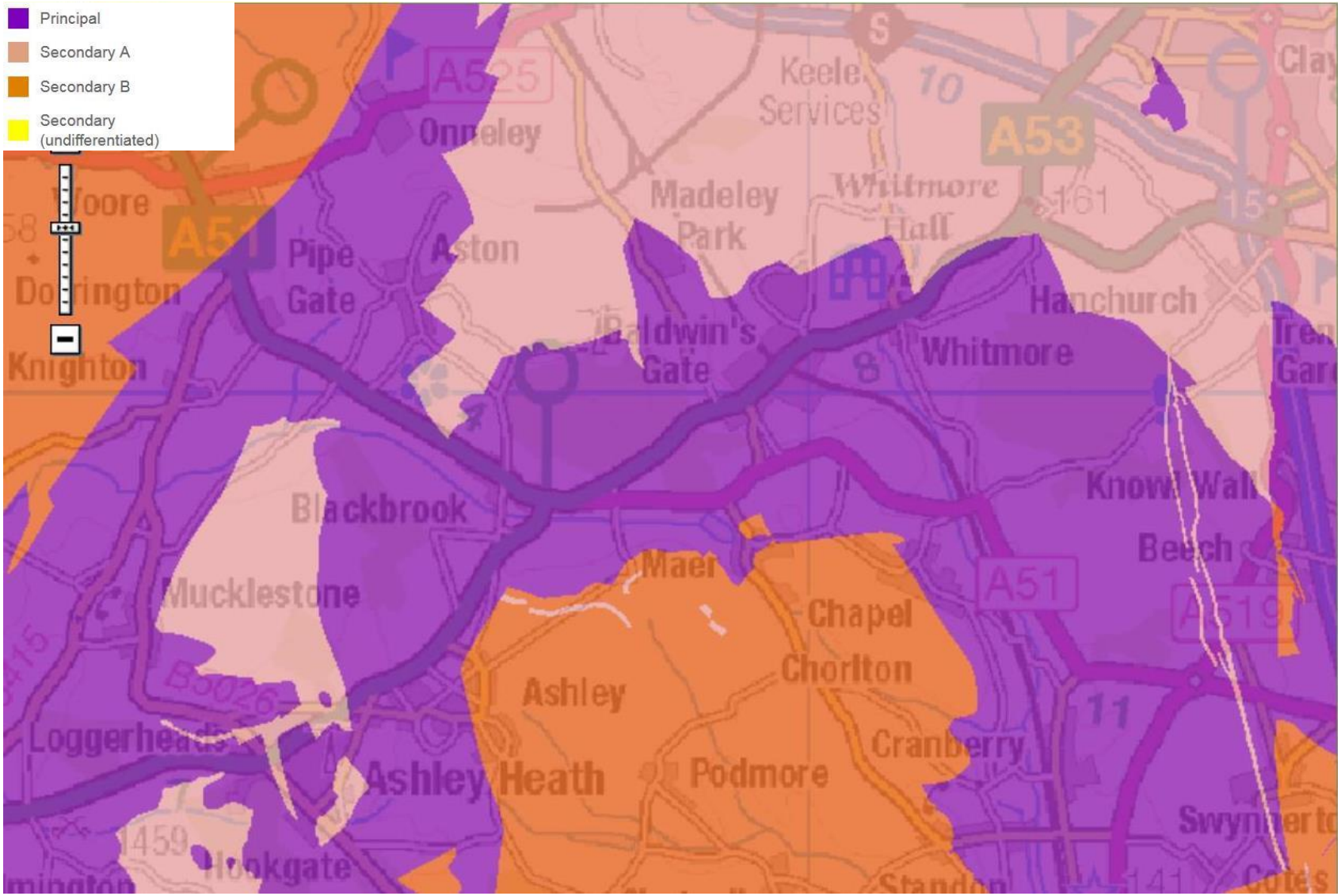
Map 12 Soilscape map of the NA

Source: Cranfield Soil and Agrifood Institute, Soilscapes map, www.landis.org.uk/soilscapes



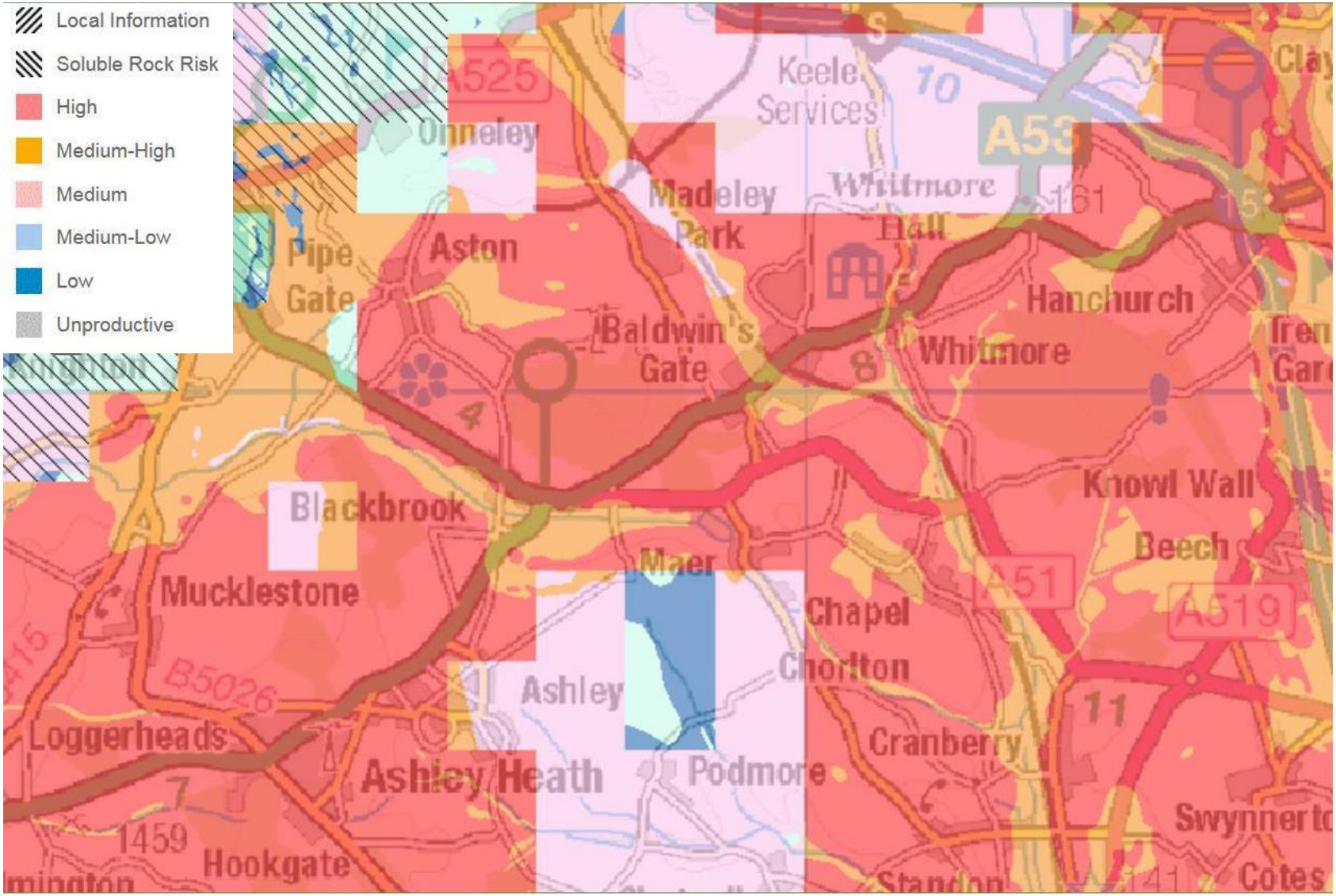
Map 13 Principal aquifer underlying the NA

Source: Environment Agency WIYBY, http://maps.environment-agency.gov.uk/wiyby



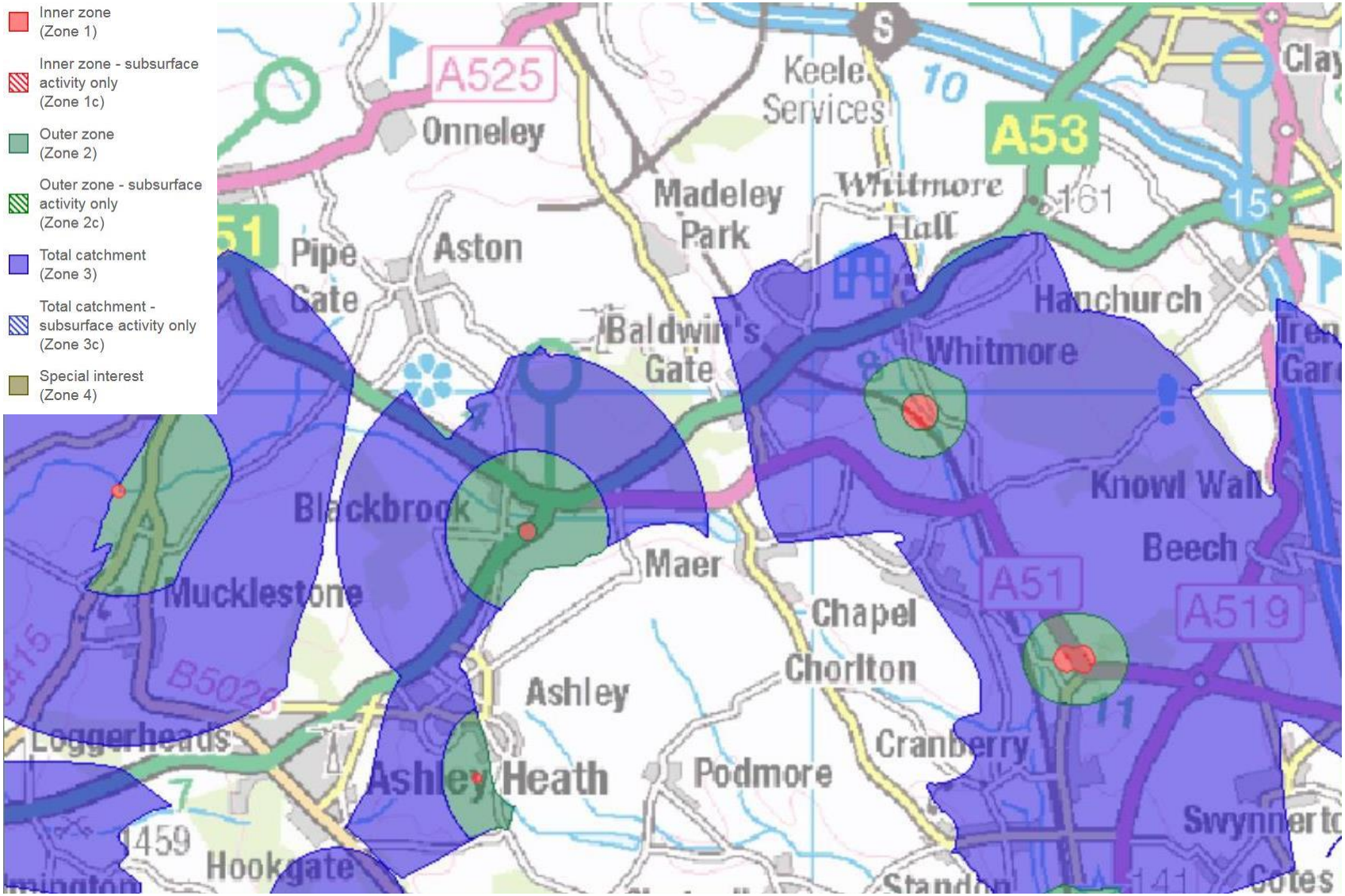
Map 14 Groundwater vulnerability zones in the NA

Source: Environment Agency WIYBY, http://maps.environment-agency.gov.uk/wiyby



Map 15 Groundwater source protection zones

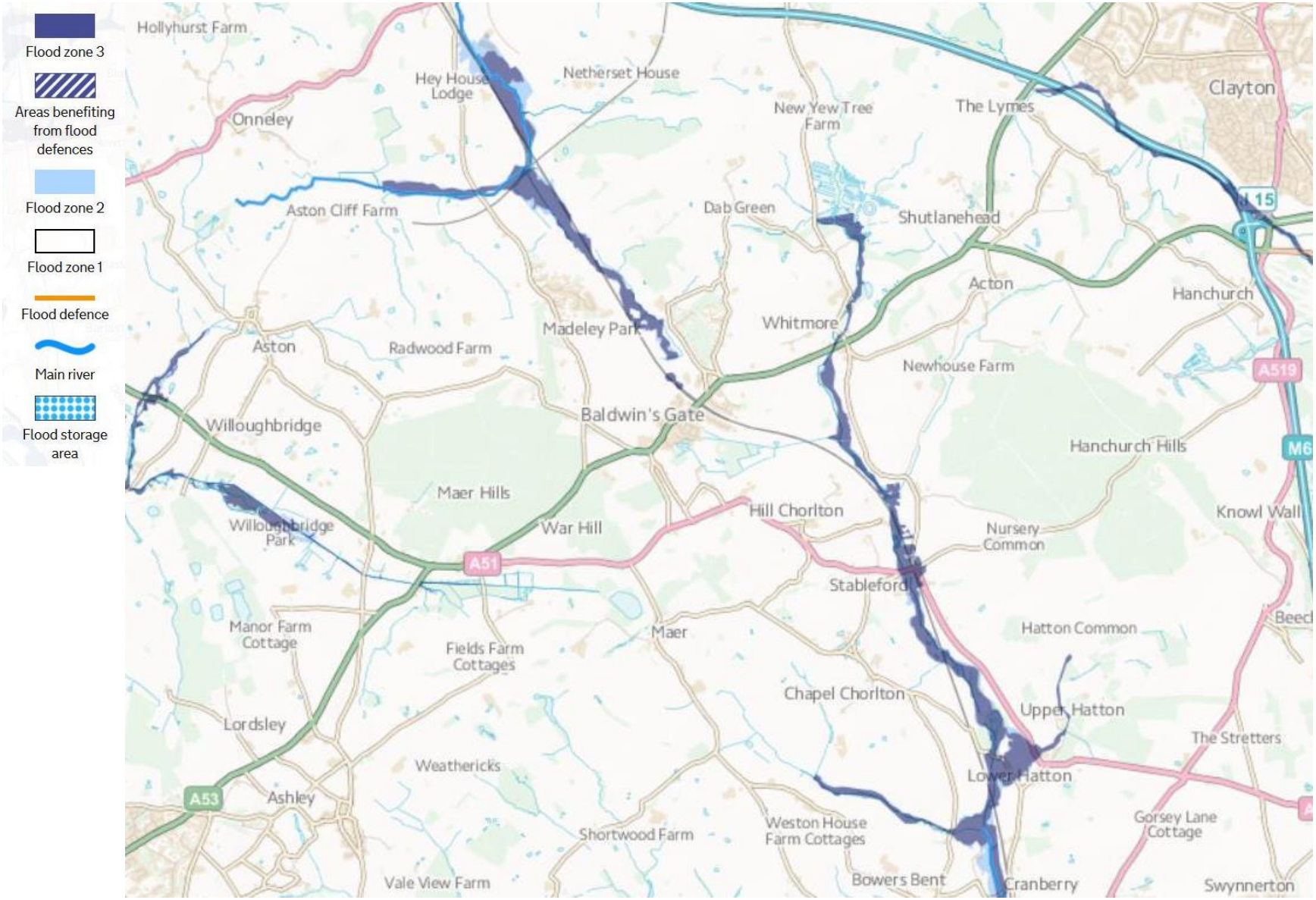
Source: Environment Agency WIYBY, http://maps.environment-agency.gov.uk/wiyby



Source: Environment Agency WIYBY

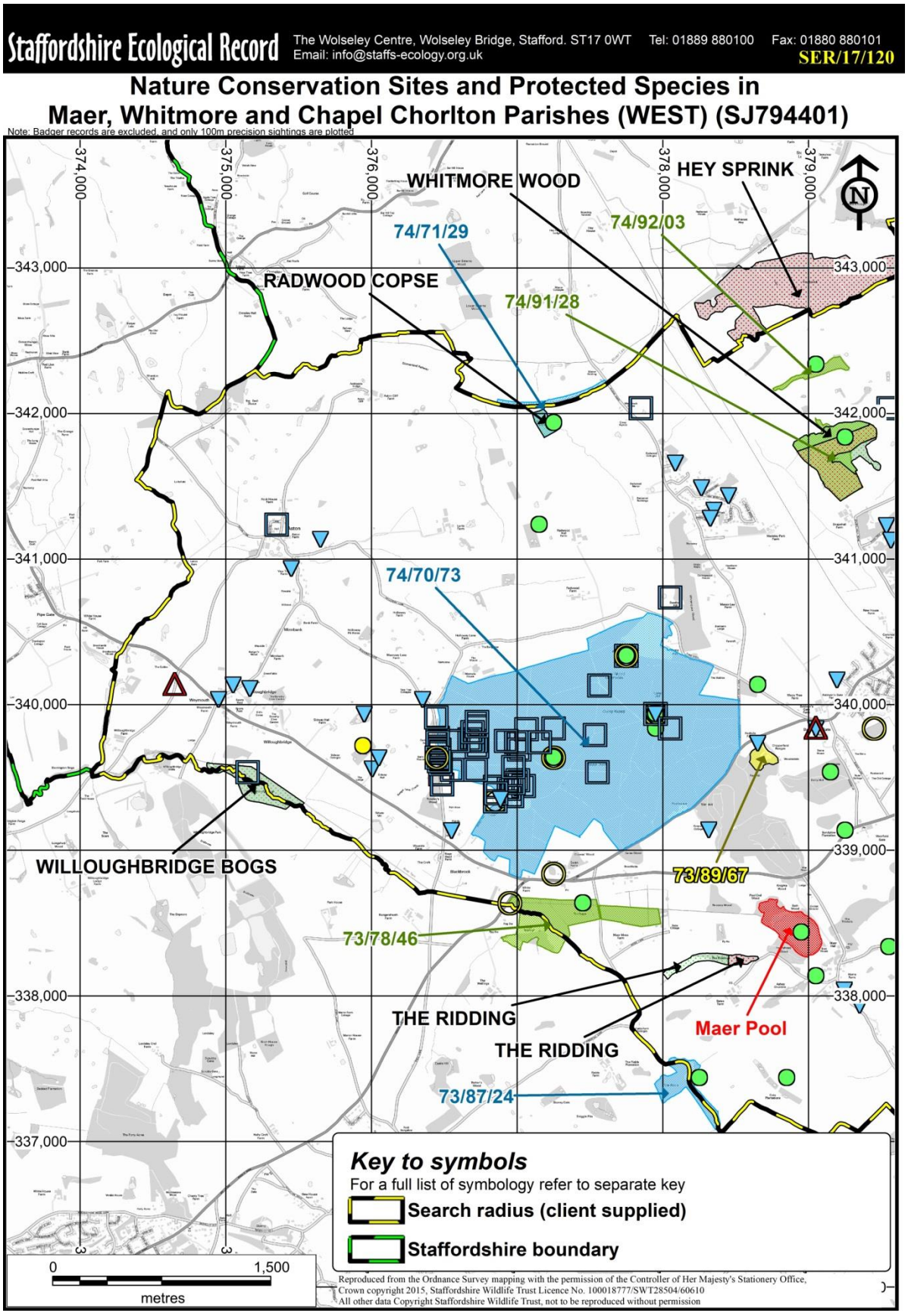
Map 16 Environment Agency fluvial flood zone map

Source: https://flood-map-for-planning.service.gov.uk



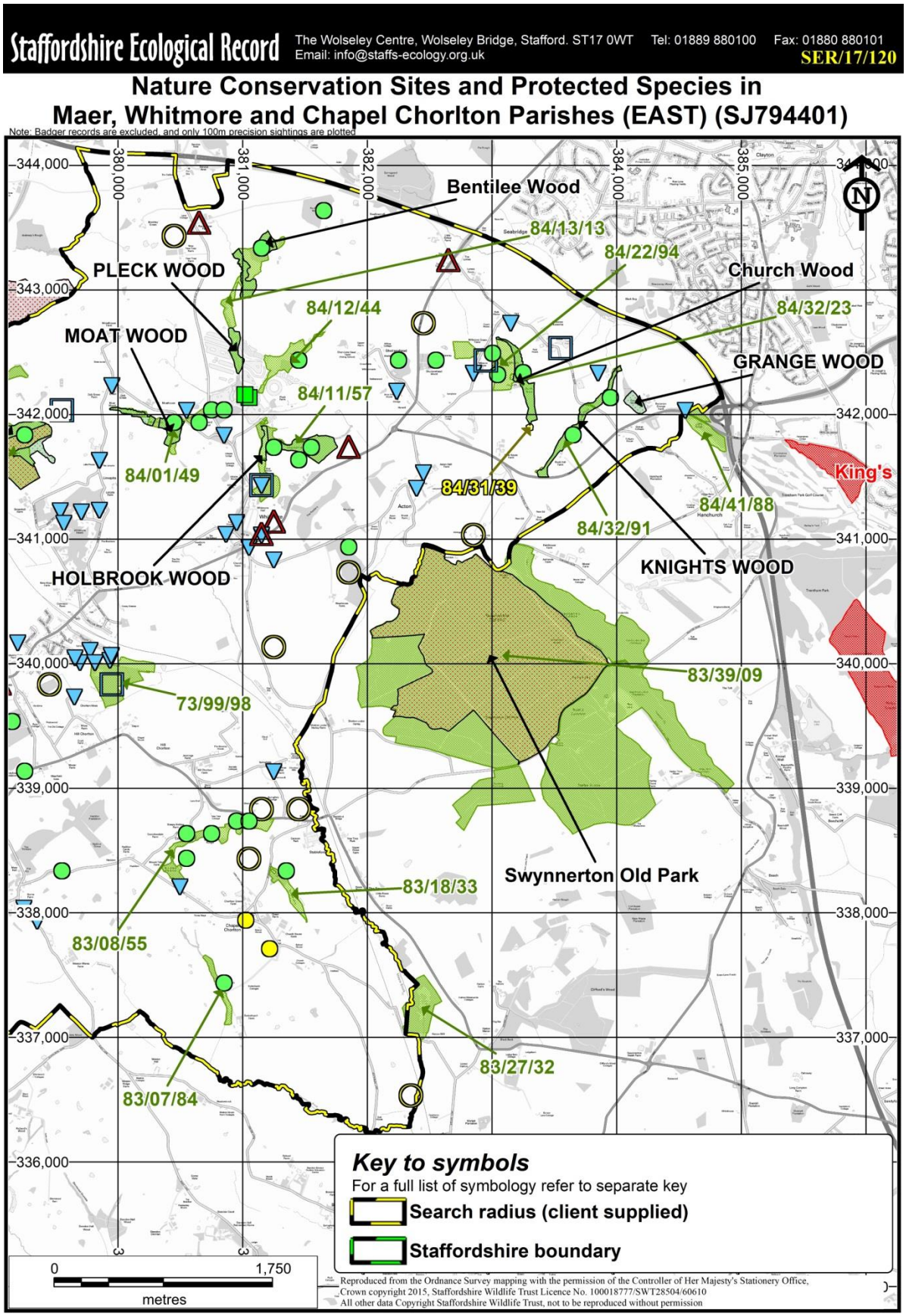
Map 17a Designated ecological sites in the NA (western map) (for key see overleaf)

Source: Map prepared by Staffordshire Ecological Record for Whitmore Parish Council. For enlargement see http://bit.ly/2FvCibR



Map 17b Designated ecological sites in the NA (eastern map) (for key see overleaf)

Source: Map prepared by Staffordshire Ecological Record for Whitmore Parish Council. For enlargement see http://bit.ly/2Fp0Xvp



Staffordshire Ecological Record
The Wolseley Centre, Wolseley Bridge,
Stafford. ST17 0WT
Tel: 01889 880100 Fax: 01889 880101
Email: info@staffs-ecology.org.uk

A legend to the map showing Nature Conservation Sites and Species

Introduction

These colours are used on the site alert mapping within the SWT GIS, but SER cannot guarantee the same colours are used in any other mapping system, particularly those based on ArcView.

Statutory Designations from Natural England's web-site

- National Nature Reserves — NNR (boundary not available owing to OS restrictions)
- Sites of Special Scientific Interest — SSSI (boundary not available owing to OS restrictions)
- Local Nature Reserves — LNR (boundary not available owing to OS restrictions)

Non-statutory Designations from the Staffordshire Grading System (1995 onwards)

- Site of Biological Importance (ex Grade 1 SBI) equivalent to "Local Wildlife Site"
- Biodiversity Alert Site (ex Grade 2 SBI)
- Proposed/potential Site of Biological Importance

Geological Sites

- Regionally Important Geological/geomorphological Site (= Local Geological Site)

Staffordshire Wildlife Trust Sites

- SWT Nature Reserves

Other Nature Reserves

- Royal Society for the Protection of Birds

Ancient Woodland Inventory

- Ancient & Semi-natural Woodland
- Ancient Replanted Woodland

Species Information

- Mammals excluding those listed below
- Otter (Lutra lutra)
- Badger (Meles meles) - not normally supplied
- Water Vole (Arvicola terrestris)
- All bat species
- All bird species
- Any other protected species (precise to 100m)
- All Protected Species Records (precise to 1km)
- Amphibians and reptiles excluding those below
- Great Crested Newt (Triturus cristatus)
- Native Crayfish (Austropotamobius pallipes)
- Flowering plants except those below
- Bluebell (Hyacinthoides non-scripta)
- Butterflies and Moths
- BAP Species Records (precise to 100m)
- BAP Species Records (precise to 1km)

Notes:

The Local Nature Reserve and other nature reserve boundaries can overlay the current grading when both layers are actively visible

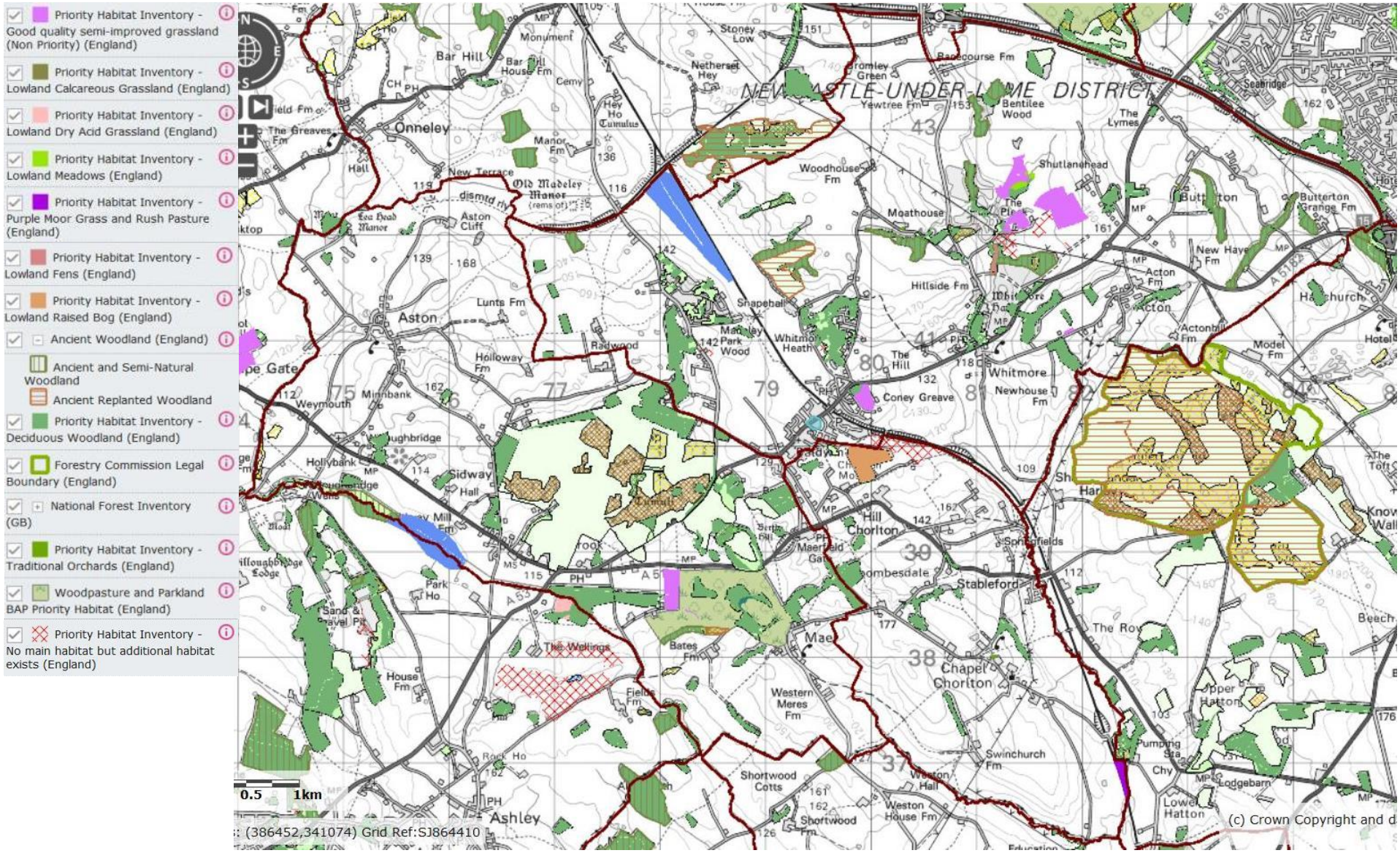
Where there are multiple species records for the same grid reference the dot for one species may obscure the dots for other species - all species records will be displayed in the accompanying spreadsheet

Not all the above categories may be present on the accompanying map

Version 2.0 July 2011

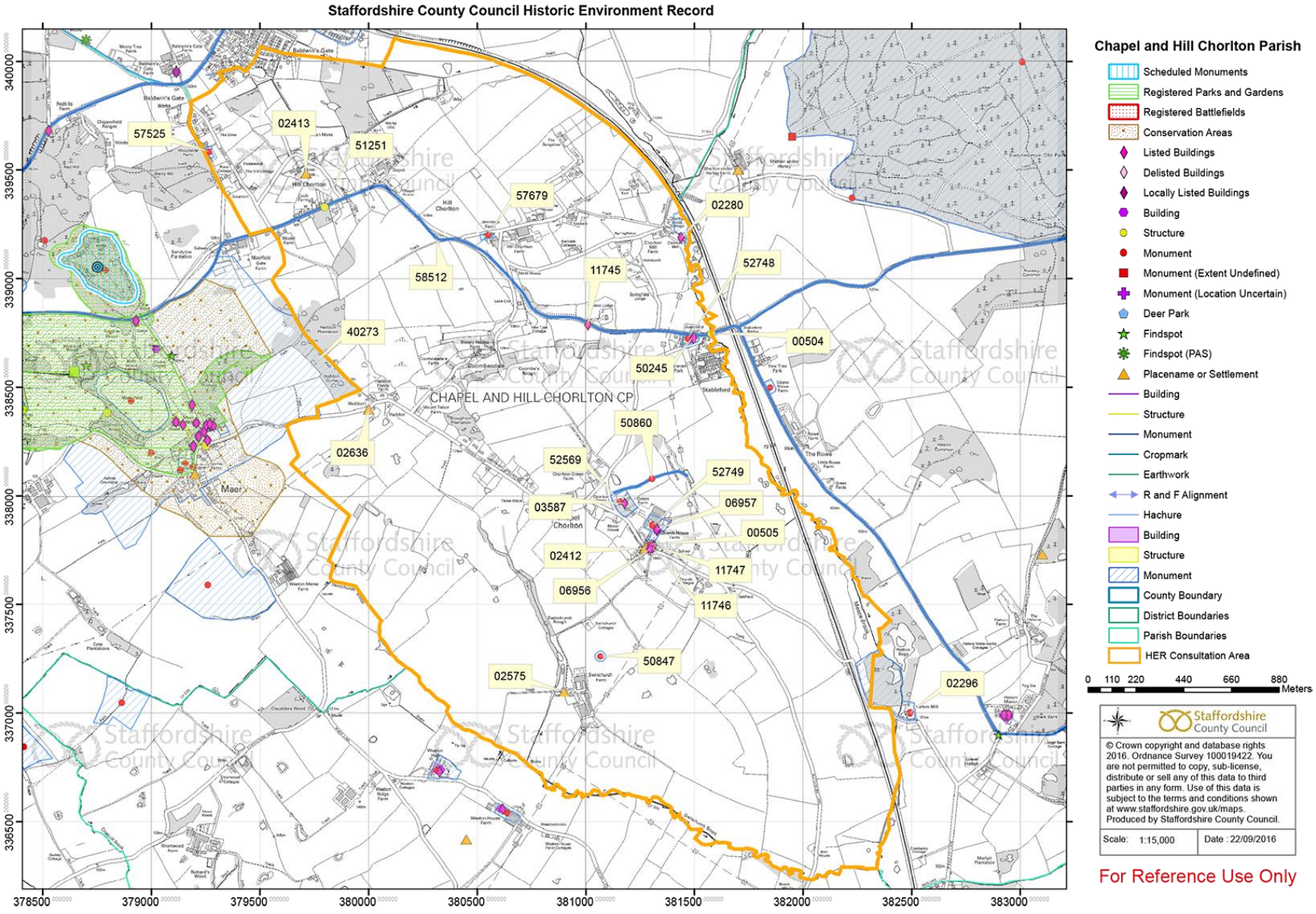
Map 18 Habitats of Principal Importance in the NA

Source: Defra Magic, http://magic.defra.gov.uk/MagicMap.aspx



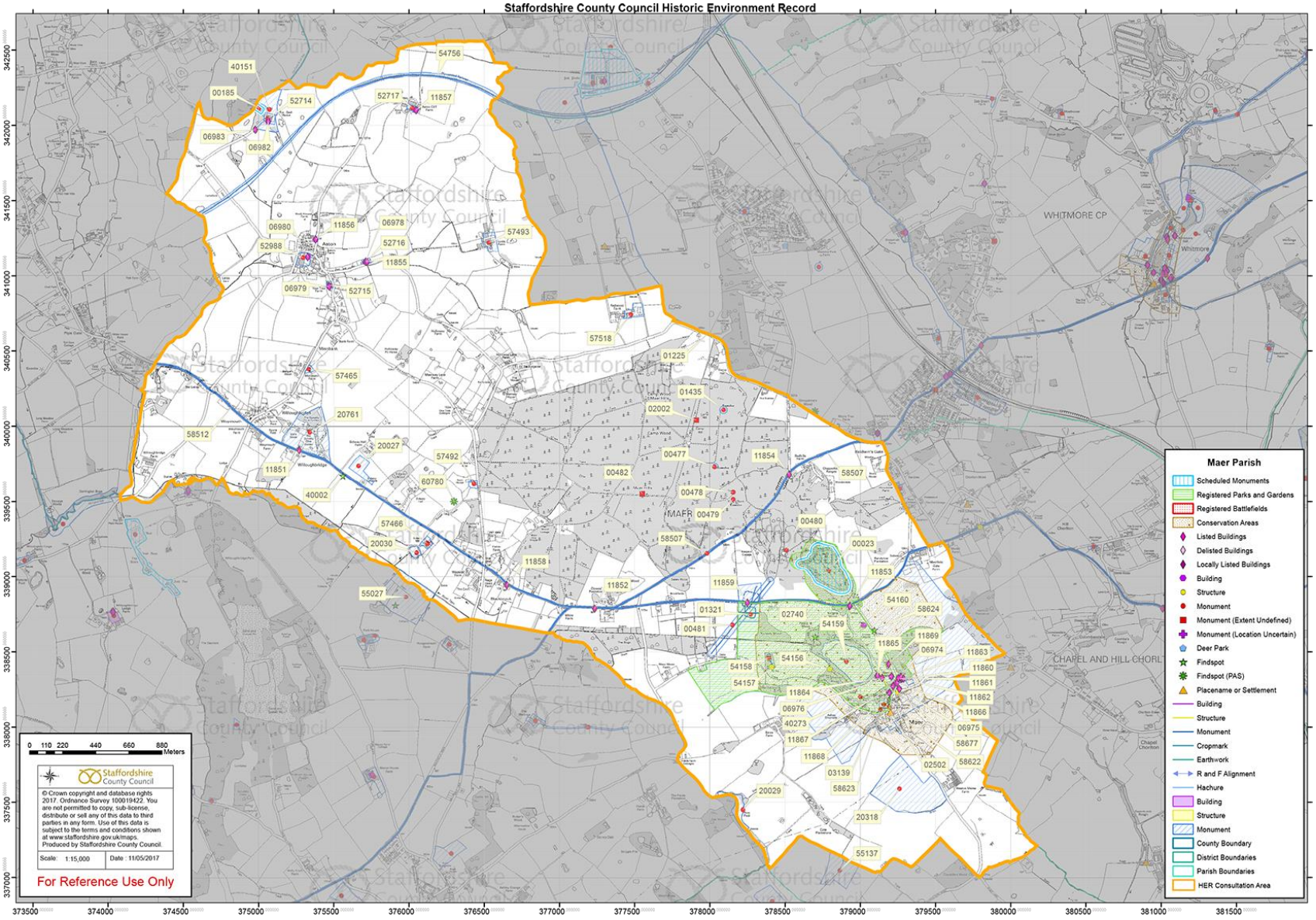
Map 19a Heritage assets in Chapel and Hill Chorlton Parish

Source: Map prepared by Staffordshire County Council for Whitmore Parish Council. For enlargement see http://bit.ly/2EWLKVf



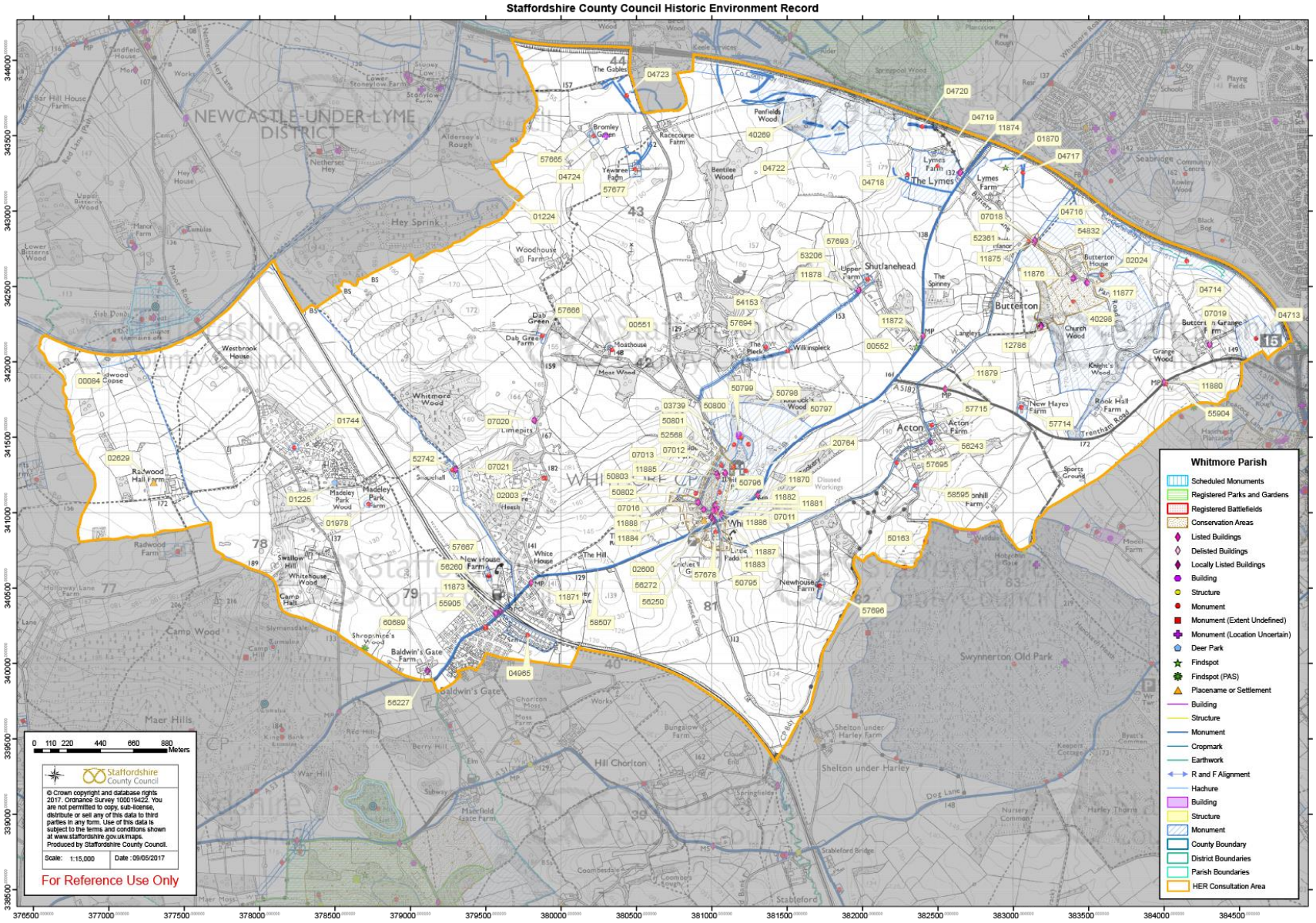
Map 19b Heritage assets in Maer and Aston parish

Source: Map prepared by Staffordshire County Council for Whitmore Parish Council. For enlargement see http://bit.ly/2sHZK0a



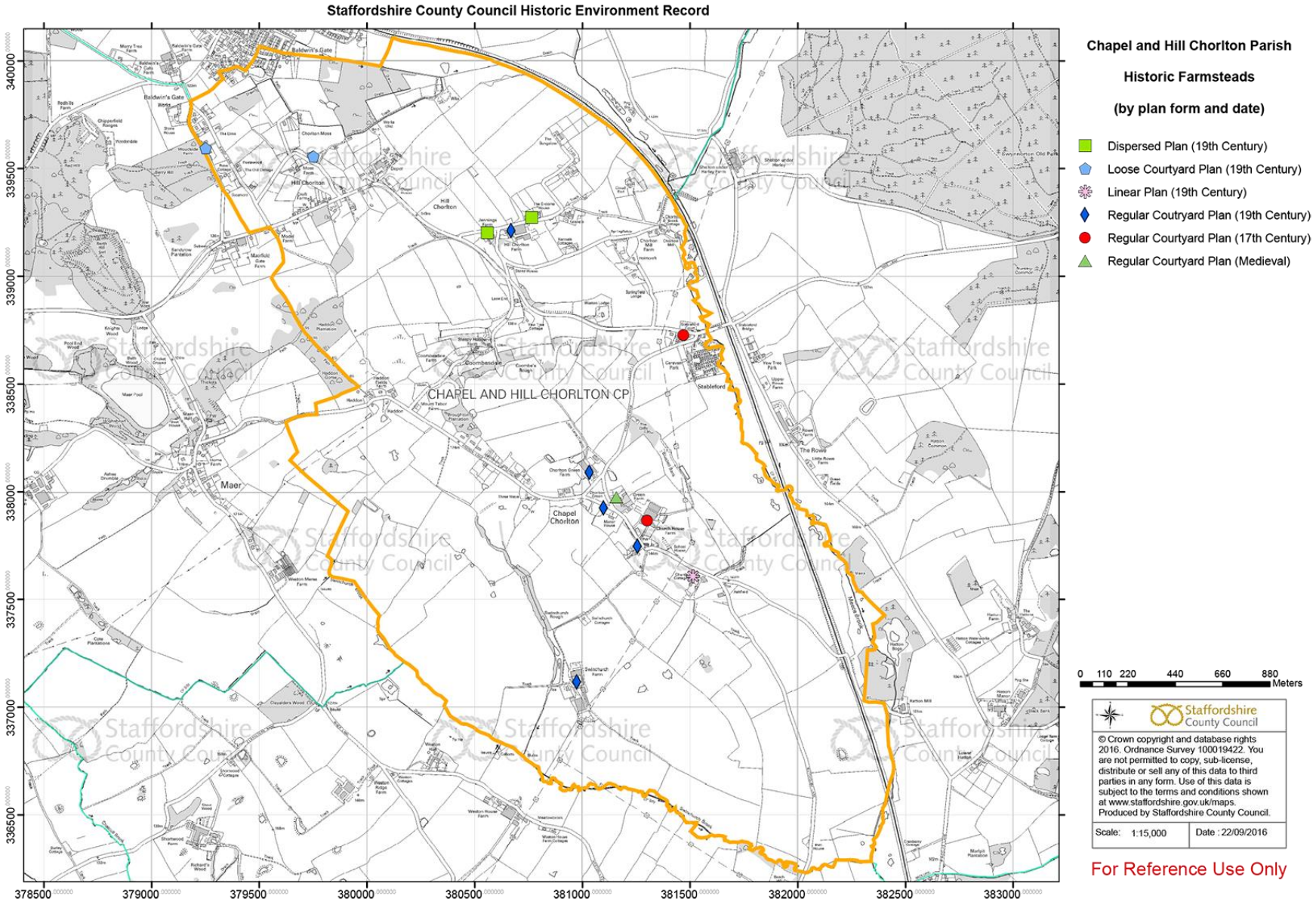
Map 19c Heritage assets in Whitmore parish

Source: Map prepared by Staffordshire County Council for Whitmore Parish Council. For enlargement see http://bit.ly/2sHZVsm



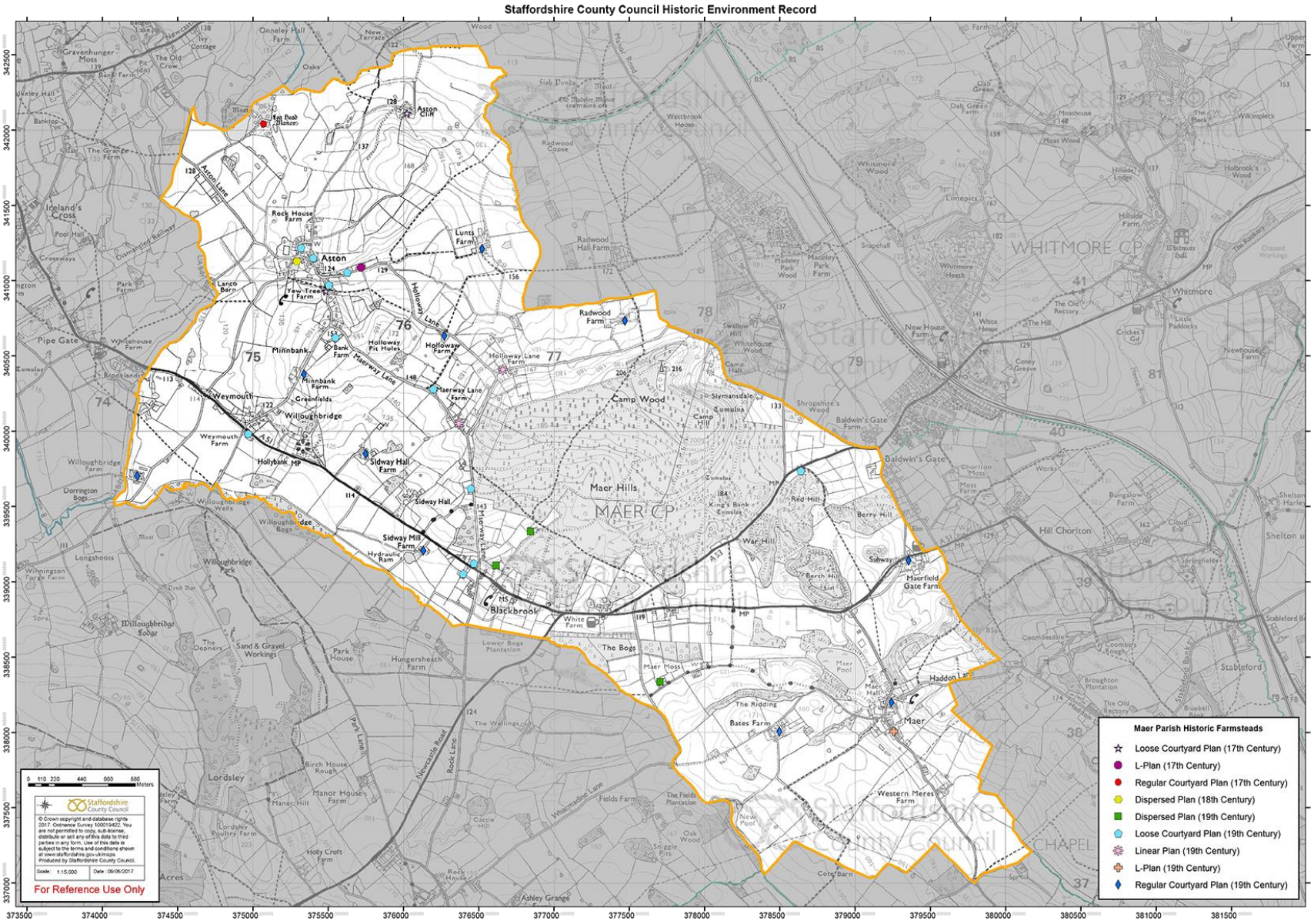
Map 20a Historic farmsteads recorded in Chapel and Hill Chorlton parish

Source: Map prepared by Staffordshire County Council for Whitmore Parish Council. For enlargement see http://bit.ly/2ogWFiS



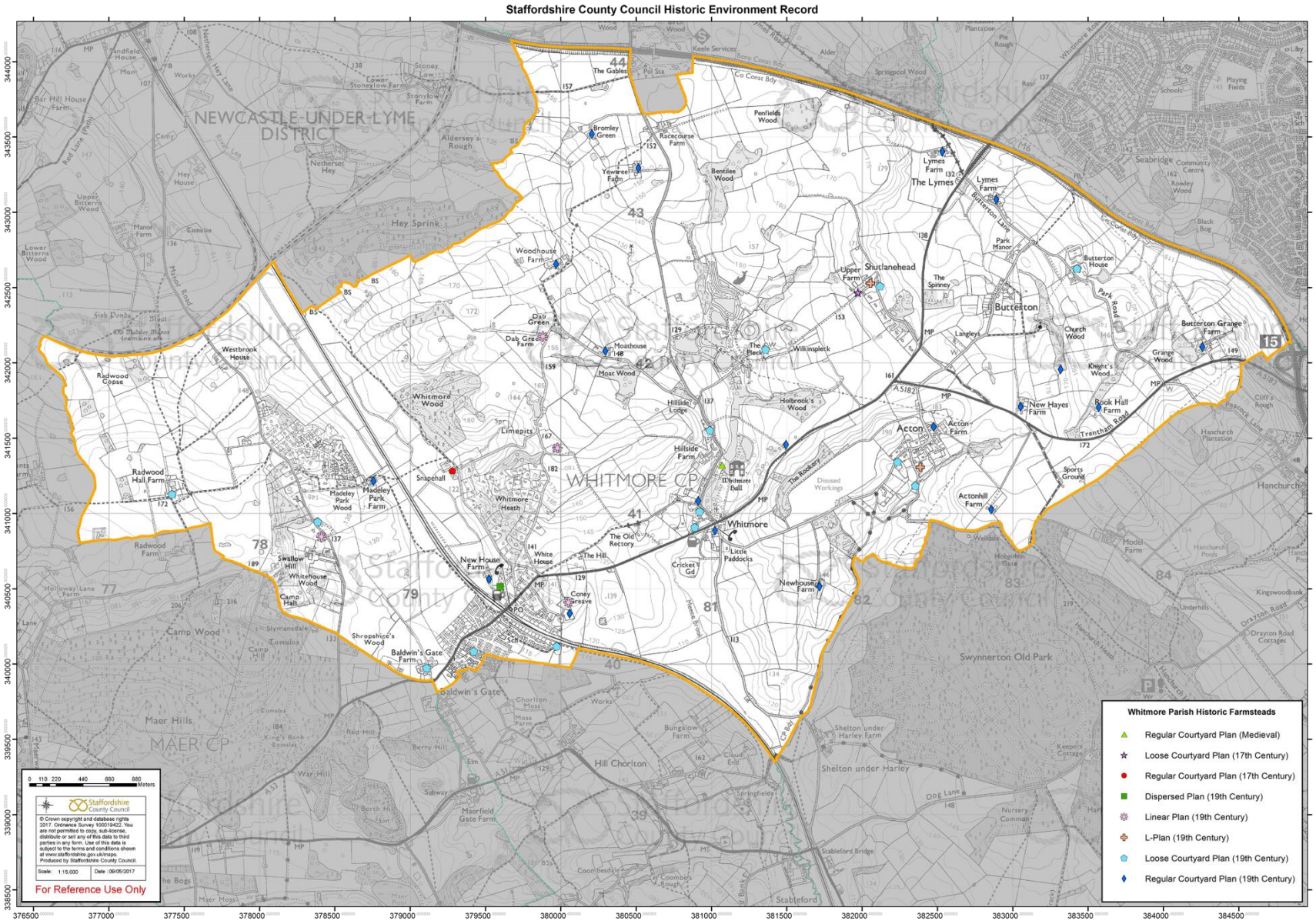
Map 20b Historic farmsteads recorded in Maer and Aston parish

Source: Map prepared by Staffordshire County Council for Whitmore Parish Council. For enlargement see http://bit.ly/2ELiGAM

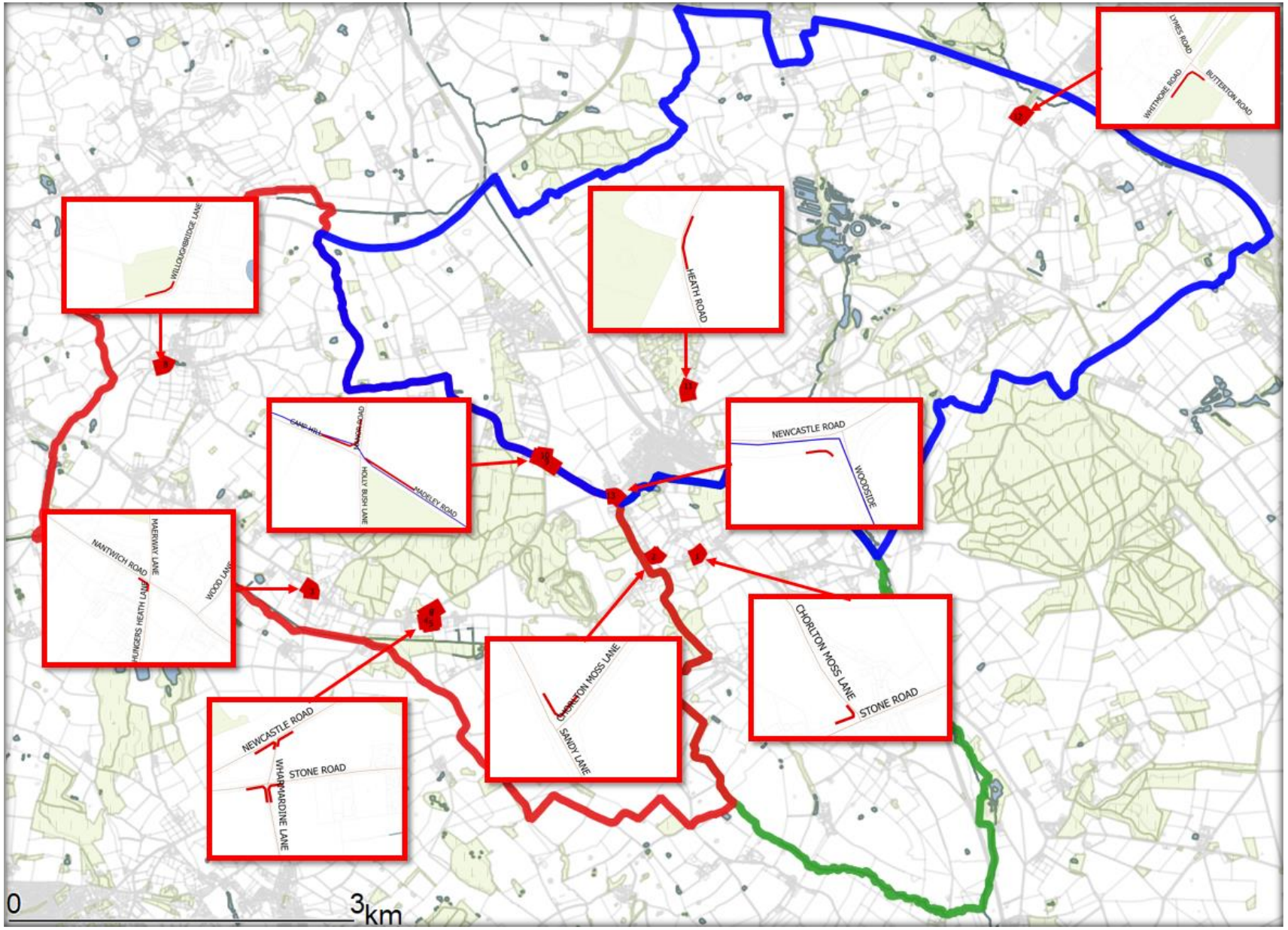


Map 20c Historic farmsteads recorded in Whitmore parish

Source: Map prepared by Staffordshire County Council for Whitmore Parish Council. For enlargement see http://bit.ly/2GA4yXw

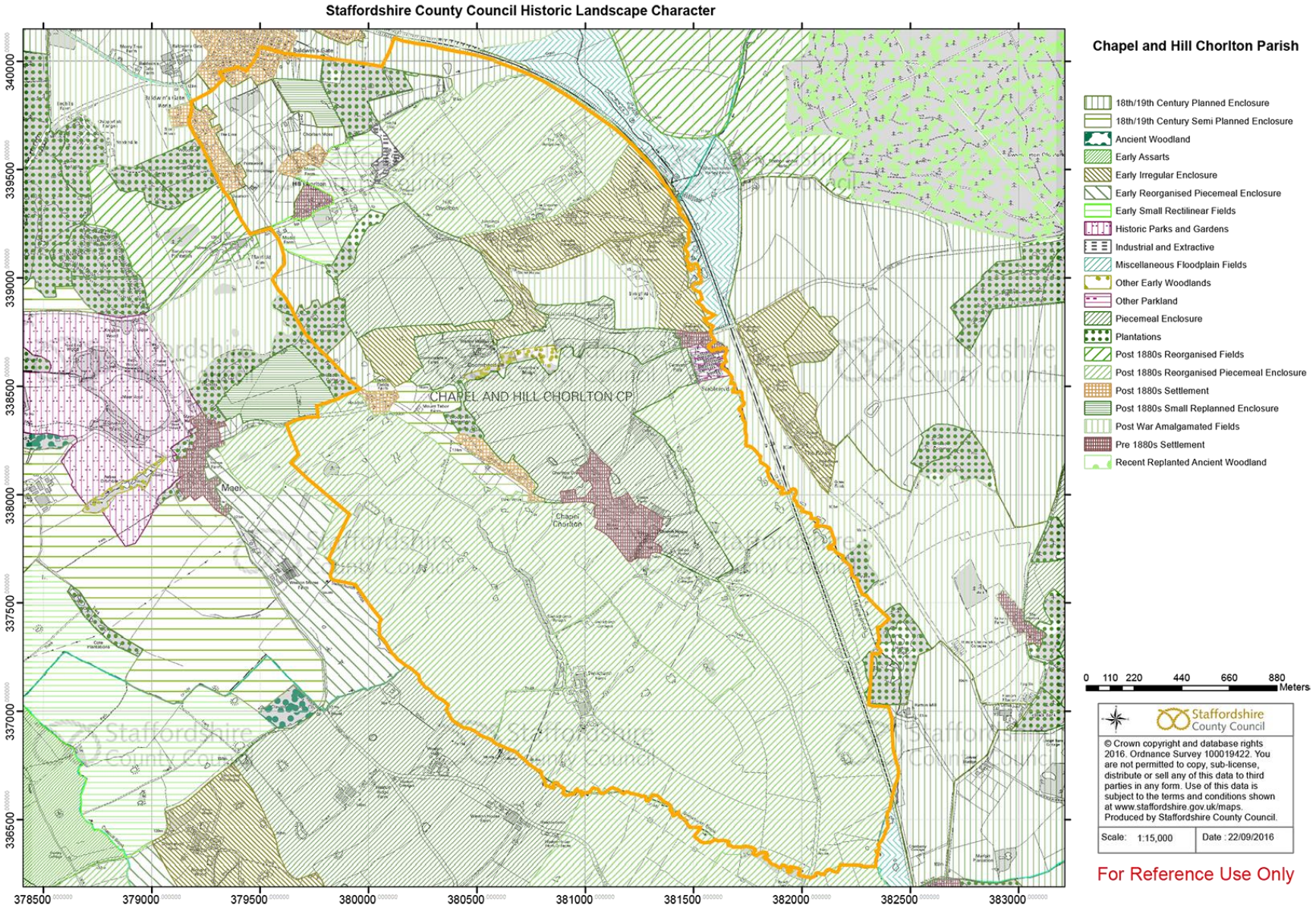


Map 21 Cheshire railings in the NA



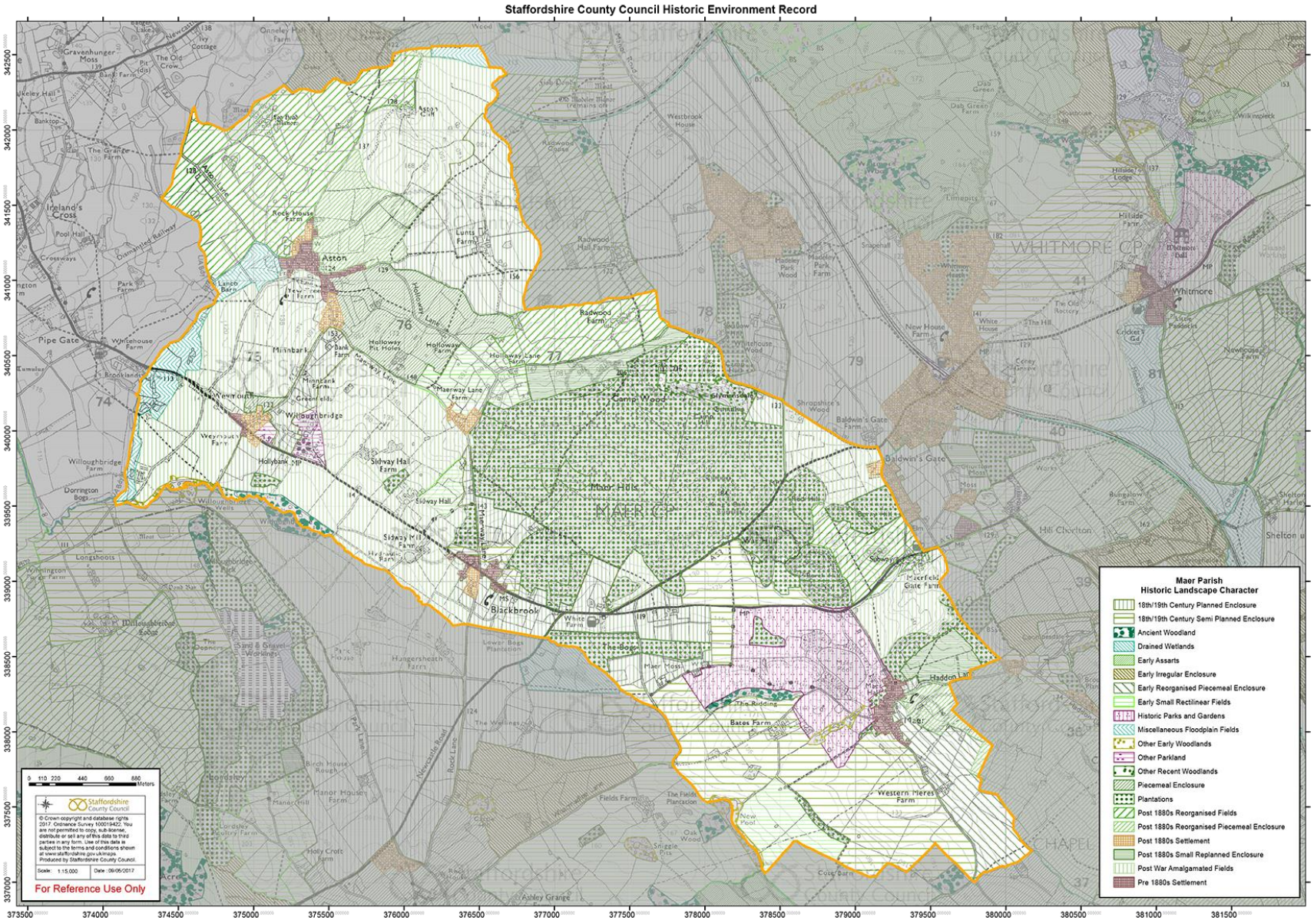
Map 22a Historic landscape character, Chapel and Hill Chorlton parish (for enlargement see http://bit.ly/2BKVb8s)

Source: Map prepared by Staffordshire County Council for Whitmore Parish Council.



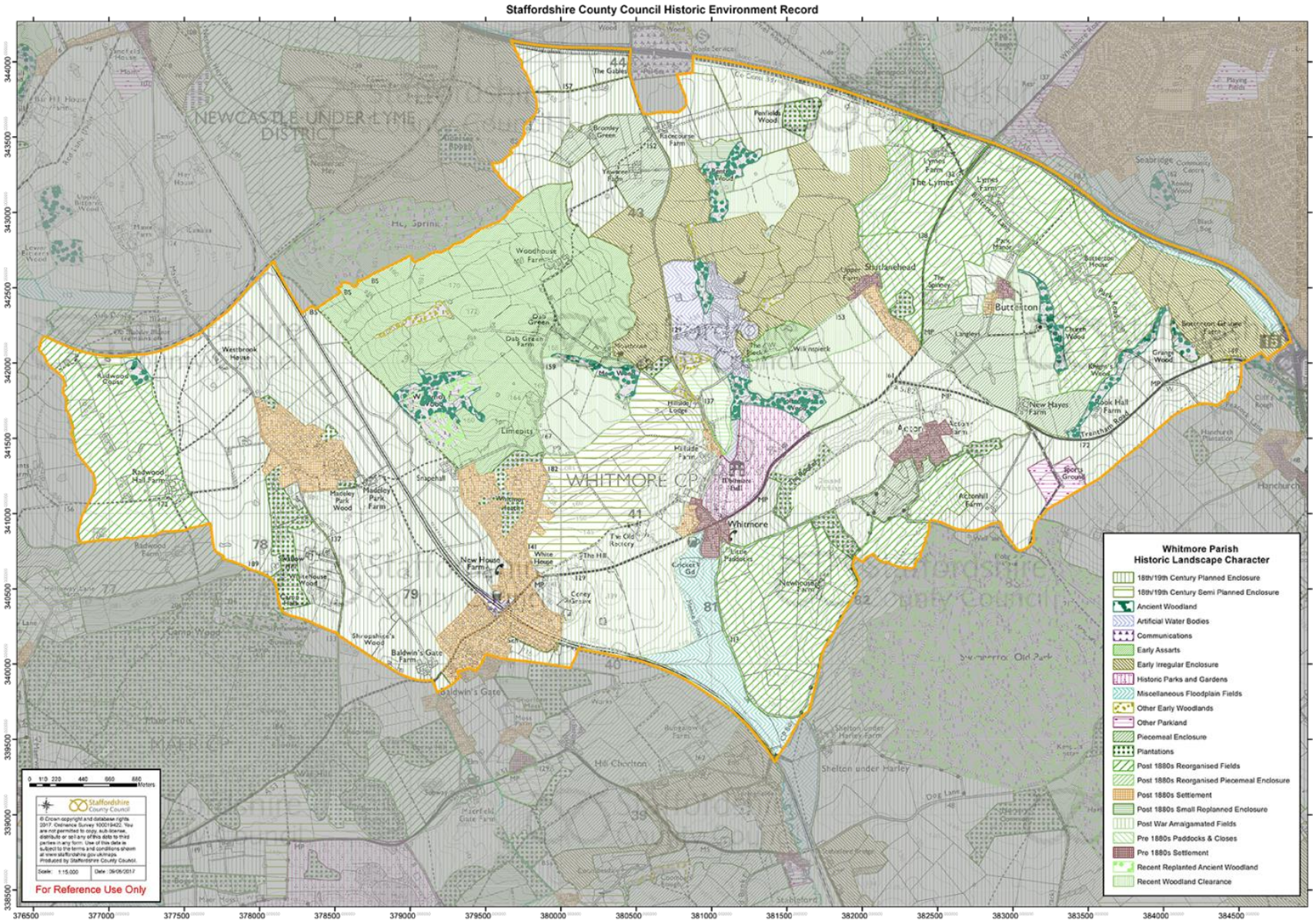
Map 22b Historic landscape character, Maer and Aston parish (for enlargement see http://bit.ly/2ELbJMf)

Source: Map prepared by Staffordshire County Council for Whitmore Parish Council.



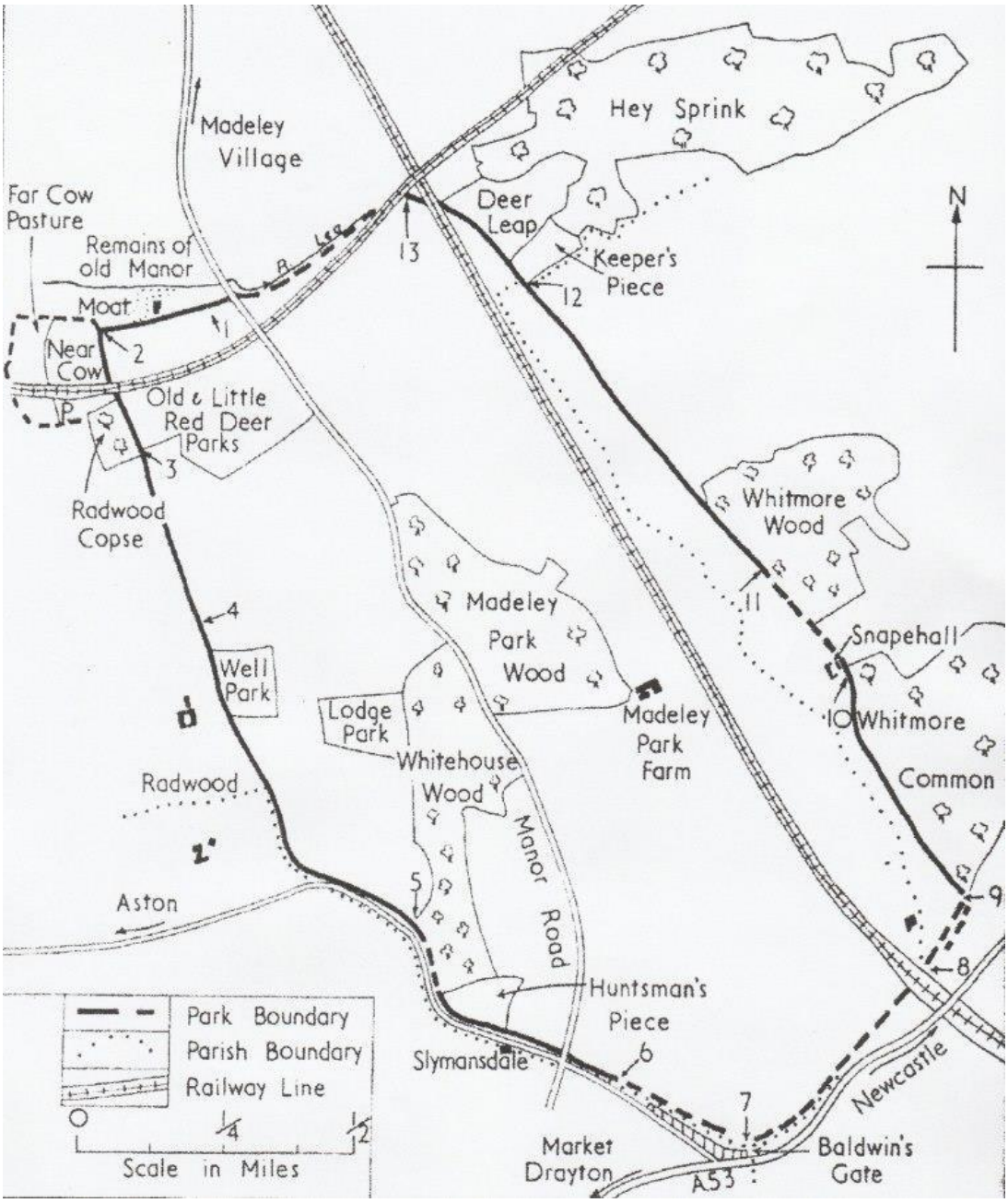
Map 22c Historic landscape character, Whitmore parish (for enlargement see http://bit.ly/2opgVhP)

Source: Map prepared by Staffordshire County Council for Whitmore Parish Council.



Map 23 Boundary of Madeley Great Park as identified by documentary and physical evidence

Source: Cantor and Moore, The medieval parks of the earls of Stafford at Madeley, North Staffordshire Journal of Field Studies (1963), vol. 3, pp. 37–58, figure 2.

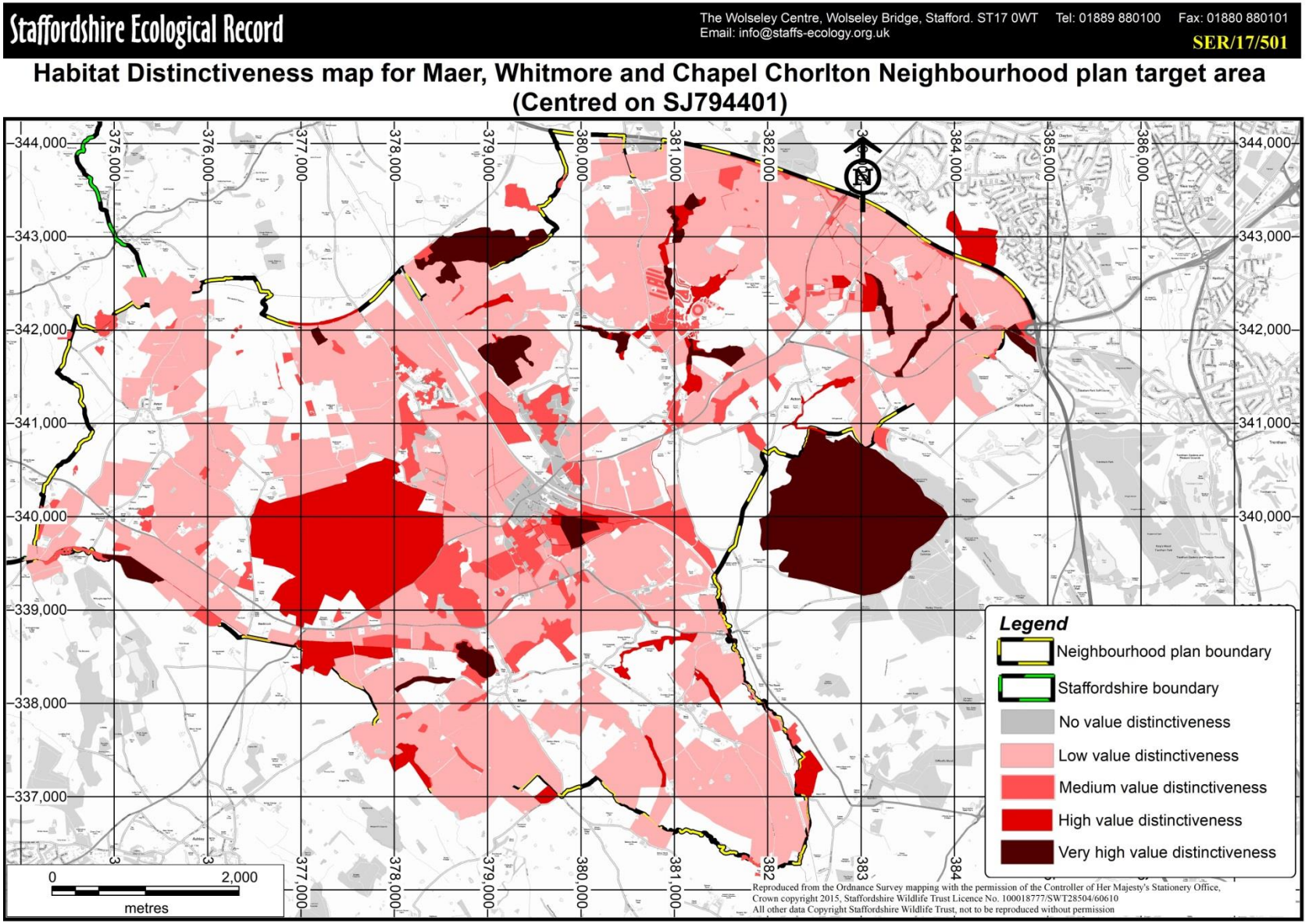


Map 24 Section from original preliminary surveyor's drawing British Library Ordnance Survey Drawings: No. 329, Betley, 1831

Source: British Library Online Gallery, www.bl.uk/onlinegallery/onlineex/ordsurvdraw/b/zoomify82223.html

Map 25 Habitat distinctiveness map for the NA (see facing page for methodology)

Source: Map prepared by Staffordshire Ecological Record for Whitmore Parish Council. For enlargement see http://bit.ly/2FjK2yf



Habitat value mapping – Draft SWT methods

Values
Compatible with Biodiversity Offsetting habitat distinctiveness bands – # get definitions for these.
Needs to also relate to statutory designations and policy, EcIA definitions and NPPF/ PPG terms.

VERY HIGH
Not included in Biodiversity Offsetting
International, national, regional value – SAC, SPA, NNR, SSSI
Irreplaceable habitats e.g. ancient woodland, veteran trees, limestone grassland, meres, mosses, bogs, inland saltmarsh
International, national, regional value species populations
Action – Avoid loss, Enhance, Link, Create new habitat adjacent

HIGH
County and District value.
LWS, candidate LWS
Habitats known to support County and District value species populations
E.g. all rivers and good quality streams
Action – Avoid loss, mitigate loss, last resort compensate loss, Enhance, Link, Create

MEDIUM
Local value.
Habitats of Principal Importance and Staffs BAP habitats that don't meet LSW criteria, semi-natural habitats that act as corridors and stepping stones, arable in HLS/ organic.
Local value species populations.
E.g. hedges, ponds, copses and low quality woodland, rough grassland, ruderal vegetation, degraded watercourses/ ditches. Habitats known to support priority species. Buildings with protected species presence, that aren't High value
Action – Mitigate and Compensate loss, Enhance, Link, Create

LOW
Site value.
Intensive arable, improved and amenity grassland, manicured landscaping, isolated poor semi-natural habitat, gardens
Action – Compensate large losses, Enhance, Link, Create

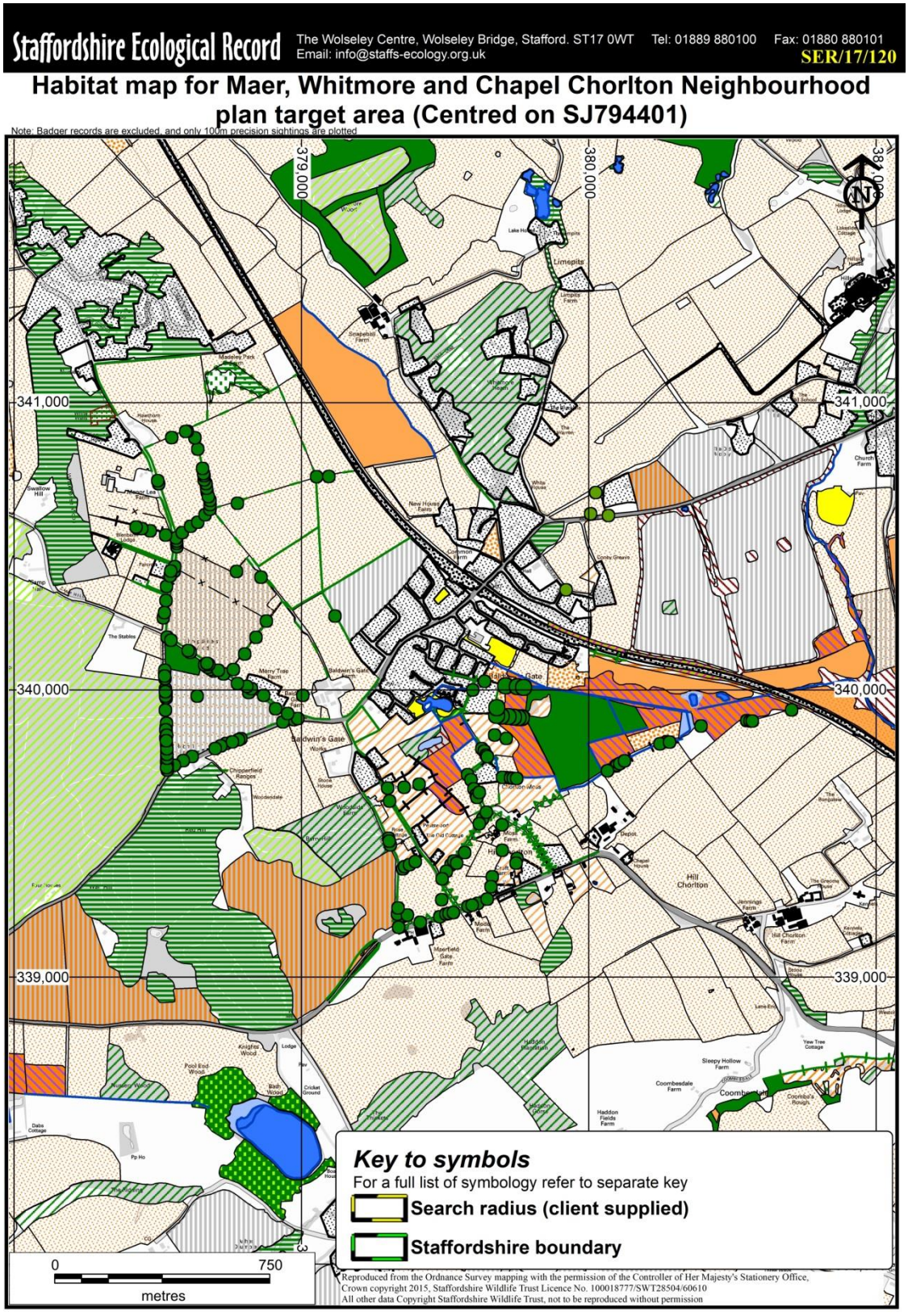
NEGLIGIBLE/ NO VALUE
Buildings (unless support protected/ priority species), hard standing, roads, regularly disturbed bare ground
Create new habitat where connectivity exists or functional size is achievable

Purpose
Suggested uses:
1. A tool to identify areas of high biodiversity value (priority habitat) which can be highlighted/ designated in the Neighbourhood Plan. This would pick up LWSs, SSSIs and potential LWS.
2. Flagging areas that may contain medium value (semi-natural) habitat. These areas have been highlighted in their policies as requiring a comprehensive biodiversity evaluation if they are put forward for planning purposes. Biodiversity offsetting/ compensation may be required in these areas if they are developed.
3. A tool to identify possible wildlife corridors which can be highlighted/designated in the Neighbourhood Plan. These areas may be targeted for restoration projects/ funding/ aspirational opportunity areas – possibly funded through development compensation (offsetting money)

Method
The habitat distinctiveness map is created from BAP inventories, Land cover data, designated sites data, agricultural land grading, aerial photography plus any information we can pull out of past planning applications. We also speak to the local community and local WT volunteers to get their input.

Map 26 Phase 1 habitat survey of land in the environs of Baldwins Gate (see facing page for key to symbols)

Source: Map prepared by Staffordshire Ecological Record for Whitmore Parish Council. For enlargement see http://bit.ly/2D7Z1Wf



Staffordshire Ecological Record
The Wolseley Centre, Wolseley Bridge,
Stafford. ST17 0WT
Tel: 01889 880100 Fax: 01889 880101
Email: info@staffs-ecology.org.uk

A Key to Colours and Patterns used on SER & SWT Habitat Maps

Introduction:
These colours are broadly based on the "Handbook for Phase 1 habitat survey" published by Nature Conservancy Council, 1990, now distributed by the Joint Nature Conservation Committee. Categories marked '*' are not the same as in the Handbook

Woodland and scrub categories

A1*: Undefined woodland
A111: Semi-nat. broad-leaved woodland
A112: Broad-leaved plantation
A121: Coniferous woodland
A122: Conifer plantation
A13*: Mixed woodland
A2*: Scrub
A21: Dense/continuous scrub
A22*: Scattered scrub
A3*: Scattered trees : over other habitats: A3 A31 A32
Orchards

Grassland and marsh categories

B*: Undefined grassland
B11: Unimproved Acid gld
B12: Semi-improved acid gld
B21: Unimproved Neutral grassland
B22: Semi-improved neutral grassland
B31: Unimp. calc. grassland
B32: Semi-imp calc. grassland
B4*: Improved grassland
B5*: Marsh/marshy grassland
B6*: Poor semi-improved gld
J12: Amenity grassland
B4a*: Improved grassland or arable

Tall herb and fern categories

C11: Continuous bracken
C12*: Scattered bracken
C3*: Undefined tall herbs
C31: Tall ruderal herbs
C32: Non-ruderal tall herbs
J11*: Arable land
J13*: Ephemeral/short perennial herbs
J14: Introduced shrubs

Heathland categories

D*: Undefined heathland
D1: Dry dwarf shrub heath
D2*: Wet dwarf shrub heath
D3*: Lichen/bryophyte heath
D5*: Dry heath/acid grassland mosaic
D6*: Wet heath/acid grassland mosaic

Wetland categories; mire, swamp and open water

E1: Sphagnum bog
E2: Flush and spring
E3*: Fen
E4: Bare peat
F1: Swamp
F21*: Marginal vegetation
F22: Inundation vegetation
G*: Open water, both standing (G1) and running (G2) if water body is wide enough
G2: Running water (linear feature)

Rock exposures and waste categories

I111*: Inland cliff (acid/neutral)
I112*: Inland cliff (basic)
I121: Scree (acid/neutral)
I122: Scree (basic)
I13: Limestone pavement
I14*: Natural rock exposure
I141: Acid rock exposure
I142: Basic rock exposure
I2*: Artificial exposures
I21*: Quarry [I22: Spoil 'S'; I23: Mine 'M'; I24: Refuse-tip 'R']

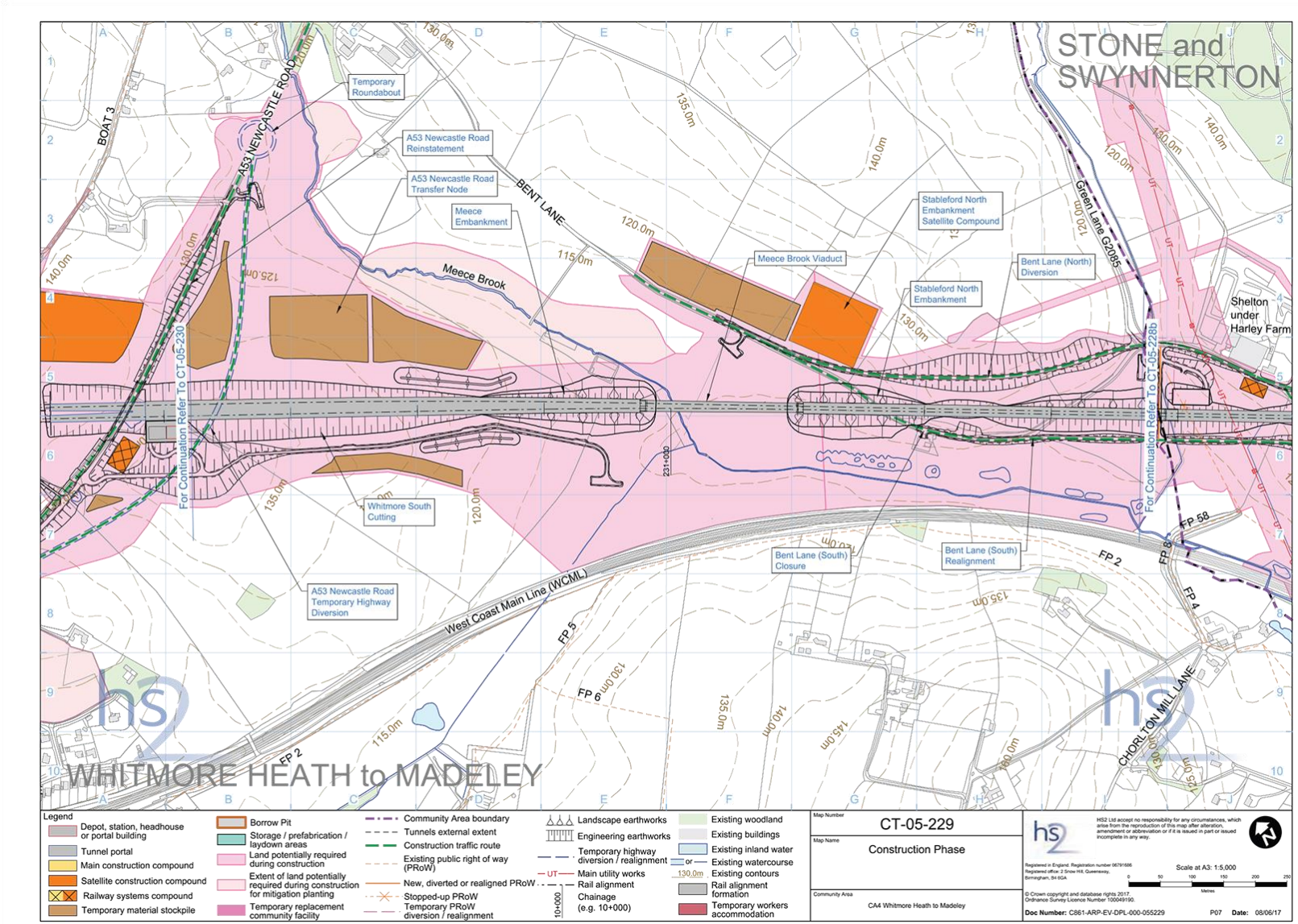
Miscellaneous other categories

(For J1 categories refer to grassland and tall herb categories)

J211*: Intact hedge (sp-rich)
J212: Intact hedge (sp-poor)
J221*: Defunct hedge (sp-rich)
J222: Defunct hedge (sp-poor)
J231*: Hedge with trees (sp-rich)
J232: Hedge with trees (sp-poor)
J24: Fence
J25: Wall
J26: Dry ditch
J27: Boundary removed
J28: Earth bank
J3*: Built-up land
J32: Industrial
J36: Buildings
J34: Caravan site
J4: Bare ground
UR0: Houses and gardens (BHT)

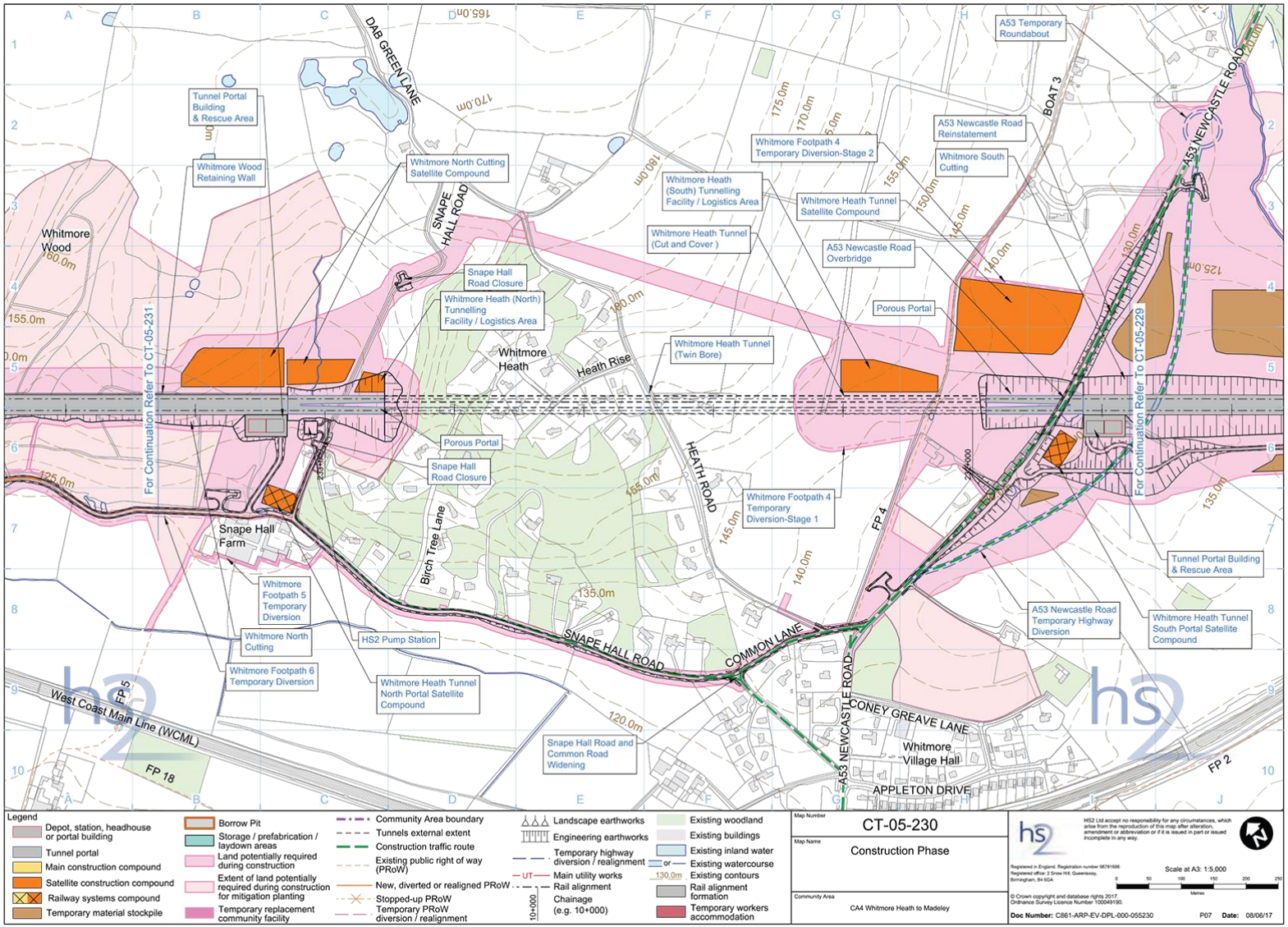
Map 27a HS2 Phase 2a construction phase: impact on Whitmore parish

Source: High Speed Rail (West Midlands–Crewe) Environmental Statement, Volume 2: Map book, CA4: Whitmore Heath to Madeley
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/628318/E21_VOL2_CA04_WATERMARKED.pdf



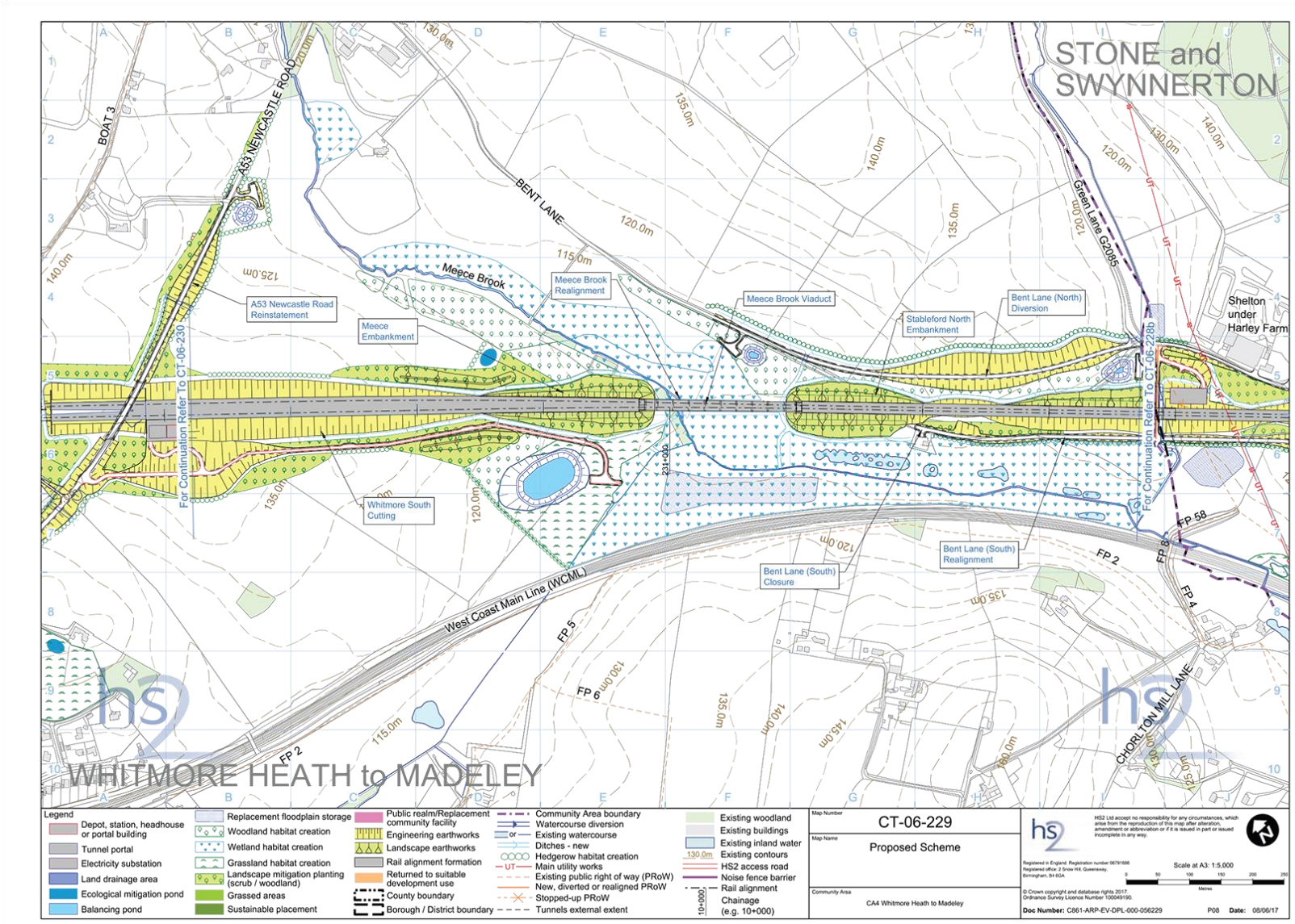
Map 27b HS2 Phase 2a construction phase: impact on Whitmore parish

Source: High Speed Rail (West Midlands–Crewe) Environmental Statement, Volume 2: Map book, CA4: Whitmore Heath to Madeley
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/628318/E21_VOL2_CA04_WATERMARKED.pdf



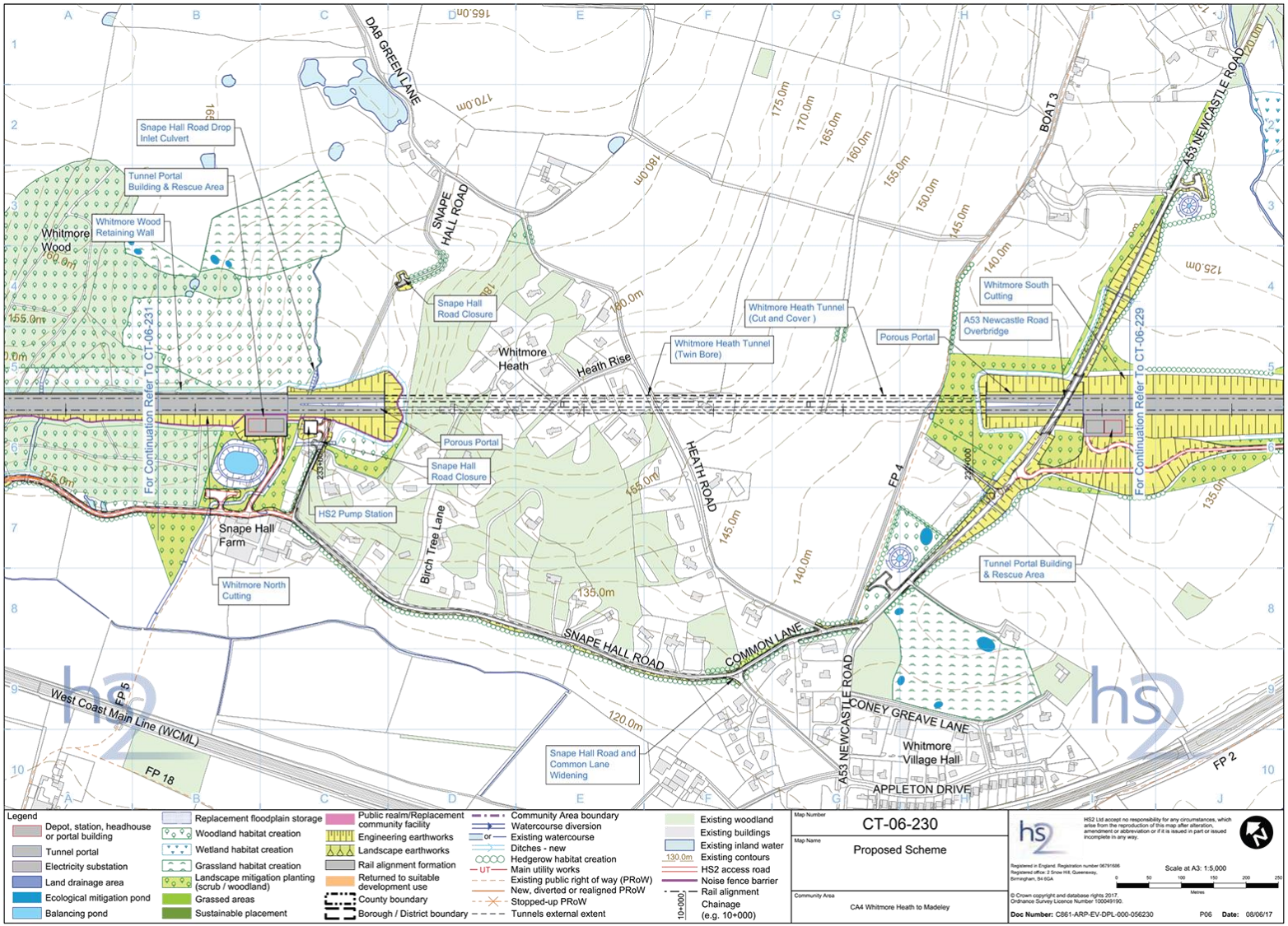
Map 28a HS2 Phase 2a proposed scheme: permanent impact in Whitmore parish

Source: High Speed Rail (West Midlands–Crewe) Environmental Statement, Volume 2: Map book, CA4: Whitmore Heath to Madeley
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/628318/E21_VOL2_CA04_WATERMARKED.pdf



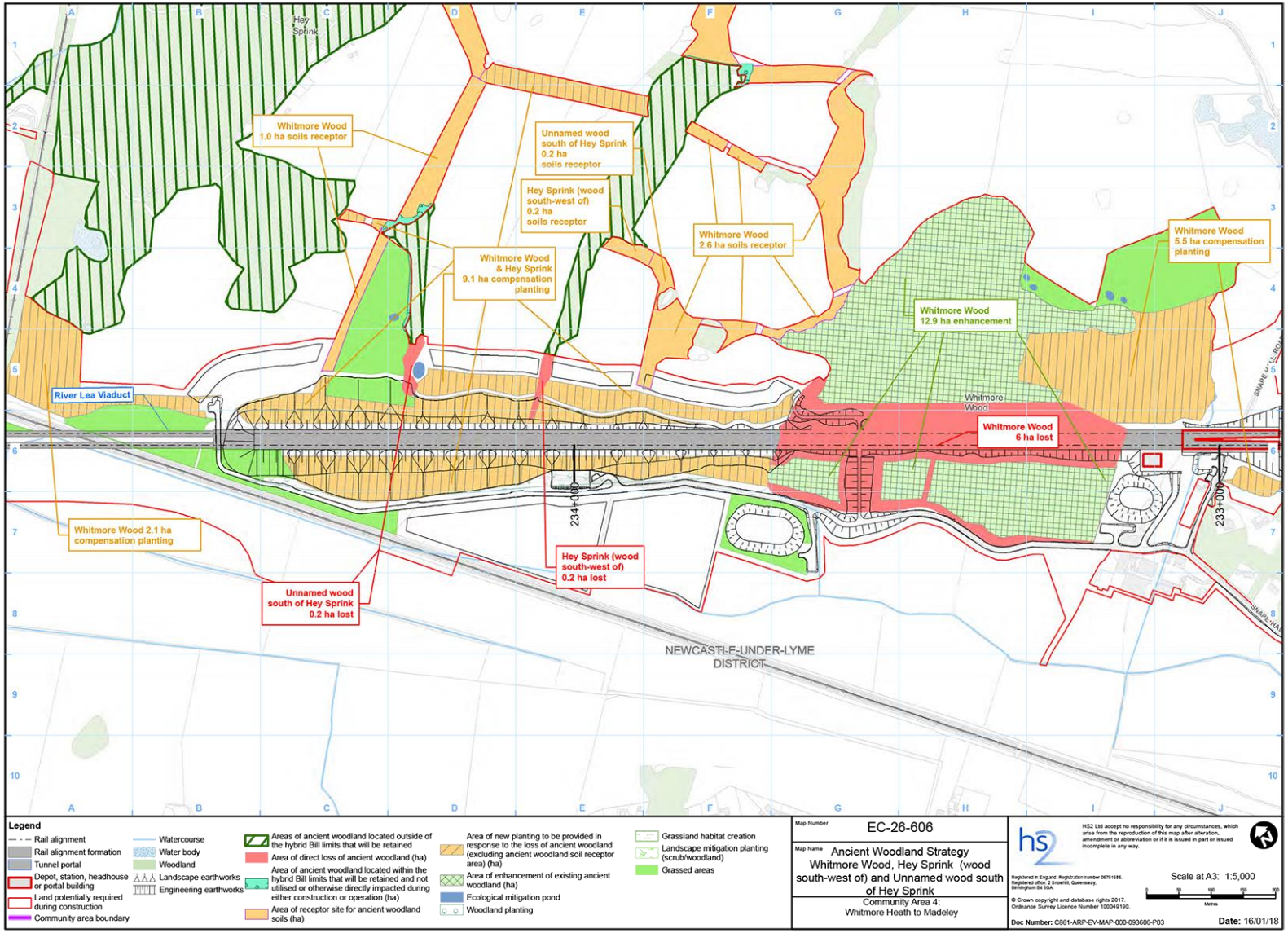
Map 28b HS2 Phase 2a proposed scheme: permanent impact in Whitmore parish

Source: High Speed Rail (West Midlands–Crewe) Environmental Statement, Volume 2: Map book, CA4: Whitmore Heath to Madeley
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/628318/E21_VOL2_CA04_WATERMARKED.pdf



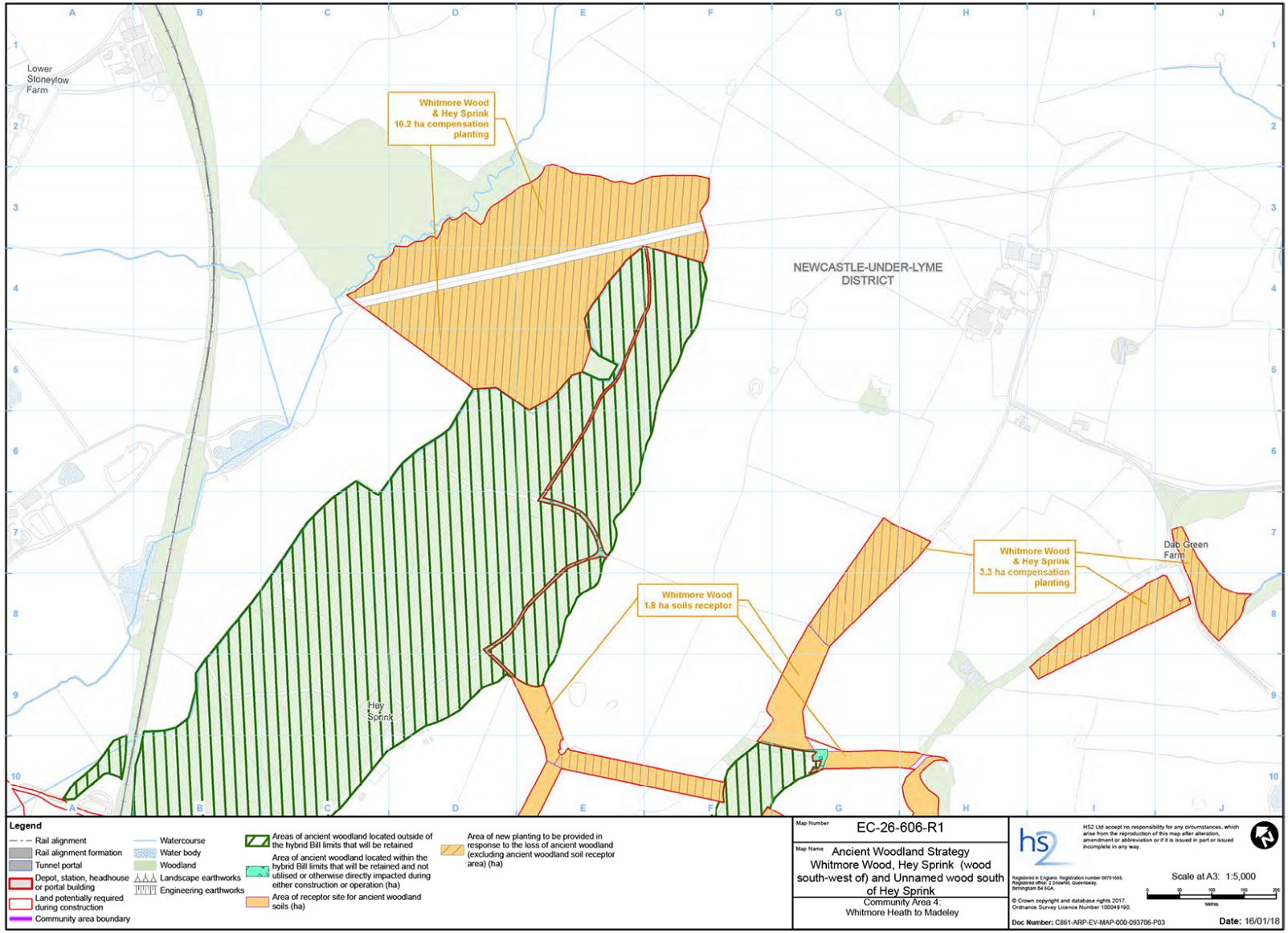
Map 29 Impact of HS2 Phase 2a on ancient woodland in Whitmore parish

Source: HS2 Ltd, High Speed Two, Phase 2a: West Midlands–Crewe: ancient woodland strategy, map EC-26-606-R1, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/682444/hs2_phase_2a_ancient_woodland_strategy.pdf



Map 30 Impact of HS2 Phase 2a on ancient woodland in Whitmore parish: proposed mitigation measures

Source: HS2 Ltd, High Speed Two, Phase 2a: West Midlands–Crewe: ancient woodland strategy, map EC-26-606-R1, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/682444/hs2_phase_2a_ancient_woodland_strategy.pdf



Map 31 JLP Preferred Options consultation, February 2018, site LW33

CONSULTATION ON A PREFERRED SITE OPTION

February 2018

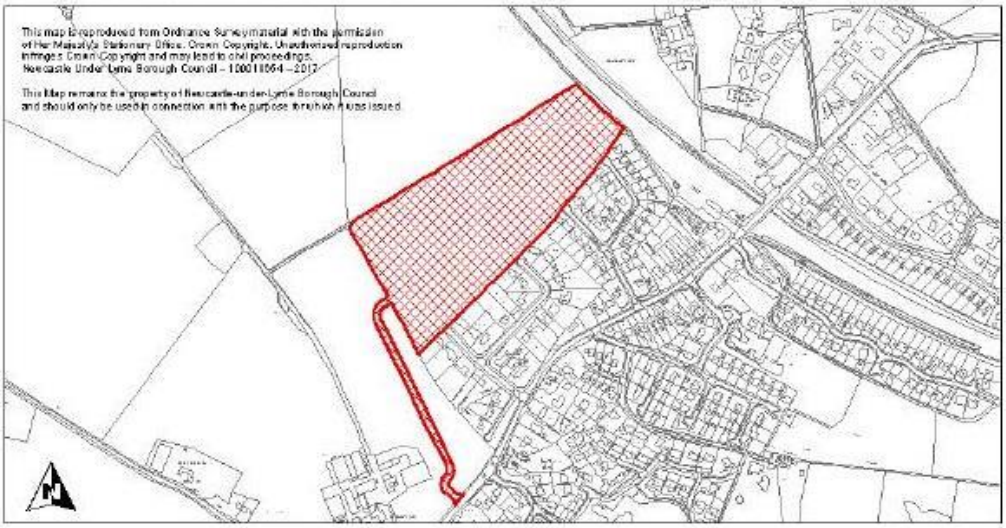
NEWCASTLE UNDER LYME BOROUGH COUNCIL

City of Stoke-on-Trent

Newcastle-under-Lyme and Stoke-on-Trent Joint Local Plan 2013 – 2033

Newcastle-under-Lyme Borough Council and Stoke-on-Trent City Council are consulting on the Joint Local Plan Preferred Options and this site is identified as a Preferred Site for Housing development

Location: Land at Baldwin's Gate Farm, Baldwin's Gate



To find out more information or to make a comment please go to www.newcastle-staffs.gov.uk/jointlocalplan

Any comments need to be submitted by 5pm on 1 March 2018.

The consultation documents are also available to view at the local Library; the Guildhall, Newcastle ST5 1PW; Kidsgrove Customer Service Centre, (Town Hall) ST7 4EL; and at The Madeley Centre, CW3 9DN. If you don't have access to the internet hard copy feedback forms can be made available.

We are also holding a number of drop-in events to which you are welcome to attend. Your nearest one is:

Whitmore Village Hall, Coneygreave Lane, Whitmore, Newcastle-under-Lyme on Thursday 22 February 2018 between 3pm and 7pm

Please check website for latest details

Map 32 JLP Preferred Options consultation, February 2018, site LW36

CONSULTATION ON A PREFERRED SITE OPTION

February 2018

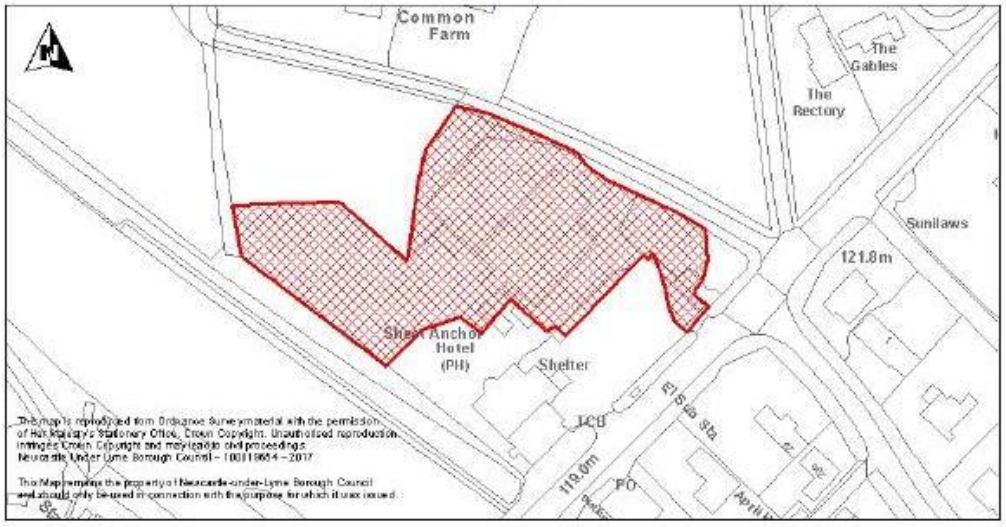
NEWCASTLE UNDER LYME BOROUGH COUNCIL

City of Stoke-on-Trent

Newcastle-under-Lyme and Stoke-on-Trent Joint Local Plan 2013 – 2033

Newcastle-under-Lyme Borough Council and Stoke-on-Trent City Council are consulting on the Joint Local Plan Preferred Options and this site is identified as a Preferred Site for Housing development

Location: Land adjacent The Sheet Anchor, Newcastle Road, Whitmore, ST5 5BU



To find out more information or to make a comment please go to www.newcastle-staffs.gov.uk/jointlocalplan

Any comments need to be submitted by 5pm on 1 March 2018.

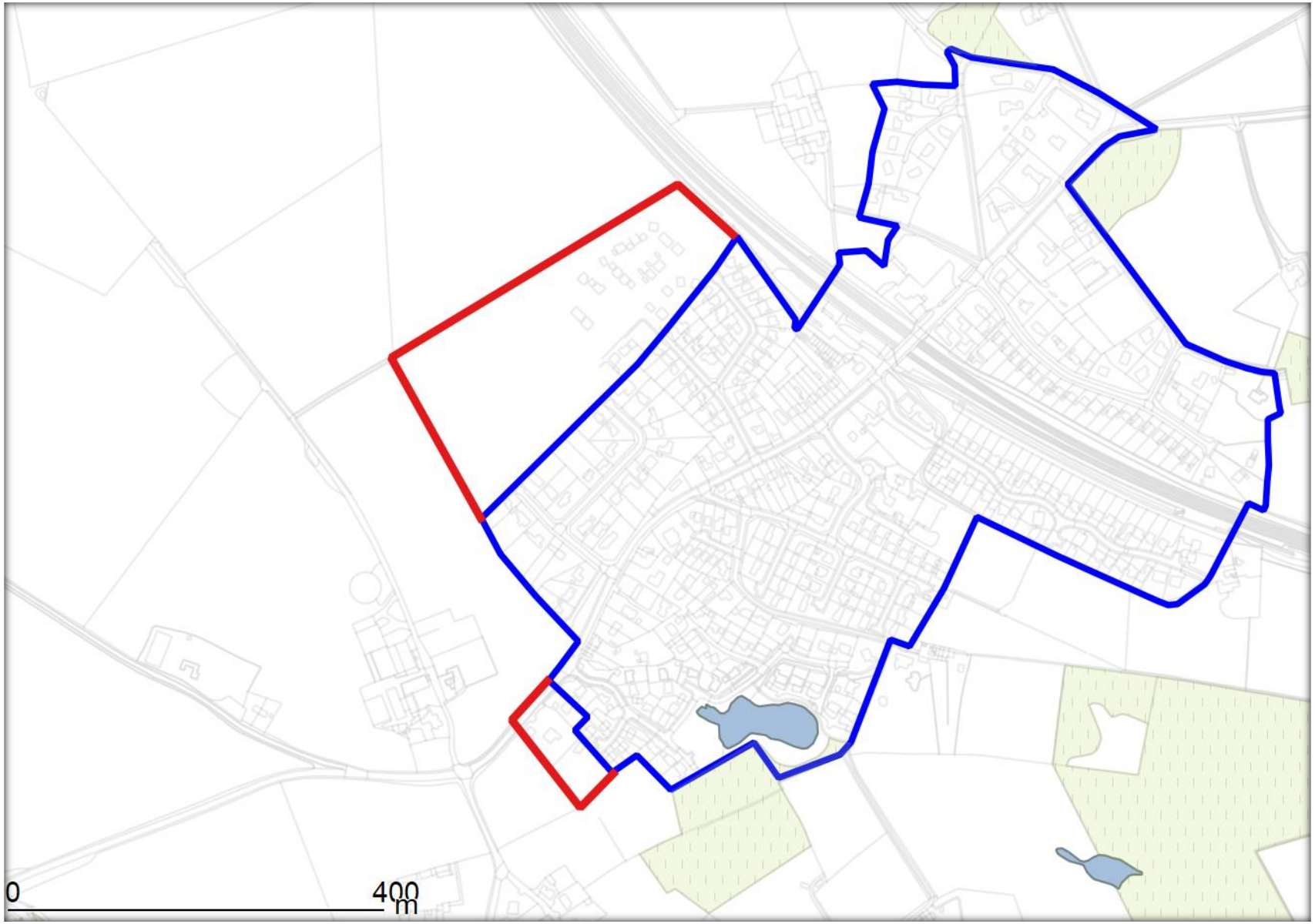
The consultation documents are also available to view at the local Library; the Guildhall, Newcastle ST5 1PW; Kidsgrove Customer Service Centre, (Town Hall) ST7 4EL; and at The Madeley Centre, CW3 9DN. If you don't have access to the internet hard copy feedback forms can be made available.

We are also holding a number of drop-in events to which you are welcome to attend. Your nearest one is:

Whitmore Village Hall, Coneygreave Lane, Whitmore, Newcastle-under-Lyme on Thursday 22 February 2018 between 3pm and 7pm

Please check website for latest details

Map 33 Proposed village envelope for Baldwins Gate



4 Socio-economic context

Content of this chapter:

4.1 Demographic overview

At Census 2011 the NA population was 2,468, comprising 1,233 males and 1,235 females.

Table 4.1 provides a general overview of the population of the NA and its parishes.

Table 4.1 NA and parishes population at Census 2011

	NA	*Chorlton*	*Maer*	*Whitmore*
All people	2468	425	489	1,554
Males	1233	225	239	759
Females	1235	200	240	795
Aged 0–15	398	85	59	254
Working age	1440	235	325	880
Aged 65+	630	105	105	420

Source: Census 2011, table KS102EW

4.1.1 Population density

Loggerheads and Whitmore ward, where the NA is located, is the most sparsely populated ward in NuL borough. From April 2018 new ward boundaries will take effect (see Box 1.1). The NA boundary will be contiguous with the new ward of Maer and Whitmore, which will be the least densely populated ward in the borough. Table 4.2 compares the population densities of the NA and its parishes to NuL and England.

Table 4.2 NA and parishes population density per hectare at Census 2011

NA	*Chorlton*	*Maer*	*Whitmore*	*NuL*	*England*
0.57	0.6	0.3	0.8	5.6	4.1

Source: Census 2011, table QS102EW

The population density of the whole NA is only 10% of that of NuL. Maer parish has the lowest comparative density at 5.4% that of NuL, while Whitmore parish has the highest comparative density at 14.3% that of NuL.

The low density of the population reflects the dominant position of agriculture and forestry in the local economy.

4.2 Population profile

4.2.1 Gender balance

Figure 4.1 provides a percentagewise gender breakdown of the populations of the NA and its parishes and compares them to NuL and England. The gender balance of the populations of the NA and its parishes is broadly similar to that for NuL and England, with minor variation between parishes.

4.2.2 Age composition

Figure 4.2 compares the age composition of the NA's population to NuL and England.

4.2.2.1 Children (0–15)

At 16.2% across the NA as a whole, the proportion of children is slightly lower than those for NuL (-1%) and England (-2.7%); but there is strong variation between parishes.

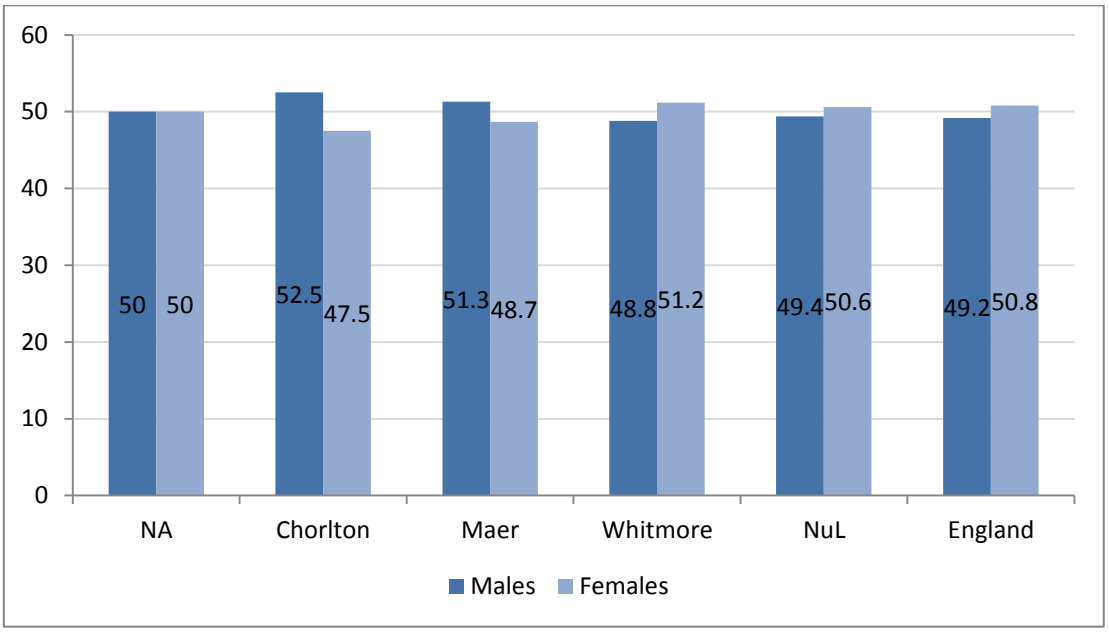
- At 12.3% Maer has a significantly lower proportion in this age group.
- At 19.8% Chorlton has a higher proportion in this age group than the other parishes and NuL (+2.6%) and England (+0.9%).

4.2.2.2 Working age group

The NA as a whole has a lower proportion of working age residents than NuL and England; but there is strong variation between parishes.

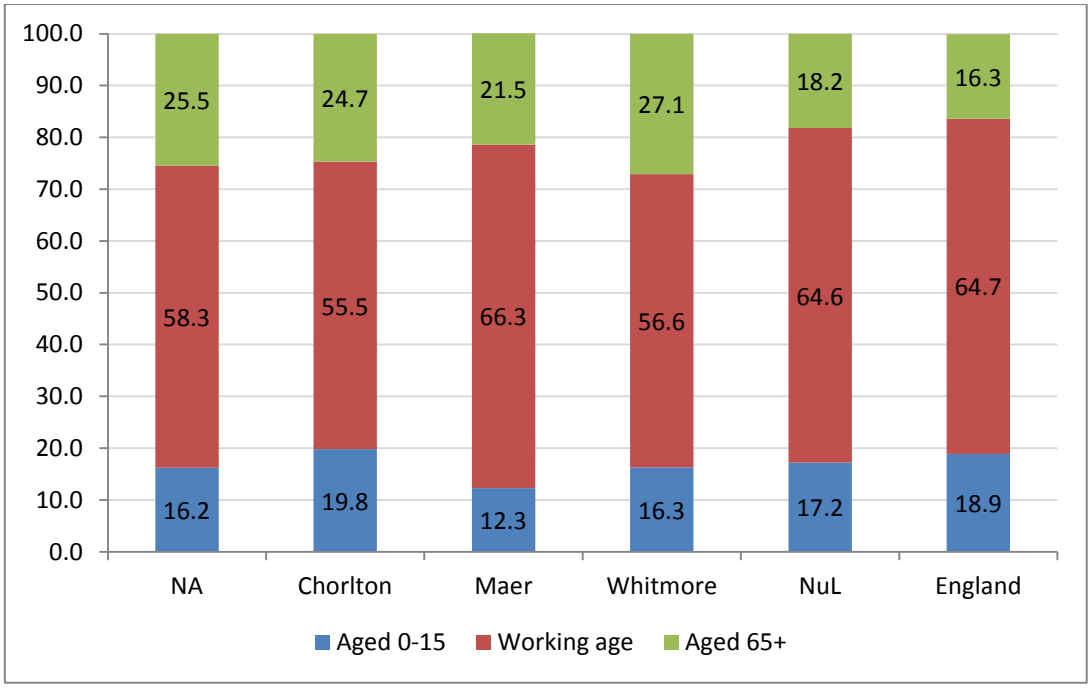
- At 66.3% Maer has a significantly higher proportion in the working age group, approximately 10% ahead of Chorlton and Whitmore; and 1.7% ahead of NuL and England.
- In Maer the significantly higher proportion in the working age group appears to be at odds with a significantly lower proportion in the 0–15 age group.

Figure 4.1 Gender balance at Census 2011 (%), NA compared to NuL and England



Source: Census 2011, table KS102EW

Figure 4.2 Age composition at Census 2011 (%), NA compared to NuL and England



Source: Census 2011, table KS102EW

4.2.2.3 65+ age group

The NA and each of the parishes has a significantly higher proportion in the 65+ age group than either NuL or England; but there is significant variation between the parishes.

- At 25.5% the NA is 7.3% ahead of NuL and 9.2% ahead of England.

- At 27.1% Whitmore has the highest proportion in this age group, 8.9% ahead of NuL.
- At 21.5%, Maer has the lowest proportion in the 65+ age group, but is still ahead of NuL by 3.3%.

4.2.3 Dependency ratio

The dependency ratio is a measure of the proportion of working age to non-working age population. A higher ratio indicates a lower proportion of working-age people. (Table 4.3)

Table 4.3 Dependency ratio of the NA and parishes compared to NuL and England

NA	*Chorlton*	*Maer*	*Whitmore*	*NuL*	*England*
0.71	0.81	0.51	0.77	0.6	0.6

Source: ACRE Rural community profiles

The NA's high dependency ratio is largely due to the high proportion of people in the 65+ age group, although in Chorlton, which has the highest dependency ratio also has a significantly higher proportion in the 0–15 age group.

Box 4.1 Issues: an ageing population – implications for service provision and housing

The above has implications for provision of services and housing in the NA.

- The unusually high proportion of the 65+ age group indicates a need for a range of housing types and services to meet their needs.
  - Housing types for which a need can be predicted are:
    - smaller units for downsizing/lifetime dwellings
    - serviced area with warden
    - care home (i.e. residential, not nursing/medical care)
    - low-cost housing for people providing care services
  - Services for which a need can be predicted are:
    - healthcare – social care – transport – shopping.

(See also below, Box 4.5)

Opportunities: an active ageing population

An ageing population can also be an active population making a significant contribution to the life of the community. This also has implications for services, community facilities and activity in the community.

An active ageing population can be involved in a wide range of leisure activities, including sport and other outdoor activities, education and learning and a variety of volunteering services in the community. Frequently, the active ageing are now involved in providing childcare for grandchildren while parents are at work. This is seen in the NA where the older or younger generations of a family move into the NA to be close together, as noted in section 1.5.1.

4.3 Population growth

The population of the NA as a whole grew significantly over the course of the 20th century, although sustained and significant growth was confined to Whitmore parish. Chorlton and Maer parishes saw some decline in population following mid-century growth (see below, Box 4.3).

Whitmore parish is set to see further significant growth with the development of the Kier site in Baldwins Gate from 2016 (109 dwellings) and two minor developments from 2017 (11 dwellings), bringing an anticipated increase of around 288 in the settlement's population.

Box 4.2 Issue: critical implications for infrastructure and services

Imminent growth in Baldwins Gate, and other growth in the NA during the plan period, will have implications for infrastructure, services (including education and health) and community facilities to serve the population of the entire NA, across all age groups. This is critical, given the general failure of successive Local Plans from the late 1950s to develop local infrastructure and services in line with population growth, and the actual decline or loss of some services over the same period. (See also section 1.1.)

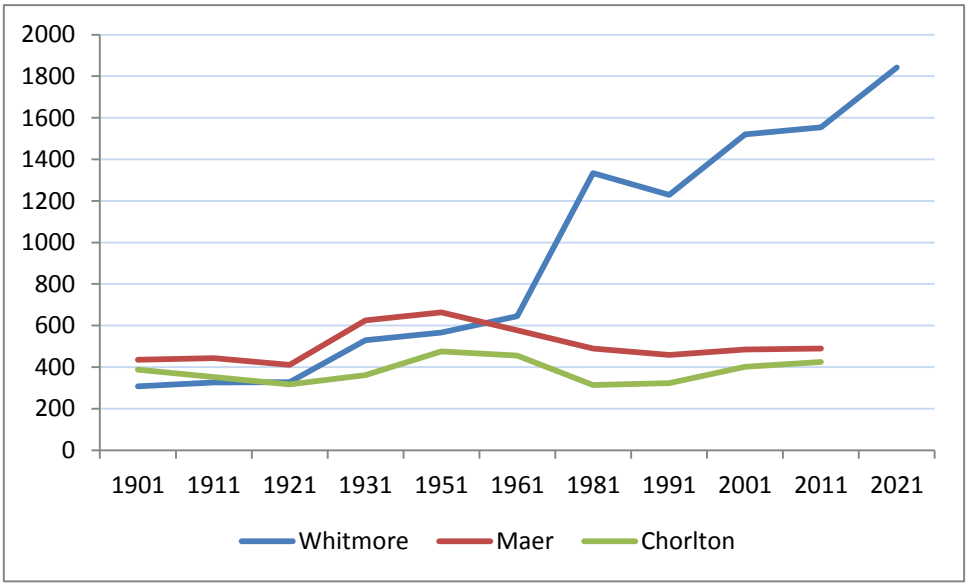
Box 4.3 Population growth in the three parishes over 110 years

Census data in Table 4.4 and Figure 4.3 shows how the populations of the three parishes have grown over a 110-year period (1901–2011), with a projection to 2021 for Whitmore parish. Populations grew in the decades following World War I (i.e. 1920s onwards), with the beginnings of housing development in the countryside.

Table 4.4 Population growth in the parishes, 1901–2011, with projection to 2021 for Whitmore

	1901	*1911*	*1921*	*1931*	*1951*	*1961*	*1981*	*1991*	*2001*	*2011*	*2021*
Chorlton	387	352	316	361	476	455	313	323	402	425	425
Maer	436	443	410	625	664	577	490	458	484	489	489
Whitmore	308	326	327	530	567	645	1333	1299	1520	1554	1842

Figure 4.3 Population growth in the parishes, 1901–2011, with projection to 2021 for Whitmore



Note: No census in 1941; data for 1971 not accessible.
Sources: Historical census data from A Vision of Britain through Time, www.visionofBritain.org.uk; Borough of Newcastle-under-Lyme Directorate of Strategic Planning, 1991 Census: Population and housing for the wards and parishes of the borough (1994)

From the 1951 to 2001 the populations of Chorlton and Maer parishes fell significantly, due to changes in the agricultural economy and social organisation of the countryside. From 1961 to 1981 an additional factor in the decline will have been the departure of 'baby boomer' children from parental homes. During the first decade of the 21st century there

was no growth in Maer parish. Minor growth in Chorlton parish was due to the new Lakeside estate in Baldwins Gate being partially located in that parish.

Whitmore, by contrast, has experienced continuous growth since the beginning of the 20th century, with dramatic growth after the end of World War I, and again from 1961 onwards due to housing development in Baldwins Gate, Whitmore Heath and Madeley Park Wood and the influx of an urban population. (It should be noted that parish boundary revisions in 1974 transferred, Sandyfields and Gateway estates in Baldwins Gate and Madeley Park Wood from Madeley parish into Whitmore parish.) By 2011 the population of the NA as a whole had grown by 218% since 1901; and by 234% since the low point at the end of World War I. However, in 2011 the combined population of Chorlton and Maer parishes was only 15% greater than in 1901, whereas that of Whitmore had increased by 505%.

The projection to 2021 for Whitmore parish is based on 2.4 persons per household. Completion of the Kier site at Gateway Avenue and two minor developments currently in progress will see the population of the parish 18% greater in 2021 than in 2011.

4.4 Incomes

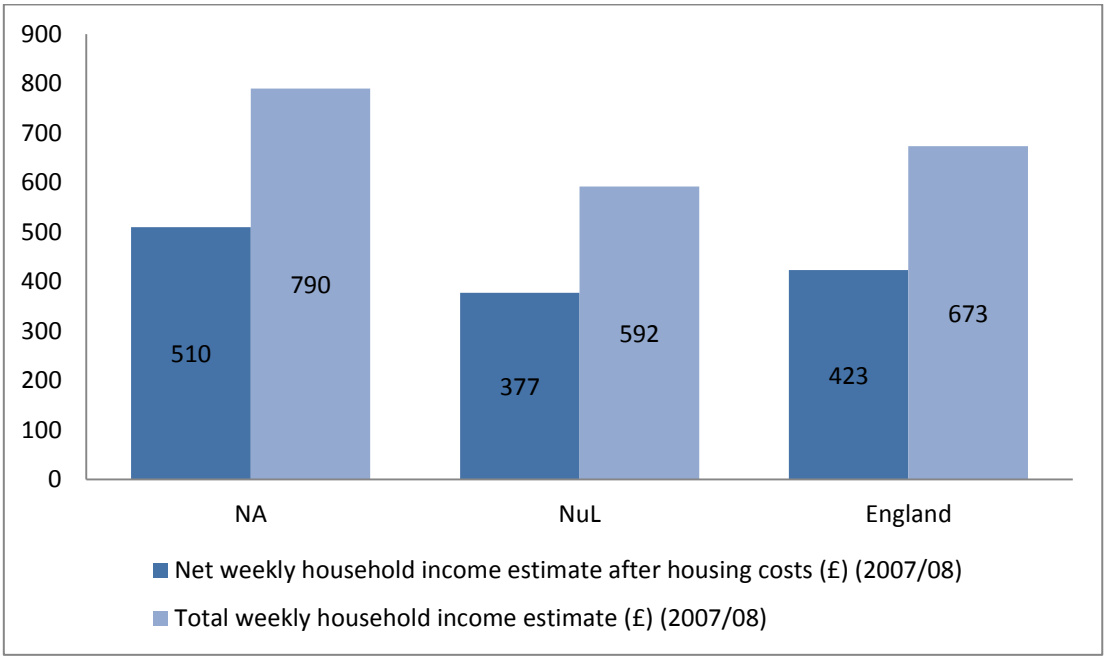
Average estimated weekly household incomes are the same across the NA. Data in Figure 4.4 from the ACRE Rural community profiles is for 2007/08. Incomes are significantly higher than in NuL as a whole and also higher than the England average. The chart also shows that housing costs are greater than for NuL and England.

Although high average weekly household incomes may be taken to indicate an affluent area, they can equally indicate households where adult children are living at home. In such cases several individual incomes will combine into a higher overall household income.

4.4.1 People living on low incomes

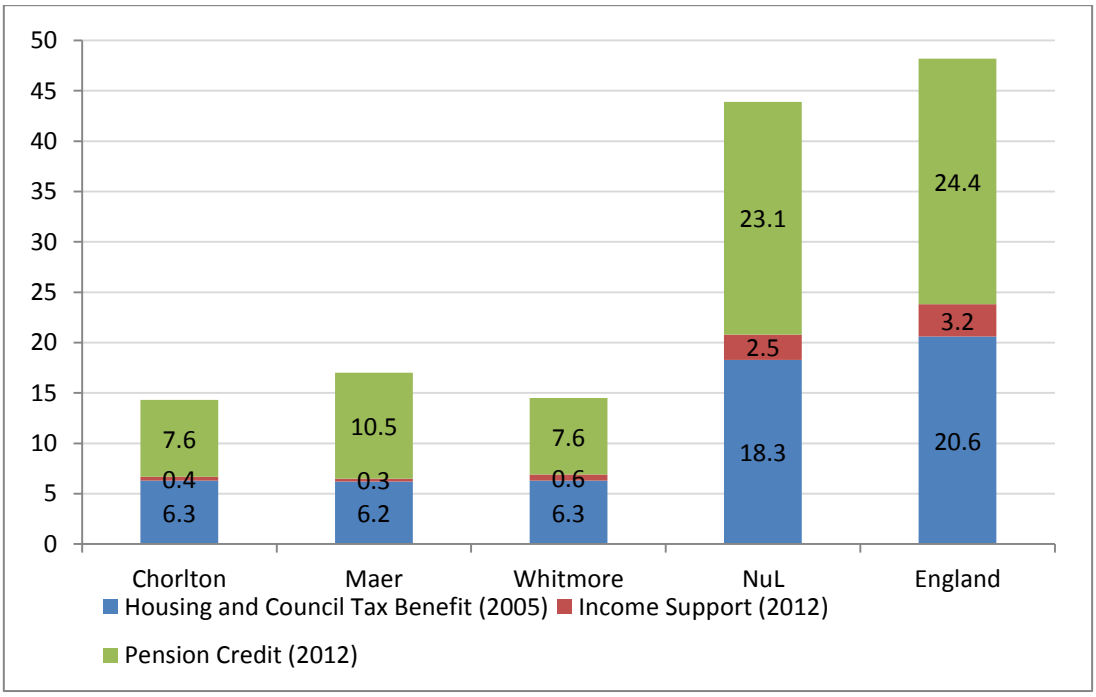
Although onlookers generally consider the population of the NA to be affluent, in all three parishes there are people and families living on low incomes. Across the NA there is little variation in the proportion of benefit claimants and low-income households, although Maer parish had a higher percentage of Pension Credit claimants (+2.9%) than the other two parishes in August 2012 (Figure 4.5). Generally speaking, the proportion of benefits claimants in the NA is about one-third of the level for NuL as a whole.

Figure 4.4 Average weekly household income estimates (2007/08), NA compared to NuL and England



Source: ACRE Rural community profiles

Figure 4.5 Benefit claimants (%), parishes compared to NuL and England



Source: ACRE Rural community profiles

The NA's proportion of households below 60% of median income after housing costs is somewhat higher, at 11.5% across the NA and two-thirds of the level for NuL (Figure 4.6). A household living below 60% of median income after housing costs is considered to be living

in poverty. In such households members of working age may be out of work or in low-paid jobs. As well as being a measure of income, this statistic is also an indicator of the relatively high cost of housing in the NA and the level of need for affordable housing. In this respect, the AECOM Housing Needs Assessment (HNA) for NA states that 45.3% of households in the Rural South sub-area (Loggerheads and Whitmore ward) of NuL could afford to purchase an entry-level home in 2016 (HNA, p. 34).

4.4.2 Fuel poverty

The proportion of households in the NA estimated to be in fuel poverty is around 2.6% higher than for NuL, and 6% higher than for England (Figure 4.7). While this reflects the condition and characteristics of older housing stock in a rural area it also indicates the higher cost of fuel in areas with no mains gas supply, where households depend on oil, LPG or electricity for heating and cooking (see also section 5.9 below).

Box 4.4 Issue: need for low-cost and affordable housing

The data in this section on incomes and areas of poverty, and the data below on deprivation and employment, shows that although the NA is generally regarded by outsiders as affluent, the local community includes people and families who are not well off and who have needs for low-cost and affordable housing.

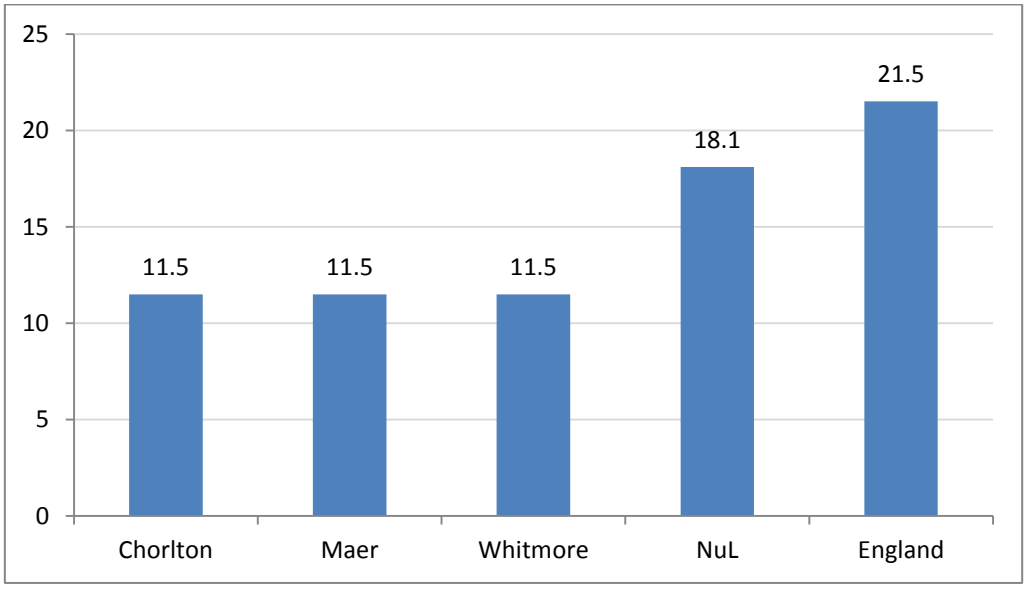
Opportunity

The Neighbourhood Plan provides an opportunity to make the case for provision of an adequate level of affordable and low-cost housing to meet the needs of lower-income members of the local community.

4.5 Deprivation

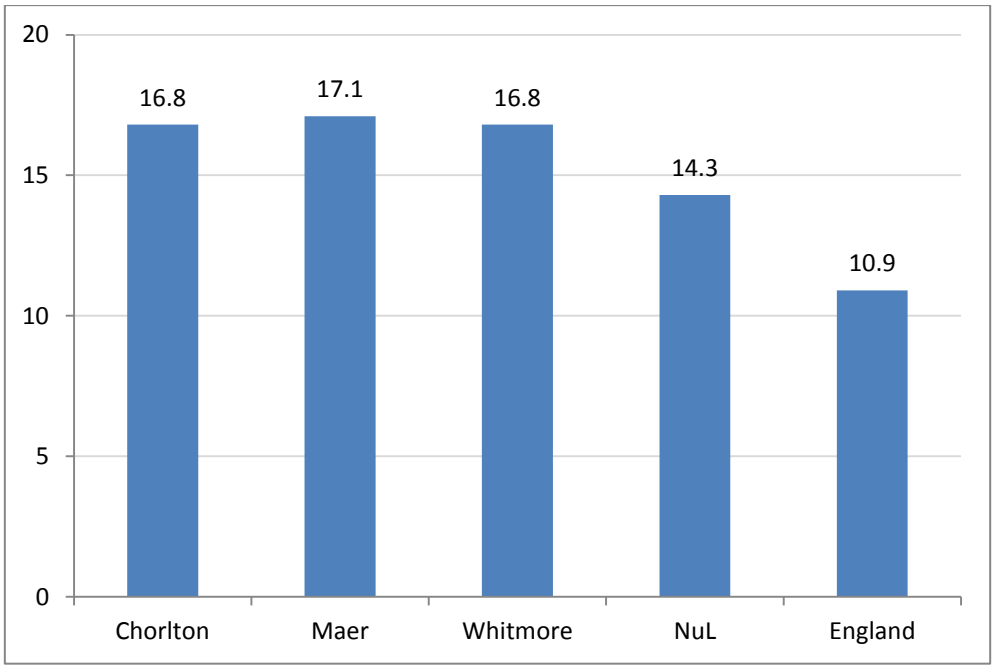
The NA is in the 3rd decile on the Index of Multiple Deprivation (IMD), where the 1st decile is least deprived. The IMD is a measure based on income, unemployment, health, education and skills, housing, crime, environment and access to services, and a household is considered to be deprived if it is experiencing deprivation in 4 or more dimensions of

Figure 4.6 Percentage of households below 60% of median income (2007/08), parishes compared to NuL and England



Source: ACRE Rural community profiles

Figure 4.7 Percentage of households estimated to be in fuel poverty (2011), parishes compared to NuL and England



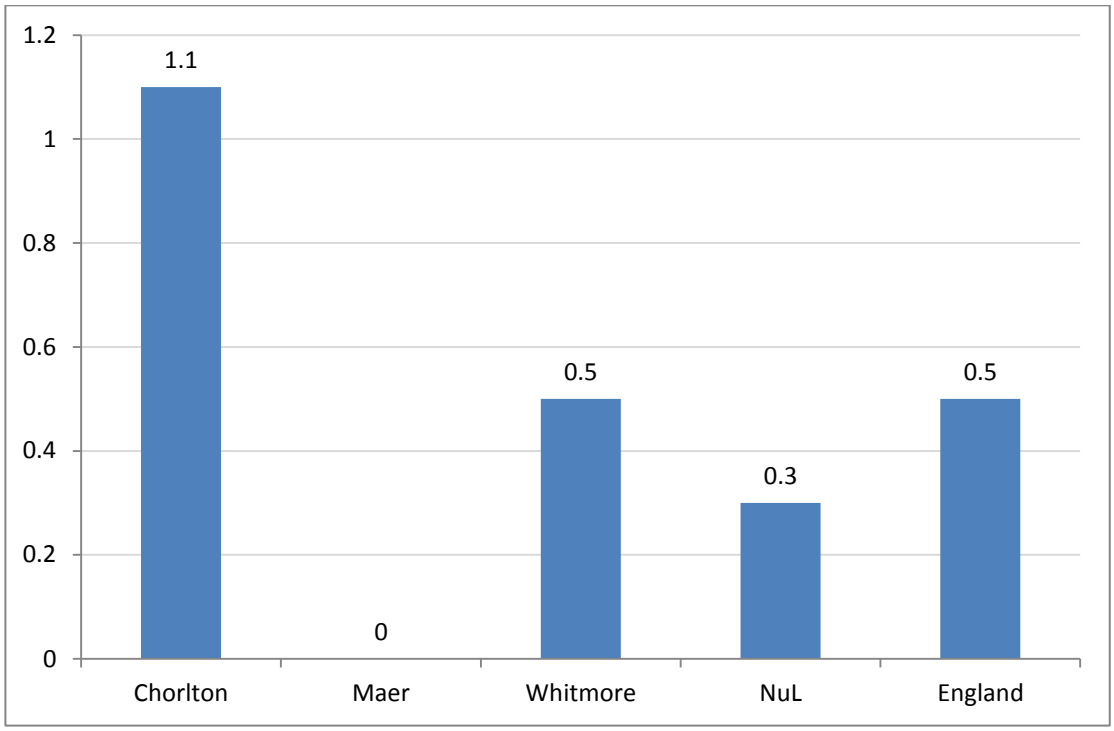
Source: ACRE Rural community profiles

deprivation. Figure 4.8 shows the proportion of households experiencing multiple deprivation in the 3 parishes.

With the exception of Maer parish, the proportion of households experiencing deprivation in the NA is higher than in NuL. In Chorlton parish it is significantly higher than for both NuL

and England. While the measure indicates in part the low level of access to services in a very rural area, Figure 4.8 provides a strong corrective to onlookers' perception of homogeneous affluence within the NA.

Figure 4.8 Percentage of households experiencing multiple deprivation (2010), parishes compared to NuL and England



Source: ACRE Rural community profiles

4.5.1 Disability and health

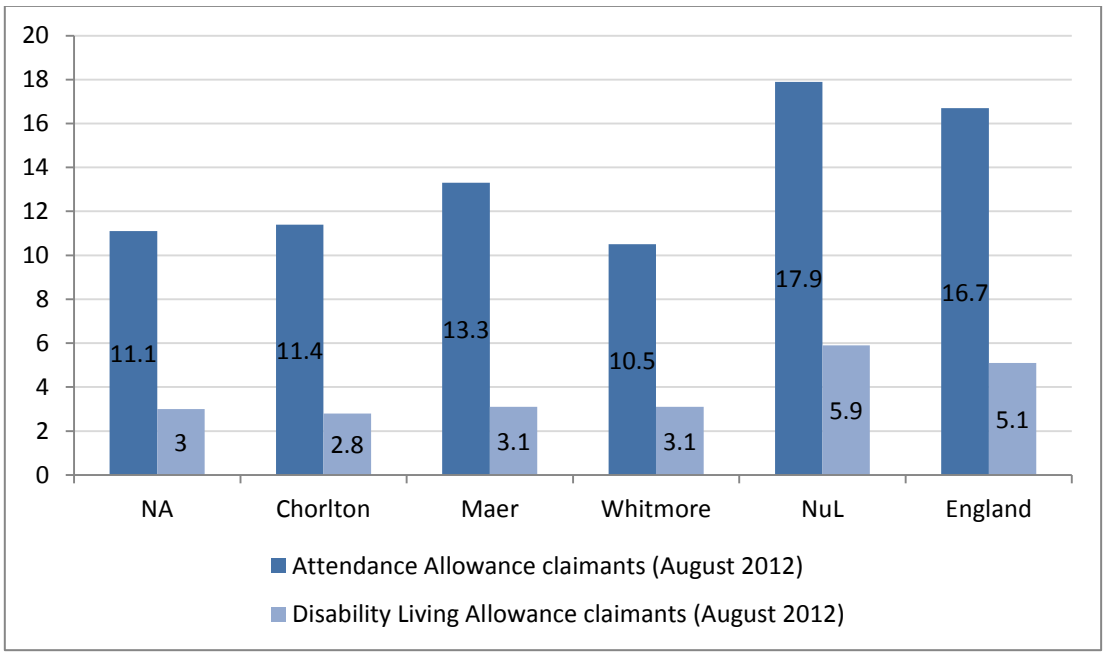
4.5.1.1 Disability

In August 2012 the population of the NA had a lower level of Attendance Allowance (AA) and Disability Living Allowance (DLA) claimants as compared NuL or England (Figure 4.9). There was little variation between the parishes for DLA, but Maer parish had a somewhat higher proportion of AA claimants.

AA is a benefit available to severely disabled people aged 65+ who need help with personal care; DLA is available to disabled under-65s to help with the extra costs of living with a disability. The generally lower levels of claimants for both allowances in the NA may reflect lower levels of severe disability and need for assistance with personal care in the NA as compared to NuL and England. However, it is well known that the level of take-up of such benefits is generally well below the actual level of qualification to receive them. Rather than

a low level of disability and care need, the low level of claimants in the NA, especially for AA, may indicate (i) a generally low level of take-up, (ii) in some instances possibly combined with favourable financial circumstances, (iii) reliance on a spouse or other family members and friends for assistance.

Figure 4.9 Percentage of persons claiming attendance/disability allowances, NA and parishes compared to NuL and England



Source: ACRE Rural community profiles

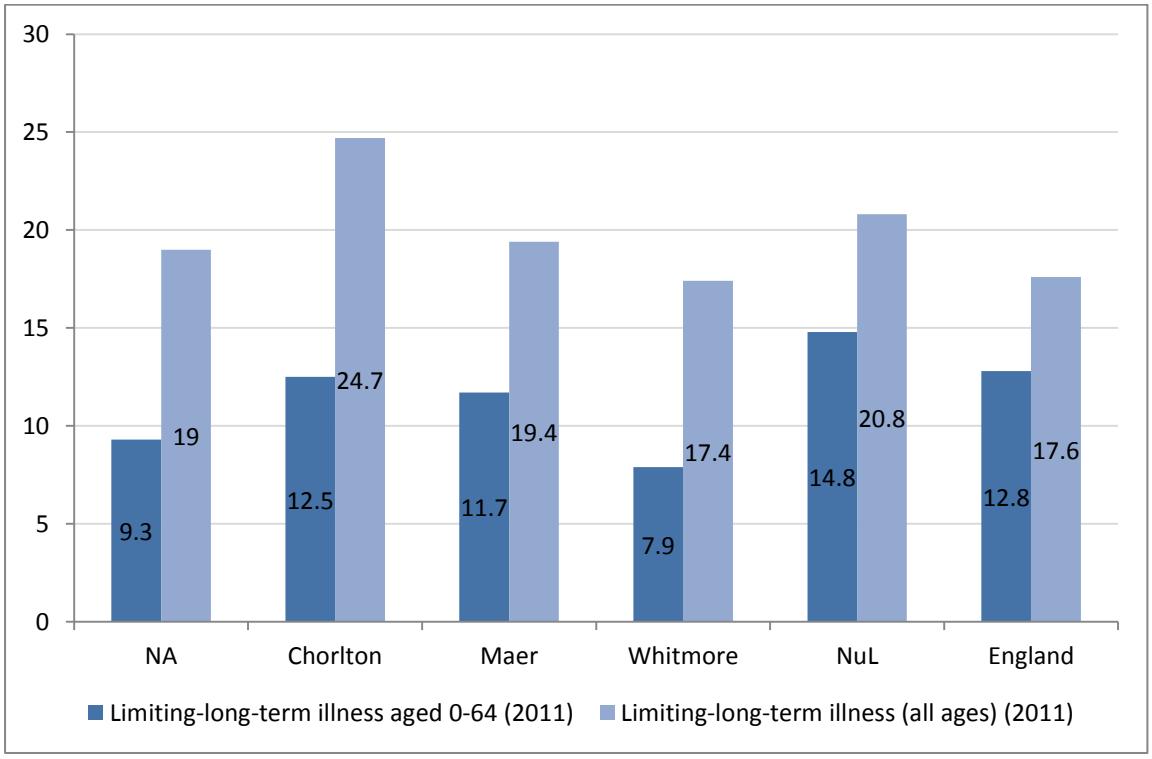
4.5.1.2 Health

Limiting long-term illness (LLTI) in the 0–64 age group is less across the NA than for NuL and England, but there is significant variation across the parishes (Figure 4.10). In 2011 the level in Whitmore parish was about half that of NuL. Chorlton and Maer parishes had 4.6% and 3.8% more LLTI than Whitmore, and in Chorlton parish the level was very close to that for England.

In 2011 the percentage of LLTI across all age groups was twice that for the 0–64 age group. This provides an indication of the higher levels of LLTI among the 65+ age group. On the other hand, among the 0–64 age group there was a lower percentage of LLTI in the NA than in NuL and England. At 19% across the NA for all age groups, the percentage of LLTI was only 1.8% below NuL, and 1.4% greater than for England as a whole. The lowest level of LLTI was

17.4% in Whitmore parish, where it was equal to England. Chorlton parish had the highest level of LLTI: at 24.7% it was 3.9% greater than for NuL and 7.1% greater than for England.

Figure 4.10 Percentage of persons experiencing limiting long-term illness, NA and parishes compared to NuL and England



Source: ACRE Rural community profiles

Box 4.5 Issues: providing for care needs in the local community

Generally speaking, the lower levels of AA and DLA claimants and of LLTI among the 0–64 age group in the NA indicate a good level of health among the population, and the figures for LLTI among the under-65 population show somewhat better health in the NA than in NuL as a whole.

Disability

Nevertheless, at 11.1% in 2012 the number of AA claimants in the NA indicates a significant proportion of the population aged 65+ who are in need of assistance with personal care. Taking into account the ageing population profile and the possibility that the low numbers of claimants may mask a hidden need, this has implications for the provision of social care and other facilities for an ageing population in a rural area (see also above, Box 4.1).

LLTI

The percentages of LLTI across all age groups as compared to the 0–64 age group are indicative of the level of LLTI among the older population. Again, this has major implications for social and healthcare and medical services provision for an ageing population in a rural area, including both local provision and emergency and out-of-hours care and hospitalisation.

Social care

An inadequate supply of low-cost housing in the NA leads to difficulty in obtaining social care for an ageing population. Care providers must travel long distances from the urban area and this, combined with long distances between clients, leads to scheduling difficulties. Individuals in need of care assistance may find it difficult or impossible to obtain care, and residents who would prefer to continue living in the NA are sometimes forced to move into the urban area or into care homes. The difficulties of arranging for social care in the rural area can also have implications for discharge of patients from hospital.

Opportunity

There is an opportunity for the 3 parish councils to work together to establish a non-profit social care agency in the NA along the lines of NED Care (North East Dartmoor Care, www.nedcare.org). The agency would employ care staff who would provide a service within the three parishes, and the parish councils would ensure that low-cost housing was available within the NA to enable carers to live locally. A social enterprise of this kind could evolve from providing care for people in their own homes to eventually establishing sheltered housing and/or a care home to cater for the needs of NA residents needing a higher level of care. The possibility of providing a service in partnership with the local GP practice could also be explored.

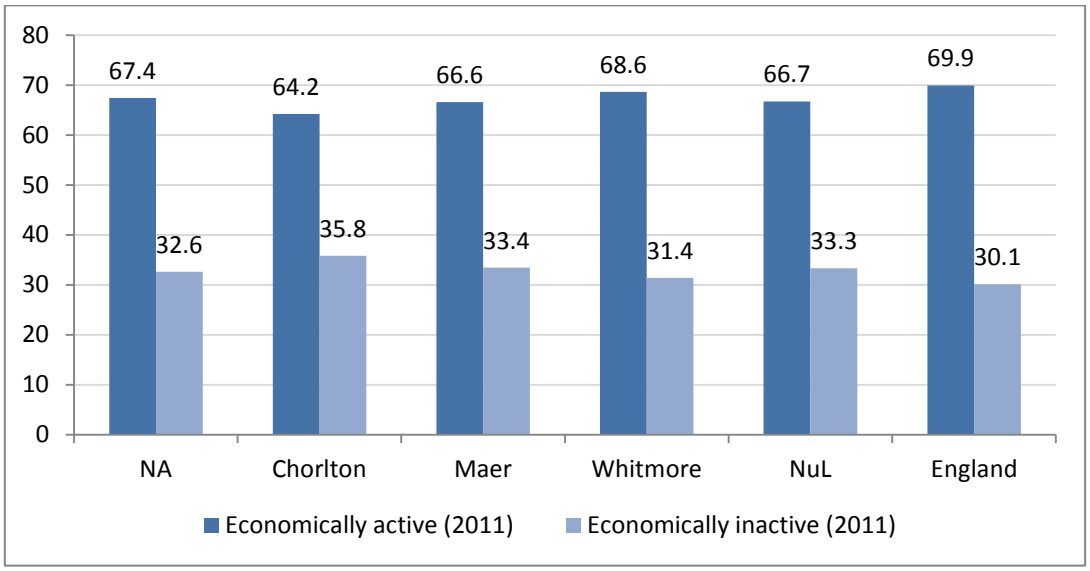
> [P]eople in lower-waged occupations are needed in the rural area to fulfil roles in the social sector. Businesses and schools need cleaners, elderly and disabled people need carers. Where do our caring professions come from now? They come out from the town and drive long miles to visit their rural clients.
>
> [Isn't] there a case … to build … housing for people in low-waged occupations? Otherwise, farmers will continue to have to provide housing on agricultural tenancies for their workers, and other low-waged people such as carers will continue to drive long miles from town to serve their clients.
>
> http://www.cmaw-neighbourhoodplan.org.uk/blog, report on Roadshow at Stableford, 8 December 2015

4.6 Employment trends

4.6.1 Economic activity

At Census 2011 the level of economic activity among the working-age population across the NA was marginally higher than for NuL and slightly lower than for England (Figure 4.11). There was small variation between the parishes, with Whitmore having the highest level of activity at 68.6% and Chorlton lowest at 64.2%. The proportion of economically inactive residents was marginally lower across the NA than for NuL and slightly higher than for England, again with small variation between the parishes. Chorlton had the highest level of economic inactivity at 35.8%. The 'economically inactive' group is defined as including students, home-makers, carers and retired people.

Figure 4.11 Economic activity (% of age group 16–74), NA and parishes compared to NuL and England



Note: 'Economically inactive' includes students, home-makers, carers, retired people.
Source: Census 2011, table KS601EW

4.6.2 Modes of employment

4.6.2.1 Self-employment

Within the economically active population, the NA has a significantly higher level of self-employment than NuL and England (Figure 4.12). At Census 2011 self-employment across the NA was 242% the level in NuL, and in Maer parish it was 282% the level in NuL.

4.6.2.2 Full- and part-time employment

The level of part-time employment was very similar in the NA to both NuL and England, with little variation between the parishes (Figure 4.13). Across the NA the level of full-time employment was 6% less than for NuL and England, with small variations between parishes.

4.6.2.3 Working from home

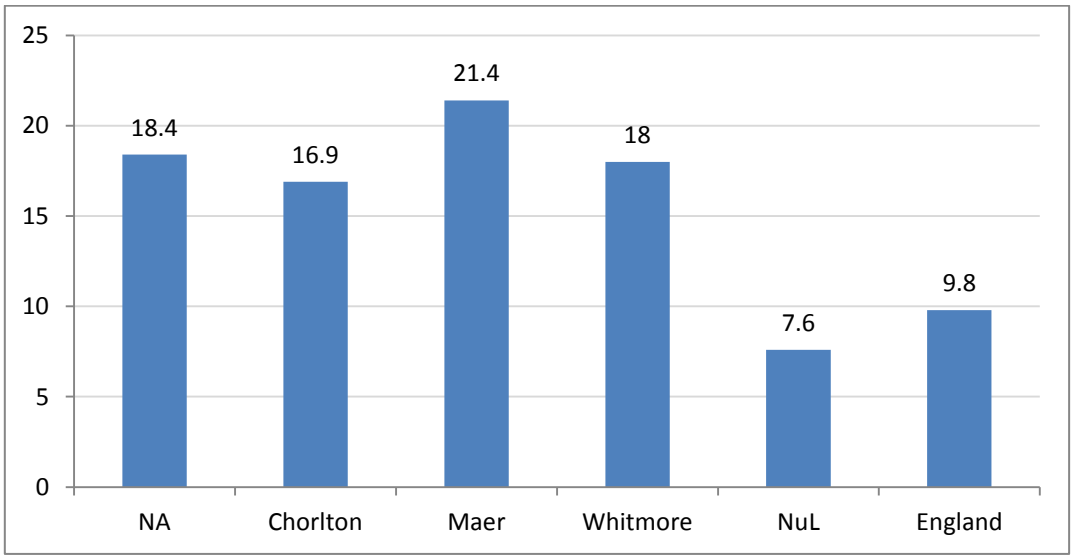
Within the working-age population group at Census 2011 the proportion of people working from home in the NA was 3.5 times greater than in NuL or England (Figure 4.14). The proportion was greatest in Maer parish (5 times greater), and least in Whitmore parish (2.7 times greater).

Box 4.6 Opportunity: lifestyle choices

The high levels of self-employment and working from home suggest that people are making lifestyle choices to combine self-employment and/or home working with rural living.

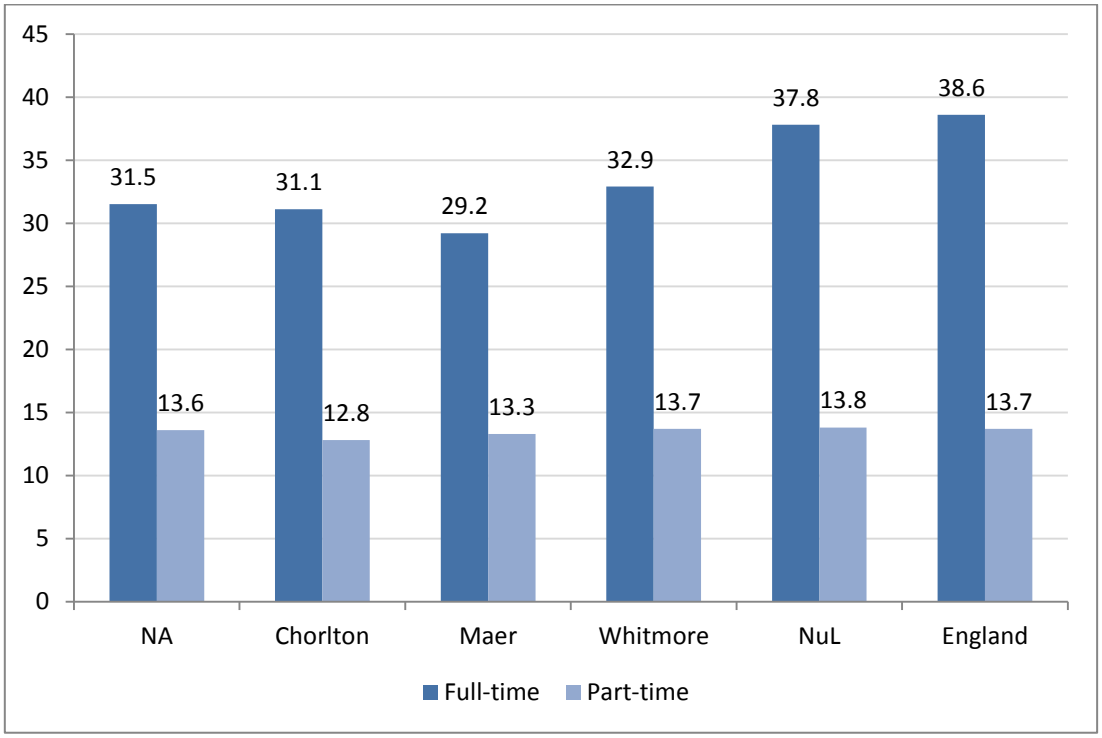
This suggests that there are real opportunities in the NA for economic growth and diversification through encouraging the establishment of small and micro-businesses that are compatible with the rural environment.

Figure 4.12 Percentage of people self-employed (age group 16–74), NA and parishes compared to NuL and England



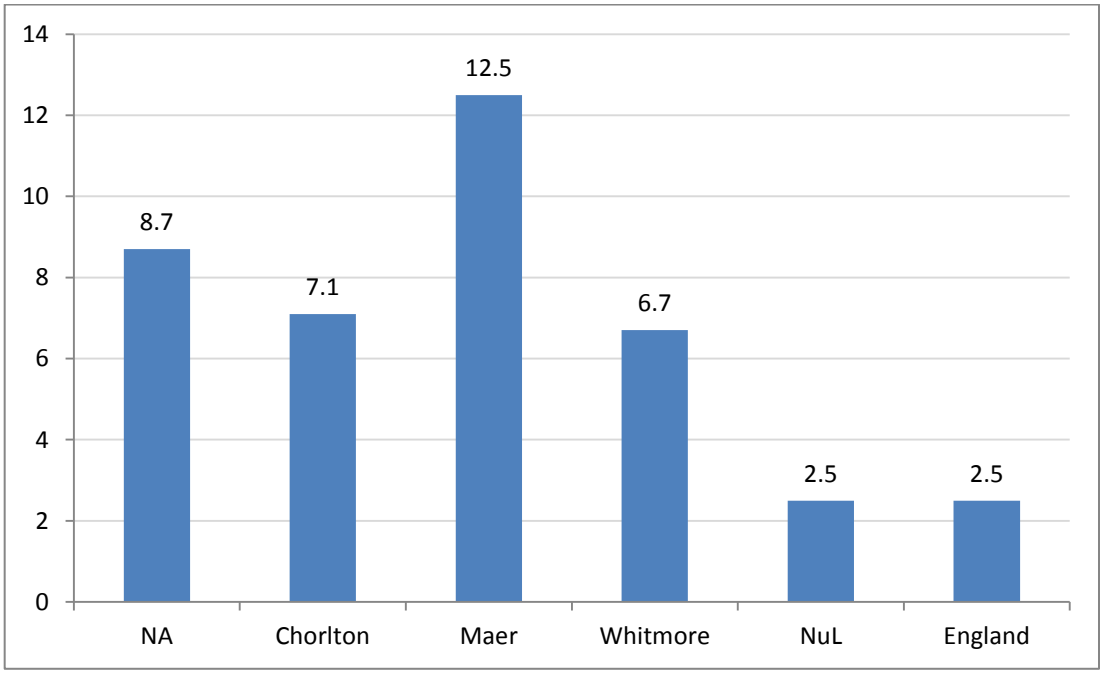
Source: Census 2011, table KS604EW

Figure 4.13 Full-time and part-time employment (% of age group 16–74), NA and parishes compared to NuL and England



Source: Census 2011, table KS604EW

Figure 4.14 People working from home (percentage of age group 16–74), NA and parishes compared to NuL and England

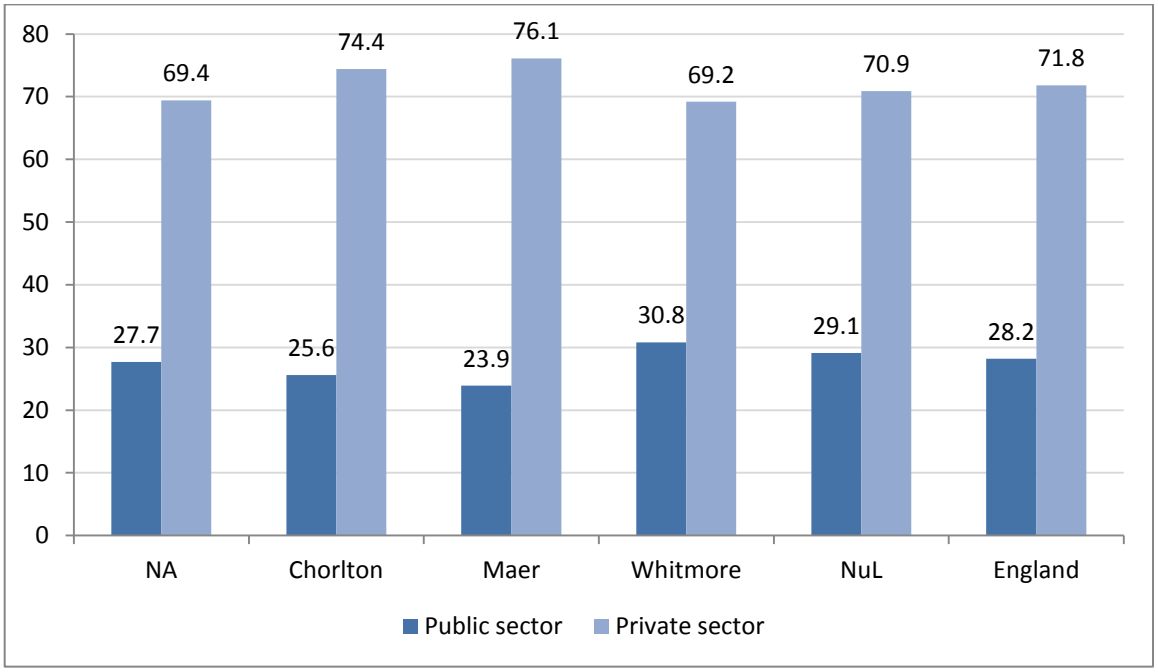


Source: Census 2011, table KS604EW

4.6.3 Sectors of employment

Employment in the public sector is slightly less across the NA than in NuL and England (Figure 4.15). At Census 2011 there was a variation of 6.9% between the parishes. Maer parish had the least amount of public sector employment (23.9%), which tallies with it also having the greatest proportions of self-employment and working from home. Conversely, Whitmore parish, which had the least proportion of people working from home and slightly below the NA average for self-employment, had the greatest proportion of public sector workers (30.8%).

Figure 4.15 Percentage of people employed in public or private sector (age group 16–74), NA and parishes compared to NuL and England



Source: Census 2011/ACRE Rural community profiles

Box 4.7 Issue: serving the day-time population

The economically inactive, home-workers and part-time employees comprise a segment of the adult population many of whom may be in the local area during the day and therefore in need of services and facilities or making use of community facilities.

On the assumption that there is no overlap between home-workers and part-time employees, across the NA 55% of the working-age population (equalling 38% of the total NA population) may be in the NA during the day on working days.

The group analysed here is the 16–74 years age group; to the numbers who may be in the NA during the day should be added those aged 75+, another 11% of the NA population, making a total of 49%. In other words, up to half of the adult population may be present in the NA during the day on working days. As in other instances, there will some small variation between the parishes.

Opportunity

The above suggests that there is a need in the NA for further development of community facilities, including a small community drop-in/café, retail businesses, services and voluntary activities, to serve the daytime population. The parish councils, in particular Whitmore Parish Council need to be alert to opportunities to meet needs in these areas.

4.6.4 Out-of-work benefits

There is a very low level of unemployment among residents across the NA. Levels of Jobseekers' Allowance and incapacity benefits are significantly lower in the NA than for NuL or England (Figure 4.16). Across the NA Jobseekers' Allowance claimants were 35% of the level in NuL in February 2013, while the numbers receiving incapacity benefits were 50% of the level in NuL in August 2012.

4.6.5 Qualifications, industry and occupations

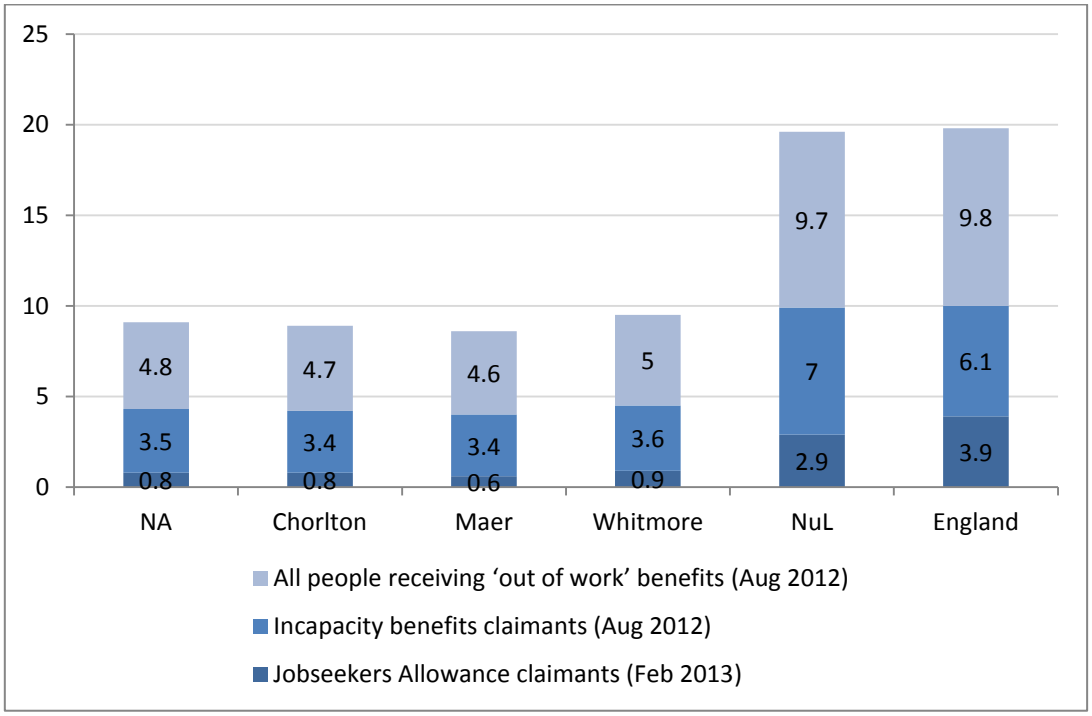
4.6.5.1 Qualifications

Across the NA qualifications are significantly higher than in NuL and England (Figure 4.17).

At Census 2011 37.9% of the NA population aged 16+ had Level 4+ (degree level) qualifications, as compared to 22.5% in NuL. The proportion of people with Level 3 (A levelor equivalent) and above qualifications was 49%, as compared to 37% in NuL.

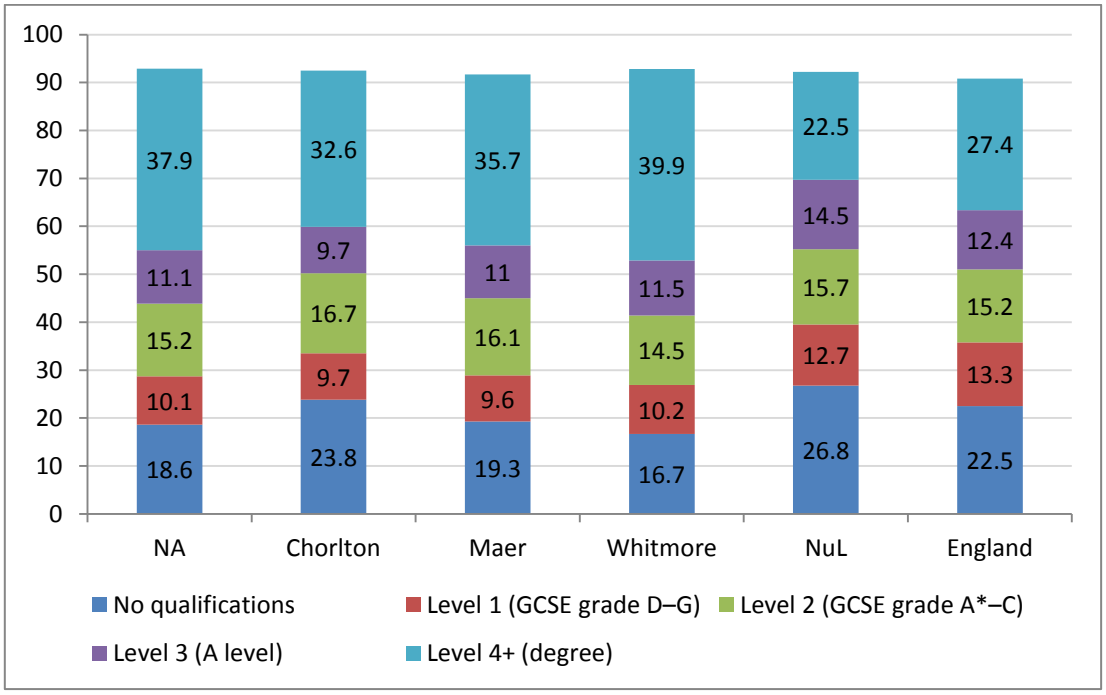
Across the NA the proportion with no qualifications was correspondingly low at 18.6%, as compared to NuL (26.8%). Chorlton parish had the highest proportion of 16+ residents with no qualifications, at 23.8% – slightly higher than for England but still below NuL.

Figure 4.16 Percentage of people receiving Jobseekers' Allowance and incapacity benefits (age group 16–74), NA and parishes compared to NuL and England



Source: DWP/ACRE Rural community profiles

Figure 4.17 Qualifications (percentage of people aged 16+), NA and parishes compared to NuL and England



Source: Census 2011, table KS501EW

4.6.5.2 Industry of employment

Across the NA the 3 largest industries of employment at Census 2011 were Retail, Human health and social work, and Manufacturing, together accounting for 40% in the working-age group. This is broadly similar to NuL, where the same industries predominate and account for 45.4%. Figure 4.18 illustrates employment in these 3 industries and contrasts it with NA's major economic sector, Agriculture, forestry and fishing.

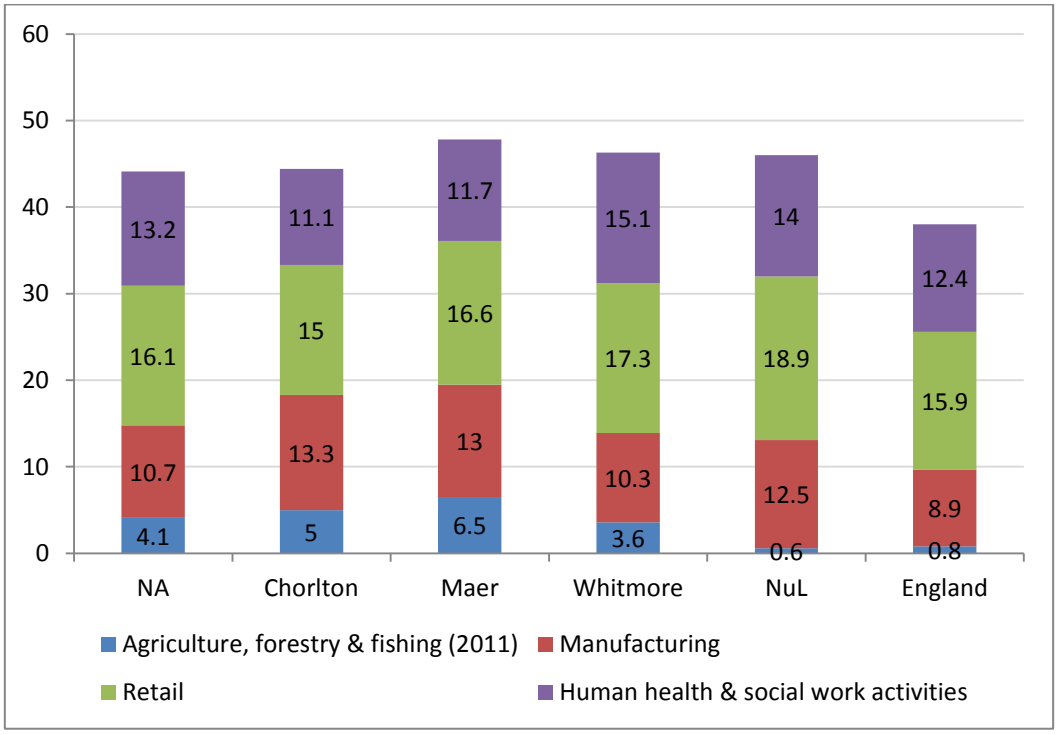
The three main sectors are fairly comparable in size to NuL. The biggest differences between the NA and NuL (not charted here) are in Agriculture, forestry and fishing, Information and communications, and Professional, scientific and technical, which together account for 15.6% of the working-age group in the NA, as compared to 7.7% in NuL and 11.6% in England.

4.6.5.3 Occupational groups

Across the NA at Census 2011 the 3 largest occupational groups were Managers and senior officials, Professional occupations, and Skilled trades occupations, accounting for 54.2% of the working-age population (Figure 4.19). This is markedly different from NuL and England, where the same groups account for 38.1% and 39.8%, respectively. Figure 4.19 contrasts these groups with elementary occupations, which accounted for 6.6% in the NA, as compared to 13.1% in NuL. There is a marked difference between the parishes, with Chorlton parish having the highest proportion in elementary occupations at 10.6% (close to the level for England) and Whitmore the lowest at 5.8%.

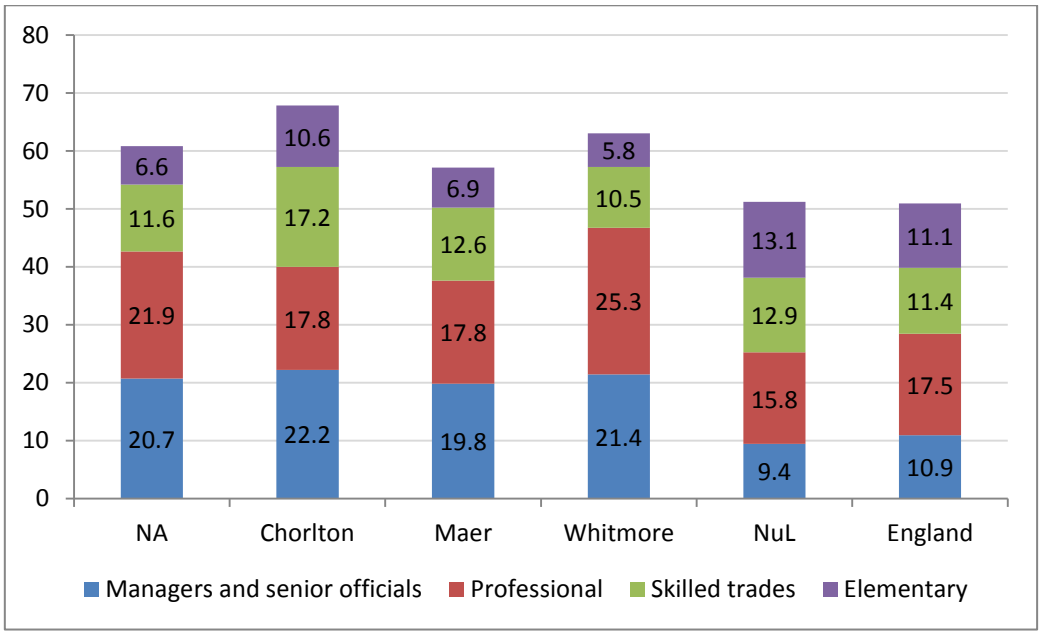
Smaller occupational groups represented in the NA and not charted in Figure 4.19 are Associate professional and technical, Administrative and secretarial, Personal service, Sales and customer service, Process, plant and machine operatives, which together account for 35.9% of occupations, as compared to 48.8% in NuL.

Figure 4.18 Percentage of people employed in three main industries and in agriculture, NA and parishes compared to NuL and England



Source: Census 2011, table KS605EW

Figure 4.19 Occupational group (percentage of people aged 16–74), NA and parishes compared to NuL and England



Source: Census 2011, table KS608EW

Box 4.8 Issue: urban-focused occupations

- The largest industries of employment represented among the NA population are not typically rural and are not industries of high employment in the NA. Together, these major industries of employment and the high levels of managerial and professional occupations and predict a high level of commuting to work (see below, section 4.7).
- While agriculture is the single largest sector of economic activity in the NA, it employs only 4.1% of the NA population. This reflects the long-term trend of mechanisation and automation and consequent declining employment in agriculture. The trend is set to continue with the ongoing development of new technologies and computerisation, such as driverless machinery and computerised dairy and herd management.
- Overall, the qualifications, occupations and industries represented in the NA, together with the population growth already noted, indicate a major social disruption in the countryside and the influx of a predominantly urban population.

Opportunity

The NA has a high level of qualifications and skills, as shown in Figure 4.17. People with a high level of qualifications and/or skills are more likely to run or start their own business, and this is reflected in Figure 4.12 by the high proportion of self-employment in the NA. This presents opportunities for establishment of businesses in the NA and development of the local economy.

Box 4.9 Issue: providing for a local labour force

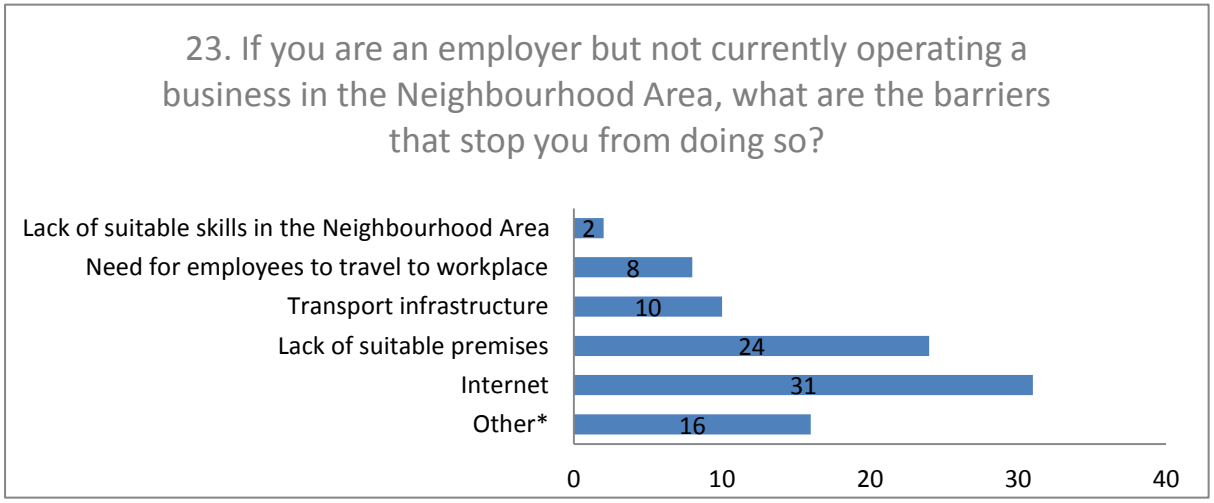
In order for local businesses to establish and grow, the NA needs housing types and a transport system that will enable employees to live and work in the NA.

> Aston is a pretty good place to run a business – provided that it doesn't grow, you have no employees and it doesn't make too many demands on the internet. The lack of transport has forced one resident to move his business from Aston into Stoke because he can't get people to come to work in Aston. 'I could employ people here, but . . .'

> Here we have a triple conundrum: there are no local jobs because the place is so isolated as to make them inaccessible; but equally, there are no people locally to work in the kinds of jobs that would be on offer; and the dwellings in Aston are not affordable by the people who would be employed by local businesses. This is not merely an economic problem, but a socio-economic problem.
>
> www.cmaw-neighbourhoodplan.org.uk/blog/, report on Roadshow at Aston 26 November 2015

Box 4.10 Residents' Survey

The Residents' Survey asked employers who were not currently operating a business in the NA to indicate the barriers that prevented them from doing so. The 16 who responded 'Other' stated that their business was not suited to the NA. This supports the conclusion drawn from evidence in the ACRE reports, that the industries of employment represented among the NA population are predominantly urban-based, not rural.



4.7 Transport and car ownership

4.7.1 Overview

The information and data presented in the following subsections illustrates the very limited public transport provision in the NA, the distances from the NA to workplaces and services and the consequent extraordinarily high dependence on private cars across the NA. The following points emerge from a critical analysis of the data.

- Access to employment and services is a major factor in quality of life.
- The limited public transport provision in the NA makes dependence on private motor cars the only option for access to many services, including at certain times of day (e.g. evenings) and at weekends and on bank/public holidays.
- Access to services can be especially difficult for people in older and younger age groups, and for those who cannot drive or with limited mobility.
- The need for older teenagers / young adults living with their parents to be independent in terms of transport contributes to the high level of car ownership.

4.7.2 Public transport services

4.7.2.1 Bus service

Scheduled public transport is limited to a single bus service operating on a route along the A53, with a short stretch on minor roads and the A51 between Blackbrook and Baldwins Gate.

The 164 bus service Shrewsbury–Market Drayton–Newcastle–Hanley is operated by Arriva West Midlands and runs Monday–Friday and Saturday during working hours only. The last bus home from Shrewsbury and Market Drayton leaves Shrewsbury at 1615hrs and Market Drayton at 1711hrs (Figure 4.20). The last bus home from Hanley and Newcastle on weekdays leaves Hanley at 1815hrs. On Saturdays the last bus home is 1 hour earlier in each direction. There is no Sunday service.

There are a total of 13 bus stops in each direction in Maer parish and Whitmore parish, including at Blackbrook, Baldwins Gate and Whitmore village (Figure 4.21). Some bus stops are located on a footway, some have on a small tarmacked refuge by the roadside and some have no off-road provision for waiting passengers.

- Blackbrook residents have a choice of 3 stops. The westbound stop on the A51 at White Farm and the stop in Hungersheath Lane have no off-road refuge.
- Maer village residents walk to the stops at Maer War Memorial. The route has no footway but there is off-road provision at the stops.
- Hill Chorlton residents walk to the stops in Woodside at Maerfield Gate. The route along the A51 has a footway and the bus stops have off-road refuges.

Figure 4.20 Service 64/164 Shrewsbury to Hanley bus timetable, revised at September 2017

Shrewsbury to Market Drayton, & Newcastle (164) via Shawbury — **64, 164**

Monday to Friday - towards Hanley Bus Station

	164	64	164	164[1]	164[2]	64		164	64		64	64	64
Shrewsbury Bus Station	--	0650	--	--	--	0915		--	15		--	1715	1815
Shawbury White Lodge Park	--	0705	--	--	--	0935		--	35		--	1735	1835
Hodnet The Grove	--	0716	--	--	--	0946		--	46		--	1746	1846
Buntingsdale Estate Tern Hill Barracks	--	0725	--	--	--	0955	Then	--	55	past	--	1755	1855
Market Drayton Bus Station	0731	0738	0741	0911	0911	1008	at	11	08	each	1711	1808	1908
Loggerheads Hotel	0741	--	0751	0921	0921	--	these	21	--	hour	1721	--	--
Ashley St Johns Church	0746	--	0756	0926	0926	--	mins	26	--	until	1726	--	--
Baldwin's Gate Sheet Anchor PH	0757	--	0807	0937	0937	--		37	--		1737	--	--
Newcastle Town Centre Bus Station	0810	--	0825	0950	0950	--		50	--		1750	--	--
Hanley Bus Station	--	--	0845	1005	1005	--		05	--		1805	--	--

[1]Term Time Only [2]Only During School Holidays

Monday to Friday - towards Shrewsbury Bus Station

	64[1]	64[1]	64[2]	164	64	164	64		164	64		64	64	164	64	164	64
Hanley Bus Station	--	--	--	--	--	0915	--		15	--		1615	--	1715	--	1815	--
Newcastle Town Centre Bus Station	--	--	--	0810	--	0930	--		30	--		1630	--	1730	--	1830	--
Baldwin's Gate Sheet Anchor PH	--	--	--	0823	--	0943	--		43	--		1643	--	1753	--	1843	--
Ashley St Johns Church	--	--	--	0834	--	0954	--		54	--		1654	--	1804	--	1854	--
Loggerheads Hotel	--	--	--	0839	--	0959	--	Then	59	--	past	1659	--	1809	--	1859	--
Market Drayton Bus Station	0647	0725	0742	0849	0912	1009	1012	at	09	12	each	1709	1712	1819	1822	1909	1912
Buntingsdale Estate Tern Hill Barracks	0700	0740	0755	--	0925	--	1025	these mins	--	25	hour until	--	1725	--	1835	--	1925
Hodnet The Grove	0709	0755	0804	--	0934	--	1034		--	34		--	1734	--	1844	--	1934
Shawbury White Lodge Park	0720	0810	0815	--	0945	--	1045		--	45		--	1745	--	1855	--	1945
Battlefield Red Lion Hotel	0725	0815	0820	--	0950	--	1050		--	50		--	1750	--	1900	--	1950
Shrewsbury Bus Station	0738	0835	0835	--	1005	--	1105		--	05		--	1805	--	1915	--	2005

[1]Term Time Only [2]Only During School Holidays

Saturday - towards Hanley Bus Station

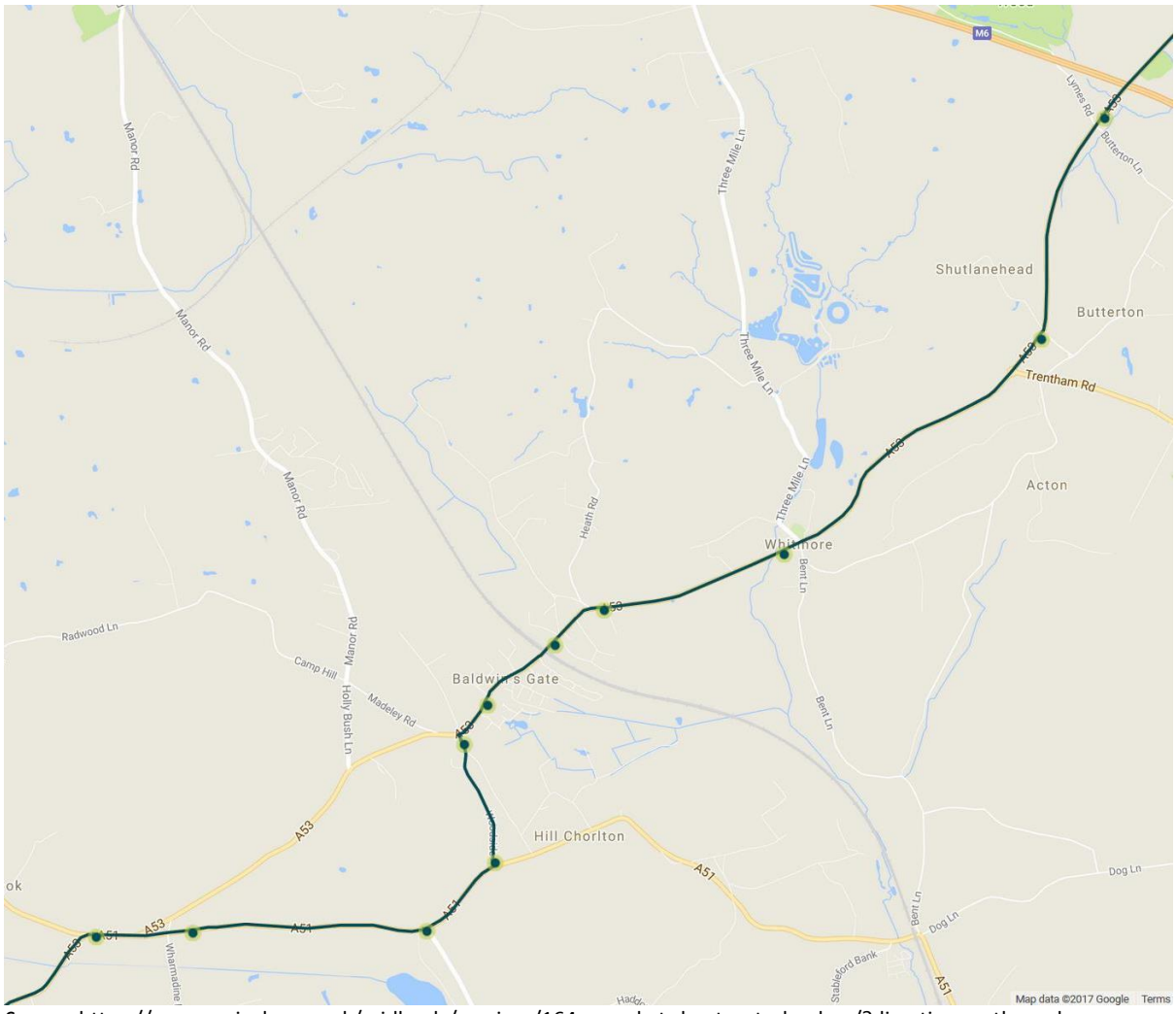
	64	164	64		164	64		64	64	64	64
Shrewsbury Bus Station	0650	--	0815		--	15		--	1615	1715	1815
Shawbury White Lodge Park	0705	--	0835		--	35		--	1635	1735	1835
Hodnet The Grove	0716	--	0846		--	46		--	1646	1746	1846
Buntingsdale Estate Tern Hill Barracks	0725	--	0855	Then	--	55	past	--	1655	1755	1855
Market Drayton Bus Station	0738	0741	0908	at	11	08	each	1611	1708	1808	1908
Loggerheads Hotel	--	0751	--	these mins	21	--	hour until	1621	--	--	--
Ashley St Johns Church	--	0756	--		26	--		1626	--	--	--
Baldwin's Gate Sheet Anchor PH	--	0807	--		37	--		1637	--	--	--
Newcastle Town Centre Bus Station	--	0825	--		50	--		1650	--	--	--
Hanley Bus Station	--	0845	--		05	--		1705	--	--	--

Saturday - towards Shrewsbury Bus Station

	64	64	164	64		164	64		64	64	64
Hanley Bus Station	--	--	0915	--		15	--		1715	--	--
Newcastle Town Centre Bus Station	--	--	0930	--		30	--		1730	--	--
Baldwin's Gate Sheet Anchor PH	--	--	0943	--		43	--		1743	--	--
Ashley St Johns Church	--	--	0954	--		54	--		1754	--	--
Loggerheads Hotel	--	--	0959	--	Then	59	--	past	1759	--	--
Market Drayton Bus Station	0742	0912	1009	1012	at	09	12	each	1809	1812	1912
Buntingsdale Estate Tern Hill Barracks	0755	0925	--	1025	these mins	--	25	hour until	--	1825	1925
Hodnet The Grove	0804	0934	--	1034		--	34		--	1834	1934
Shawbury White Lodge Park	0815	0945	--	1045		--	45		--	1845	1945
Battlefield Red Lion Hotel	0820	0950	--	1050		--	50		--	1850	1950
Shrewsbury Bus Station	0835	1005	--	1105		--	05		--	1905	2005

Source: https://www.arrivabus.co.uk/GetTimetable/?guid=f2b29056-0724-4891-a45b-5203f8fa3255&id=30600&date=170902-180111

Figure 4.21 Service 64/164 Shrewsbury to Hanley bus route through the NA



Source: https://www.arrivabus.co.uk/midlands/services/164---market-drayton-to-hanley-/?direction=outbound

- Residents at the northern end of Woodside and Sandy Lane walk to the stop at the northern end of Woodside. There are no footway and no off-road refuges.
- Baldwins Gate residents walk to the stops on the A53 at Sandyfields or the Sheet Anchor. The stops are on the footway.
- Whitmore Heath residents walk to the stops on the A53 at the Sheet Anchor or near the Common Lane junction. The route to the A53 has no footway.
- Whitmore village residents walk to the stops on the A53. The route has a footway.
- Acton residents walk to the stop on the A53 at the Trentham Road junction. The route to the A53 has no footway but the stop has an off-road refuge.
- Butterton and Shut Lane residents walk to the stops on the A53 at Shut Lane Head. The route to the A53 has no footway. The westbound stop has an off-road refuge, the eastbound is on the footway.

- The Lymes residents walk to the stop on the A53 at Butteron cross-roads. The route to the A53 has no footway but the stops are on the footway.

Residents at Chapel Chorlton, Stableford, Weymouth/Willoughbridge, Aston, Manor Road and Madeley Park Wood and in other isolated parts of the NA have no access on foot to the bus service.

Box 4.11 Issue: limitations of bus service – a Planning Inspector's comments

The limitations of the bus service were highlighted by a Planning Inspector in January 2017. The appeal in question concerned a site at Maerfield Gate in Maer parish adjacent to a stop on the 64/164 bus route.

> 19. The appellant has referred to a bus service which operates the route between Shrewsbury and Market Drayton and also Newcastle and Hanley to Market Drayton. However as noted by [a] previous Inspector, there are limitations to the service. These include two early morning buses …, no service in the evenings and no service on Sundays (the timetable states Mondays to Saturdays). Whilst the service may be hourly during the day, that is not always convenient for commuting purposes or for a specific timed appointment such as for a dentist or doctor as arrival or departure times may not always exactly correspond with the desires of future occupants [of the proposed development]. Future occupants [of the proposed development] might also work elsewhere other than the locations served by the bus service.
>
> 20. There is no specific information before me as to the exact distance of goods and services that future occupants would be reliant upon, such as supermarkets, the nearest GP practice or school, from the appeal site and whether or not these would be readily accessible via the bus route. Additionally, future occupants undertaking large weekly food shops or travelling with children may well view the use of the private car as more convenient to undertake trips as it is often easier to carry large volumes of shopping or bulky items such as prams this way. For these reasons, whilst there is a bus service available that future occupants could use, I consider it likely that future occupants would be likely to undertake the majority of trips via the car as this would be likely to be seen as a more convenient option.
>
> Appeal Decision APP/P3420/W/16/3163358, 24 January 2017

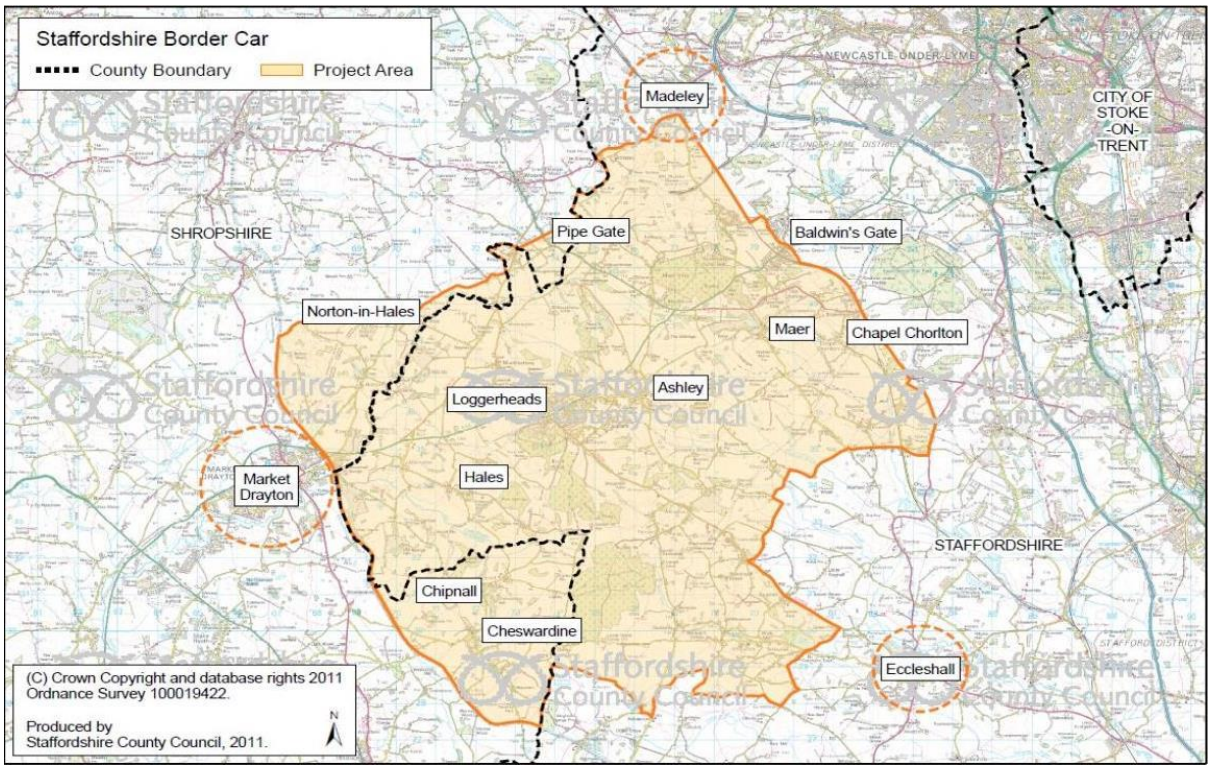
The Inspector's comment that future occupants would be likely to take the majority of trips by car, for the reasons stated in paragraphs 19 and 20, is applicable across the NA area.

4.7.2.2 Border Car

The Border Car is a 12-seater minibus operated and subsidised by Staffordshire County Council (SCC) and runs during the day time, Monday–Friday. It offers 'dial-a-ride' transport to and from Market Drayton or interchange points at Baldwins Gate, Ashley and

Loggerheads, from where users can link to other bus services. It can be used by anyone in the operating area who doesn't have access to a regular bus service or who needs help in using the bus due to disability or mobility problems. There are standard single and return adults', children's and concessionary fares. The service was to be withdrawn in April 2018 following a decision by SCC to cut subsidies to public transport. However, the decision was 'called in' by several councillors. Following a further review, the service will continue in its current form for the foreseeable future.

Figure 4.22 Staffordshire Border Car operating area



Source: https://www.staffordshire.gov.uk/transport/publictransport/buses/Plan-your-journey/Call-and-Book-Services/Border-Car/Border-Car-Operating-Area.pdf

4.7.2.3 Rural Runabout

The Rural Runabout is operated by the Newcastle-under-Lyme Rural Parishes' Transport Scheme and operates an 11-seater minibus that is available to residents across the rural area. The minibus is driven by volunteer drivers and can be hired by groups of residents (not necessarily formally constituted groups) for a variety of trips such as shopping, theatre visits, days out etc.

4.7.2.4 School and college transport

SCC provides bus transport for secondary school children attending the high school in Madeley. The main stop is outside Baldwins Gate primary school and routes are planned so as to pick up/set down children living in other settlements and isolated locations.

SCC also provides some bus transport for pupils attending the primary school in Baldwins Gate. A number of routes serve both this school and Madeley High School.

A private minibus is available for secondary school children attending the fee-paying school in Newcastle; otherwise children must travel on the 64/164 bus service.

Students attending college in NuL or SoT must use the 64/164 bus service.

4.7.2.5 Taxi service

There is currently no locally based hackney carriage taxi service. Residents needing a taxi must hire from a service based outside the NA, i.e. NuL and Market Drayton. Other services may also be available.

Box 4.12 Residents' Survey

Comments on public transport.

'Disappointed with the lack of bus services between Blackbrook and Woore/Pipe Gate. It is difficult for non-drivers to get into local towns.'

'Why can there not be a circular bus route between Newcastle, Baldwins Gate and Madeley?'

'If you cannot drive or afford a car in Chapel Chorlton you are trapped.'

'I wouldn't want a bus to come through the village of Aston but one stopping on the main road would be useful.'

Box 4.13 Issues: public transport

Bus routes and times

- In terms of destinations served, the existing bus routes and minibus services do not meet all public transport needs in the NA. Residents express a need for public transport to other destinations where shopping and services are available, specifically to Woore and to Madeley (see Box 4.12).

- The limited times of the 64/164 bus service mean that it is a not travel-to-work option for people working shifts or whose work schedule requires early or late starts/finishes. See also Box 4.11 regarding a Planning Inspector's comments on the limitations of the bus service both as a means of travel to work and for appointments and shopping in the urban area.

Publicity for minibus services

- It is clear from comments received in the Residents' Survey that the minibus services need to be better publicised in the NA (see Box 4.12).
- Better communication is needed from all 3 parish councils to residents via newsletters and parish notice boards.

School transport

- Although SCC provides some transport to the primary school, many children from outside Baldwins Gate must be brought to school by car, as the combination of distance, lack of footways on minor roads and the traffic conditions on the A53 make it unsafe for children to walk or cycle to school unaccompanied.

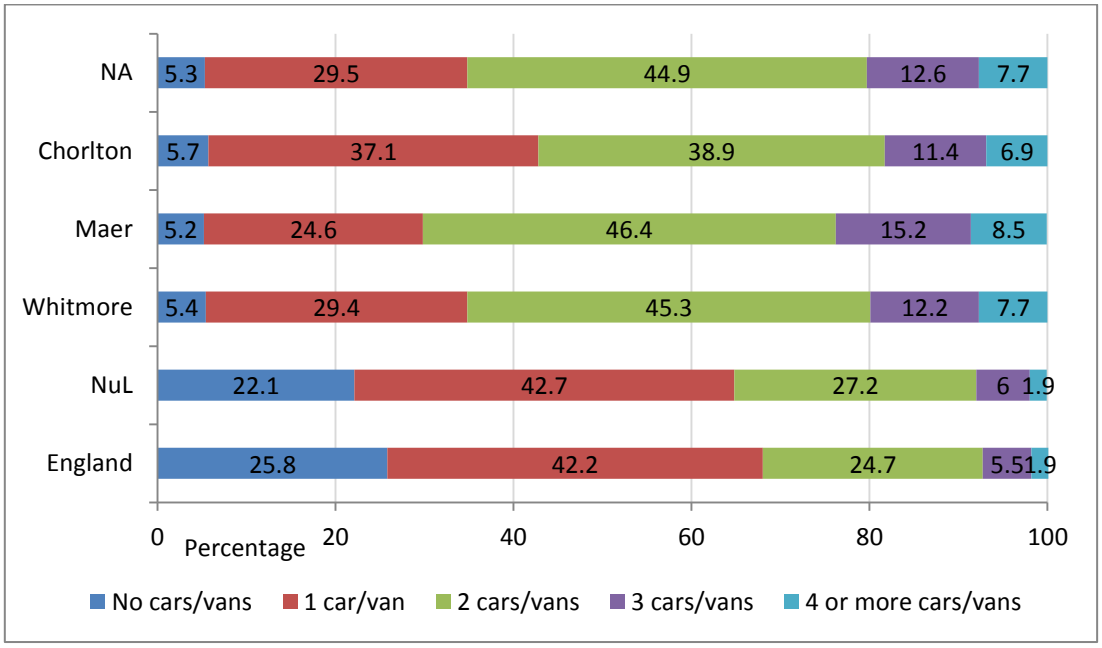
Opportunities

- There are opportunities for the 3 parish councils to work with the County Council and the parish councils of neighbouring NAs to define new bus routes that would serve the locally defined needs of the rural population.
- There is scope for a resident hackney carriage taxi driver to be based in the NA. There has been such a service based in Baldwins Gate in the recent past, but it has not been replaced since the taxi driver retired.

4.7.3 Car ownership

The level of car ownership in the NA is significantly higher than for the borough of NuL as a whole and for England (Figure 4.23). At Census 2011 only 5.3% of households across the NA had no car, as compared to 22.1% in NuL. Ownership of 2 cars per household was the norm in the NA (44.9%), compared to 1 per household in NuL (42.7%). Across the NA 3-car households were twice as common as in NuL; the proportion of households with 4+ cars was 4 times greater in the NA than for NuL and England. The proportion of multiple-car households was highest in Maer parish and lowest in Chorlton parish.

Figure 4.23 Car/van ownership per household (percentage), 2011 Census, NA and parishes compared to NuL and England



Source: Census 2011, table KS404EW/ACRE Rural community profiles

Box 4.14 Issue: car dependence

The high level of car ownership in the NA reflects the limitations of the public transport offer in relation to the actual needs of the community.

4.7.4 Distance travelled to work

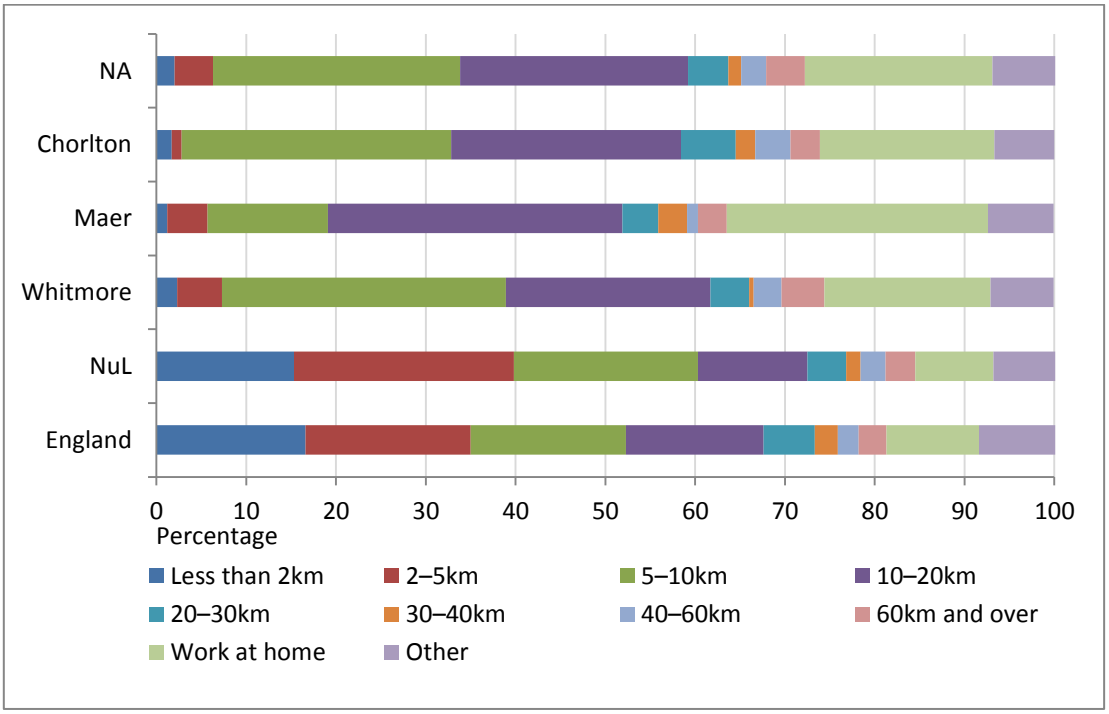
NA residents travel greater distances to work than do residents of NuL or of England (Figure 4.24 and Table 4.5). Across the NA at Census 2011 only 4.3% travelled up to 5km to work, as compared to 39.8% in NuL. In Chorlton parish as few as 2.8% travelled up to 5km, while in Whitmore parish the proportion was 7.3%.

Across the NA more than half (52.9%) travelled between 5km and 20km to work, as compared to 32.7% for NuL and England. The proportion of journeys greater than 20km was very similar for both the NA (13%) and NuL and England.

The average distance travelled to work was 20.9km, as compared to 14.1km for NuL and 14.9km for England.

The proportion of residents working mainly from home was 20.9% across the NA, as compared to 8.7% for NuL and 10.3% for England.

Figure 4.24 Distances travelled to work (percentages), 2001 Census, NA compared to NuL and England



Source: Census 2011, table QS702EW (data from Nomis 2 June 2017, percentages calculated)

Box 4.15 Residents' Survey

Distance travelled to place of work/study

Of those completing the Residents' Survey who were in work, 4.6% travelled up to 5km to work; 56.4% travelled between 5km and 20km; 25.8% travelled 20km or more; and 13.2% worked at home.

Place of work

Responses to the Residents' Survey (Question 27) showed that while the majority of residents in employment worked in the urban NuL and SoT post code areas, others work further afield. Places include Staffordshire Moorlands, Stafford, Crewe, Manchester, Wigan, Birmingham, Walsall, Coventry, Dudley, Nottingham, Watford, London, Edinburgh. These will include some people who reported that they work partly at home.

Table 4.5 Distances travelled to work (percentages), 2001 Census, NA compared to NuL and England

	NA	*Chorlton*	*Maer*	*Whitmore*	*NuL*	*England*
Less than 2km	2.0	1.7	1.2	2.3	15.3	16.6
2–5km	4.3	1.1	4.5	5.0	24.5	18.4
5–10km	27.5	30.0	13.4	31.6	20.5	17.3
10–20km	25.4	25.6	32.8	22.8	12.2	15.3
20–30km	4.5	6.1	4.0	4.3	4.3	5.7
30–40km	1.4	2.2	3.2	0.5	1.6	2.6
40–60km	2.8	3.9	1.2	3.1	2.8	2.3
60km and over	4.3	3.3	3.2	4.8	3.3	3.1
Works mainly at home	20.9	19.4	29.1	18.5	8.7	10.3
Other	7.0	6.7	7.3	7.0	6.9	8.5
Total distance (km)	17,654	2,620	3,339	11,695	681,637	304,789,308
Average distance (km)	20.9km	19.7km	21.3km	21.1km	14.1km	14.9km

Source: Census 2001, table QS702EW (data from Nomis 2 June 2017, percentages calculated)

Box 4.16 Issues: commuting

Distance travelled to work

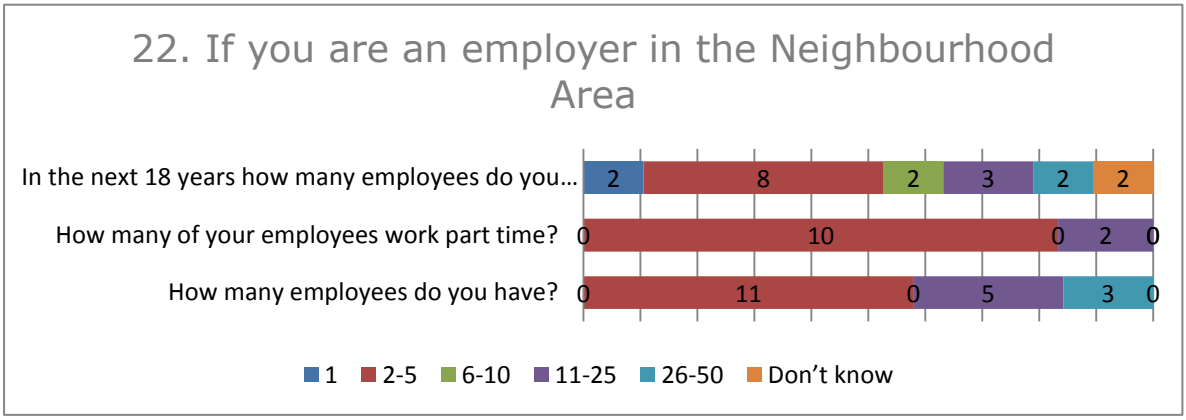
The Census 2001 results show that in the NA significantly fewer people work close to home and more people travel longer distances to work, as compared to NuL and England. Only 6.3% of NA residents travel up to 5km, as compared to 39.8% in NuL. This reflects a lack of suitable local employment opportunities in the NA for NA residents.

- The proportion of NA residents travelling 10–20km is more than double the proportion for NuL. This distance encompasses travel to workplaces outside NuL and SoT; even a journey from the NA of less than 10km can be to a workplace outside NuL and SoT.
- The percentage of residents travelling over 20km and 'other' (e.g. not working on the UK mainland) is 20%. These residents are unlikely to be working in the NuL and SoT economy.

- At 20.9km the average distance to work for NA residents is 1.5 times greater than that for NuL. Although a significantly higher proportion of NA residents work mainly from home (20.9%, as compared to 8.7% for NuL), any cumulative advantage in terms of miles saved is more than cancelled out by the significantly longer average distances for those who do travel to work.

Employment in local businesses

Question 22 of the Residents' Survey asked employers in the NA how many employees they have. Nineteen employers responded to this question and their responses indicated that between them they employed a minimum of 155 people. Of these a minimum of 42 were working part time.



Question 27 of the Residents' Survey asked the postcode of people's main place of work/study. Forty-three out of 174 respondents gave a postcode in the NA. Of these 43, 27 were working at home. It can be assumed that the remaining 16 (or 9.2% of 174 respondents) were employed by businesses in the NA.

Digital commuting

Many residents who work at home or mainly from home are commuting digitally and are not limited by distance. There is a strong possibility that they will be working for employers or clients based outside NuL and SoT, in which case they will not be contributing to the local economy. Because digital commuting is not limited by distance, when these residents do travel to a workplace the likelihood is that they will be travelling longer distances.

4.7.5 Method of travel to work

The Census records method of travel to work on Census day. Across the NA as a whole on Census day 2011 87.9% of people who travelled to a workplace did so driving a car or van, as compared to 74% for NuL and 60.2% for England as a whole (Table 4.6 and Figure 4.25). Only 3.4% were passengers in a car or van, as compared to 7.8% in NuL and 5.3% in England. Just 1.1% travelled by bus or minibus, as compared to 4.8% in NuL and 5.6% in England.

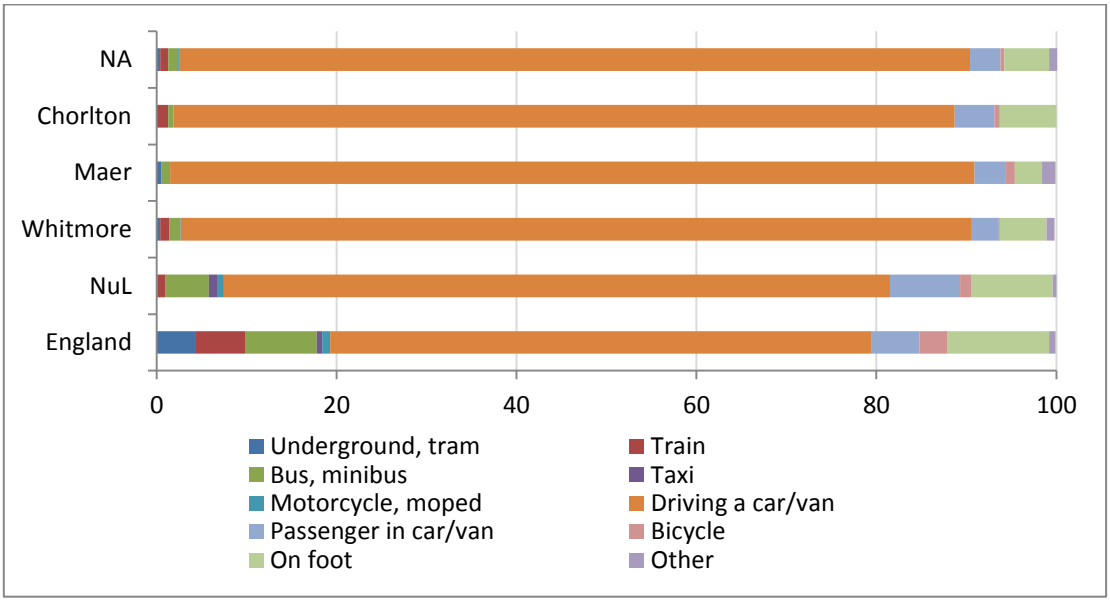
Five per cent walked to work, and 0.1% travelled by a bicycle. For NuL, walking and bicycle were 9.1% and 1.2% respectively, and for England, 11.3% and 3.1%.

Table 4.6 Method of travel to workplace (percentage), Census day 2011, NA compared to NuL and England

	NA	*Chorlton*	*Maer*	*Whitmore*	*NuL*	*England*
Underground, metro, light rail, tram	0.4	0.0	0.5	0.4	0.1	4.3
Train	0.9	1.3	0.0	1.0	0.9	5.6
Bus, minibus or coach	1.1	0.6	1.0	1.2	4.8	7.9
Taxi	0.0	0.0	0.0	0.0	1.0	0.6
Motorcycle, scooter or moped	0.1	0.0	0.0	0.1	0.7	0.9
Driving a car or van	87.9	86.8	89.4	87.8	74.0	60.2
Passenger in a car or van	3.4	4.4	3.5	3.1	7.8	5.3
Bicycle	0.4	0.6	1.0	0.1	1.2	3.1
On foot	5.0	6.3	3.0	5.2	9.1	11.3
Other method of travel to work	0.9	0.0	1.5	0.9	0.4	0.7

Source: Census 2011, table QS701EW [percentages calculated]

Figure 4.25 Method of travel to workplace (percentage), Census day 2011, NA compared to NuL and England



Source: Census 2011, table QS701EW [percentages calculated]

Box 4.18 Issues: travel to work

- NuL as a whole has a significantly higher proportion than nationally of travel to work driving a car. This is attributable in part to the limitations of the public transport service in the polycentric urban area of NuL and SoT.
- Travel to work driving a car is 13.9% more in the NA than in NuL, whereas travel by bus, as a passenger in a car, by bicycle or on foot is 13% less. The limitations of the bus service, the greater distances travelled and the conditions on the roads will all be factors in the higher proportion of driving and lower proportion of other modes of travel.
- Across the NA the low level of travel to work by bus or minibus (one fifth of the level in NuL and one seventh of the national level) reflects the limited possibilities for travel to work by public transport or by transport provided by employers, and travelling to workplaces that are outside NuL and SoT.
- The lower level of travel to work as a passenger in a car or van (44% of the level for NuL) may reflect lack of options for sharing transport, due to shifts or part-time working, or to travel patterns arising from the polycentric nature of NuL and SoT; it may also reflect level of commuting to workplaces outside NuL and SoT.

- The 5% of NA residents who walk to work can be assumed to work in the NA. Some of those who travel up to 5km to work may also work in the NA (6.3%, see Table 4.5)

Box 4.17 Residents' Survey

Means of travel to place of work/study

Of those completing the Residents' Survey who travelled to work, 94.1% travelled by car or van; 2.1% walked, 1.7% cycled and 3.8% travelled by bus; 3.8% travelled by train, and very likely belong to a group that works partly from home.

There was a lower level of engagement with the Residents' Survey among the 19–55 age group than among over-55s. However, the results for this question can be considered to be comparable to the Census data.

4.8 Accessibility of key services

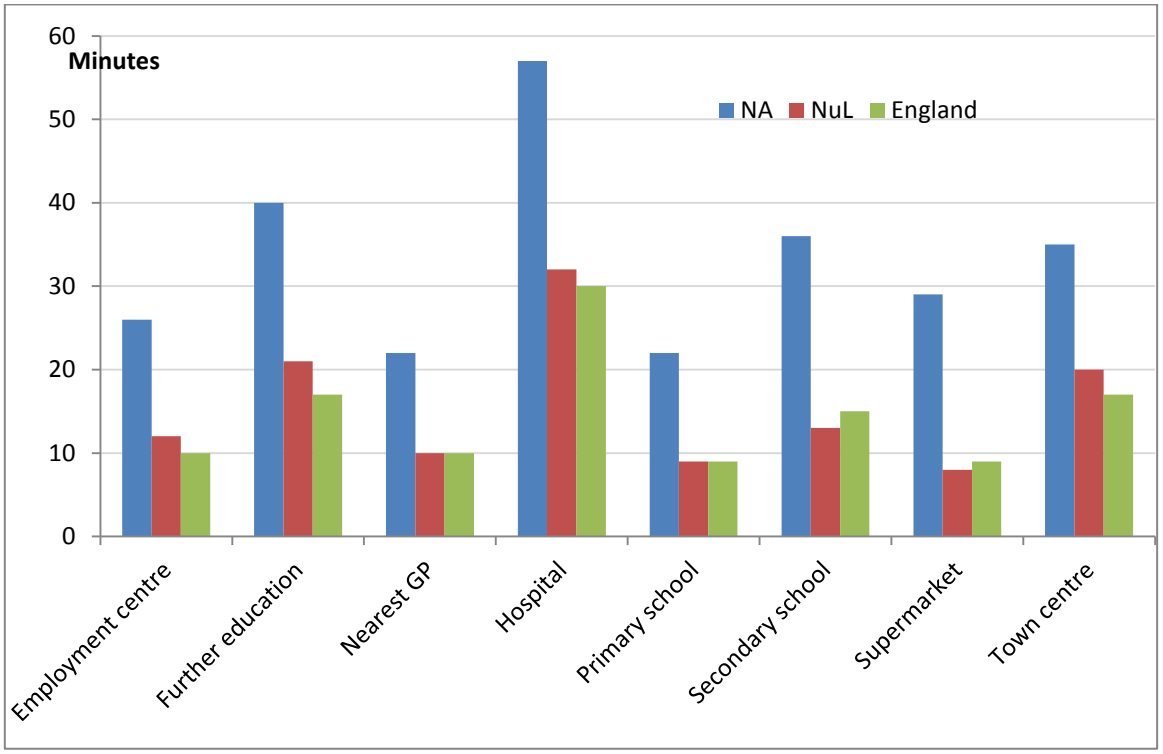
Accessibility of key services is taken to be a measure of the sustainability of a location. The standard list of key services includes employment centre, further education centre, GP surgery, hospital, Job Centre, post office, public house, primary school, secondary school, supermarket and town centre. Accessibility is measured in terms of average travel times by walking/public transport and road distance to services.

The Rural Accessibility Appraisal for Newcastle under Lyme prepared by Staffordshire County Council in September 2015 reproduces maps illustrating times to access employment centres, secondary schools, primary schools, supermarkets, GP surgeries, hospitals, town centres and local centres.

4.8.1 Average travel times by walking/public transport to key services

Average walking/public transport travel times to 8 key services are significantly greater for the NA than for NuL. The differences in time range from 190% (further education institution) to 360% (supermarket) (Figure 4.26).

Figure 4.26 Average travel times (minutes) to key services by walking/public transport, NA compared to NuL and England



Source: DfT 2011/ACRE Rural community profiles

4.8.2 Road distance to services

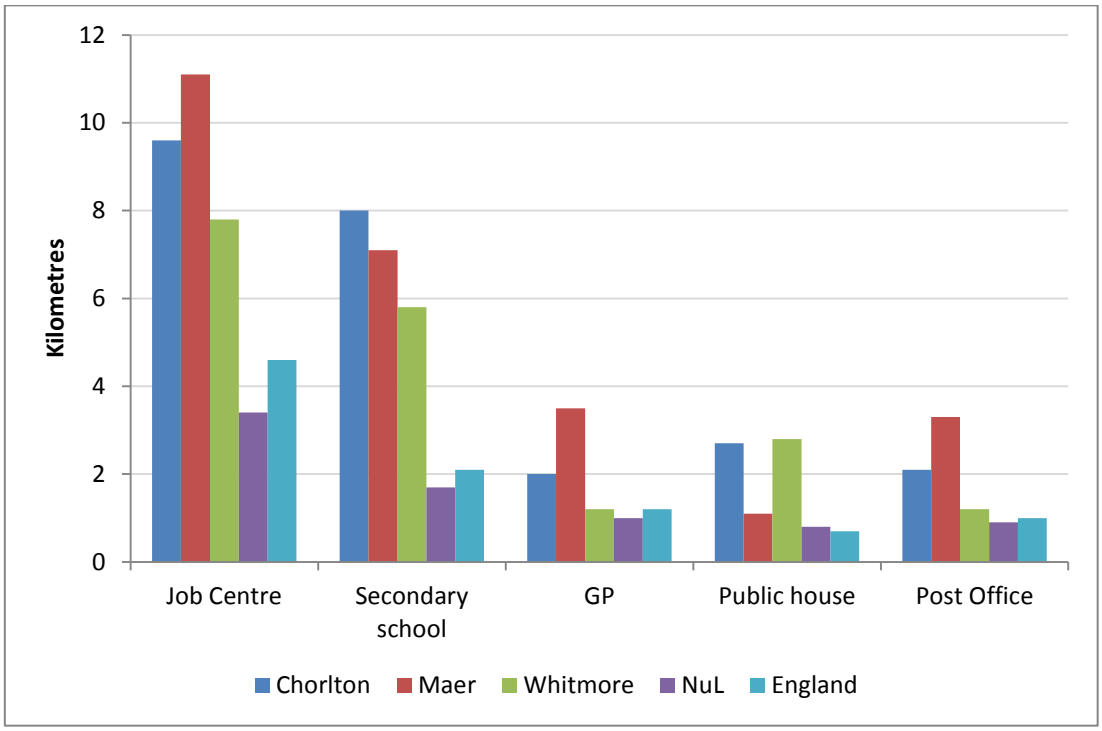
Road distances from the NA to 5 key services, as compared to NuL and England, are illustrated in Table 4.7 and Figure 4.27. The greater distances to services in the NA than in NuL range between 133% and 470%.

Table 4.7 Road distance to services (km), parishes compared to NuL and England

Service	*Chorlton*	*Maer*	*Whitmore*	*NuL*	*England*
Job Centre	9.6	11.1	7.8	3.4	4.6
Secondary school	8.0	7.1	5.8	1.7	2.1
GP	2.0	3.5	1.2	1.	1.2
Public house	2.7	1.1	2.8	0.8	0.7
Post Office	2.1	3.3	1.2	0.9	1.0

Source: Commission for Rural Communities 2010/ACRE Rural community profiles

Figure 4.27 Road distance to services (km), parishes compared to NuL and England



Source: Commission for Rural Communities 2010/ACRE Rural community profiles

Box 4.19 Issues: access to key services

- The longer travel times and road distances to key services by walking/public transport, combined with the limitations of public transport (hourly service on a single route) are a significant factor in car dependency in the NA.
- Without a full-time GP surgery in Baldwins Gate, the travel times and distances to a GP listed in Figures 4.26 and 4.27 and Table 4.7 are of limited relevance, as patients frequently have to travel to the main surgery in Madeley.

4.9 Sustainability and sustainable development

A presumption in favour of sustainable development is central to the NPPF (para. 10). Sustainable development has three overarching and interdependent objectives: social, economic and environmental (para. 8).

This chapter has uncovered a number of issues with implications for the NA's sustainable development, which are reviewed below in Box 4.20.

Box 4.20 Issues: sustainability

- There are people in the NA who experience a range of types of deprivation, including multiple deprivation.
- Data on employment, travel and transport and access to key services illustrates the level of dependence of the NA's population on the urban area. By definition, a rural area that is so dependent on an urban area that it could not sustain itself economically and socially if it were cut off from the urban area cannot be said to be sustainable.
- Residents have a significantly greater need to travel, and have to travel greater distances, to access employment and other essential services than does the population of NuL or of England generally.
- Older residents with a variety of health and care needs experience difficulty accessing needed services, and while they may wish to continue living in the NA some are eventually forced to move into or closer to urban areas.
- The limited available transport options make the NA's population highly dependent on private car ownership and use. Those who are dependent on public transport may have difficulty accessing key services.
- While the NA has a significantly higher proportion of home workers and self-employed than NuL or England generally, the number of residents whose work is based in the NA is not sufficient to avoid a high proportion of the population travelling above-average distances to work by car.
- Local planning policy and decisions from the late 1950s to the present have encouraged an essentially urban-oriented population into a highly rural NA and have not attended to the need of maintaining a thriving rural economy and society. Policies can be made and actions can be taken to achieve a measure of sustainability by supporting home working and the development of local rural businesses and by attracting a population that will live and work in the NA. However, the data on qualifications, occupational groups and sectors of employment indicates that the greater proportion of the NA's working-age population is urban oriented and must look to the urban area because they are working in sectors and at occupational levels for which by definition a rural economy offers few or no opportunities in. Further, working from home and developing the local economy

can be only a partial solution, as it does not reduce dependence on the urban area for other key services.

Opportunities

The Neighbourhood Development Plan provides opportunities to establish policies and initiate actions to curtail the trend of unsustainable development and embrace a plan-led, sustainable development pattern in the NA.

Given the conditions described in this chapter, it appears that the opportunities and the greater needs to achieve sustainable development in the NA are for:

(i) economic development to create the types of jobs and businesses that the NA can sustain and that can sustain the NA

(ii) a focus on providing dwelling types and low-cost/affordable housing that will enable people working in the rural economy and providing services that meet the needs of the local population to live close to their work in the NA.

Remediating the effects of nearly six decades of poor planning is a long-term project that will not be accomplished over the period of a single Neighbourhood Plan, but that can be built on and achieved over successive plans.

5 Land use

Content of this chapter:

5.1 Predominant land uses

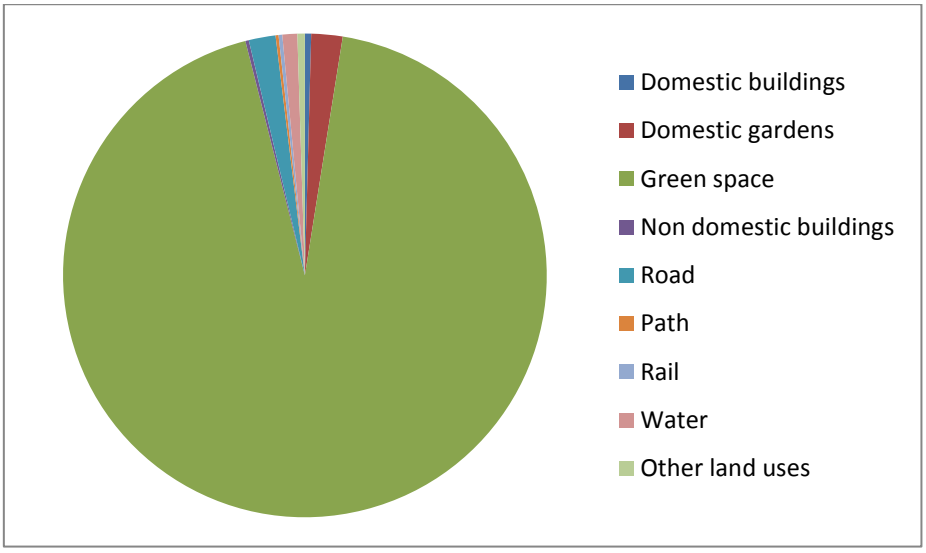
The NA has an area of 4290ha. Table 5.1 shows land use statistics for the NA from the government's Generalised Land Use Database (January 2005). Figure 5.1 presents the same data graphically.

Table 5.1 Land uses in the NA (hectares)

Total area	*Domestic buildings*	*Non domestic buildings*	*Road*	*Path*	*Rail*	*Domestic gardens*	*Green space*	*Water*	*Other land uses*
4290	18	10	78	1	11	89	4026	41	23

Source: Generalised Land Use Database (January 2005)

Figure 5.1 Land uses in the NA (hectares)



Source: Data from Generalised Land Use Database (January 2005)

Green space accounts for 94% of land use and has the following uses: agriculture, woodland, orchards, Environmental Stewardship, horsiculture. The next greatest land uses are domestic gardens (2.1%) and road (1.8%).

5.1.1 Agriculture

Agriculture is the single greatest land use, predominantly for intensive diary farming, beef cattle and sheep grazing. Arable farming is predominantly fodder crops for livestock and cereals. Other production is oilseed rape, poultry farming, potatoes and vegetables.

5.1.2 Woodland

Woodland is the second largest land use, comprising commercial conifer forestry, broadleaf and mixed plantations and managed woodland, unmanaged scrub woodland, estate and parkland plantings, copses and windbreaks on agricultural land, wooded areas on smallholdings and large domestic plots, hedgerow trees and individual trees in the landscape.

5.1.3 Orchards

Across the NA there are orchards of varying sizes and ages on smallholdings and large domestic plots.

5.1.4 Environmental Stewardship

A number of farm holdings in the NA are under Environmental Stewardship (ES). ES is a scheme managed by Natural England on behalf of Department for Environment, Food and Rural Affairs (Defra) that rewards farmers/landowners for adopting environmentally sensitive land management practices.

Entry Level Stewardship (ELS) includes practices such as creating buffer strips of 2m to 6m wide around field margins to benefit wildlife or protect watercourses, as well as hedgerow and ditch management. Organic Entry

Figure 5.2 Wild flower meadow on land under HLS in the NA (Photo: Hannah Barter)

Level Stewardship (OELS) is the version of this scheme that operates for organic farms.

Higher Level Stewardship (HLS) is usually combined with ELS or OELS and aims to deliver significant environmental benefits in high-priority situations and areas. Options include wetland or woodland creation, restoration or maintenance; hedgerow restoration; maintenance or restoration of lowland raised bog.

In the NA two landowners are known to operate HLS, one farm operates OELS and there are other farms operating ELS, but not all farms in the NA are in the ES scheme.

5.1.5 Horsiculture

Horsiculture comprises several equine-based businesses, including a race horse establishment, an equestrian centre with a range of facilities for horse owners and riders, livery stables and a riding school. A stud farm based outside the NA has grazing land in the NA. Horses are also kept domestically as pets or as a hobby.

Box 5.1 Residents' Survey

The Residents' Survey (Question 11) asked about the suitability in the NA of 18 different uses of land. Support was highest for agriculture, open space, forestry and nature reserves and trails, ranging from 92% to 83%. Horsiculture and equestrian uses received 68% and 50% support, respectively. The 4 uses with lowest support were caravan and camping sites, wind turbines, fracking and mineral extraction (10% to 2%).

5.2 Housing

A Housing Needs Assessment (HNA) for this Neighbourhood Plan was carried out by AECOM consultants in 2016 as a technical assistance package provided by Locality and is presented here as an Appendix to the Plan. The HNA was performed according to a standard methodology that is used for all AECOM HNAs for neighbourhood plans. It includes a thorough review of the housing stock and housing affordability in the NA on the basis of Census and other data from official sources and assesses the need for different types and sizes of housing.

5.2.1 Summary of HNA findings

5.2.1.1 Quantity of housing

The HNA identified 5 separate projections of dwelling numbers for the NA for the period 2013–2033, as set out below.

> 16. Our assessment of a wide range of data sources identified five separate projections of dwelling numbers for the Chapel and Hill Chorlton, Maer and Aston and Whitmore parishes NP area between 2013 and 2033 based on:
>
> • A figure derived from the Adopted 2009 Joint Core Spatial Strategy (JCSS) for NuL and Stoke-on-Trent (which gives a total of **0 dwellings**, or 0 per year);
>
> • A 'proportionate share' derivation from the 2015 SHMA, Objectively Assessed Need[1] (OAN) lower range figure of 1,177 dwellings per annum (367 per annum for NuL) (the demographically adjusted need[2]), which gives a total of **148 dwellings** (rounded to the nearest whole number), or **7.4 dwellings** per annum;
>
> • A 'proportionate share' derivation from the 2015 SHMA, OAN higher range figure of 1,505 dwellings per annum (the economic growth and housing affordability adjusted level of need[3]), which would give a requirement of **197 dwellings** (rounded to the nearest whole number) or **9.8 dwellings per annum;**
>
> • A projection forward of net dwelling completion rates 2001-2011, (which gives a projection of **80 dwellings**, or **4 dwellings per annum**); and
>
> • A projection forward of net dwelling completion rates 2011-2015 (which gives a projection of **31** dwellings, or **1.56 dwellings per annum**).
>
> [1] The OAN includes the baseline demographic need, plus any adjustments made to official forecasts to account for projected rates of household formation post 2021, past suppression of the formation of new households, the effect of past under-supply, employment forecasts, market signals and affordable housing need (as set out in paragraph ID2a-004 of the NPPG).
>
> [2] The starting point of the 2012-based Sub National Household Projections have been adjusted to account for a return to the rates of household formation for younger households seen in 2001, when house prices and affordability were more in line with longer term national trends.
>
> [3] In this projection, there has been further consideration of the level of growth in labour force required to support forecast job creation, which suggests that greater retention or attraction of people would be required to grow the labour force. In addition, this projection considers the need for affordable housing, including the need to clear the backlog of existing households on the waiting list.
>
> AECOM, HNA, para. 16

> 18. A further assessment applied to the five projections set out above indicates that the local market factors acting to increase demand for new housing in the NP area are outweighed by those acting to reduce demand for housing (see Table 1 below, which replicates Table 20 of our conclusions).
>
> AECOM, HNA, para. 18

> 24. It is our evidenced conclusion that, taking into account that the factors acting constraining demand and the factors increasing demand (as set out in Table 1 above) tip in favour of lowering demand in Chapel and Hill Chorlton, Maer and Aston and

> Whitmore Parishes; that the level of unconstrained need will lie somewhere below the midpoint of the projections, with an appropriate range considered to be between 50 and 100 dwellings for the period 2013-2033.
>
> AECOM, HNA, para. 24

Box 5.2 Issue: Government consultation: Planning for the right homes in the right places

In September 2017 the Government put out to consultation a proposed methodology for calculating Objectively Assessed Need. The accompanying 'Housing need consultation data table' showed that the indicative assessment of housing need for NuL borough for the 10-year period 2016–2026, based on the Government's proposed formula, is 361 dwellings per annum. A proportionate share derivation for the NA would be 7.2 dwellings per annum.

5.2.1.2 Dwelling types

Tables 2 and 21 of the HNA summarise local factors in the NA that have a potential to influence housing characteristics

The HNA identifies a need to ensure that affordable housing needs are met, mostly with smaller units of 1–2 bedrooms. A need above the adopted CSS target of 25% affordable housing on new developments was not identified.

The report identifies that a proportion of smaller dwellings both for downsizing by the older population and for younger families and those in local rural occupations is needed. Small affordable units could be provided as flats or through conversions. Homes to enable older people to live independently in the NA could include small detached houses or bungalows.

A policy supporting downsizing would free up larger stock for incoming families, but there remains a need for larger homes. Monitoring is important to avoid an over-supply of larger homes, which should be at least 3 bedrooms, with the majority 4 bedrooms or more.

Box 5.3 Residents' Survey

The Residents' Survey asked a series of questions about future housing development in the NA. The local perception of a need for housing to meet the needs of older residents and for smaller dwellings suitable for both older residents and young families corresponds with the findings of the HNA. Responses to the survey indicate if the need for smaller homes for downsizing could be met a significant supply of larger homes would be freed up for new occupants.

Dwelling types and sizes

Respondents' opinion was that the greatest need is for dwellings designated for older people and people with disabilities (55%), followed by bungalows (47%) and houses with 1 or 2 bedrooms and starter homes (both 41%). Homes with 3 or 4 bedrooms received less support (27%) and larger homes and apartments each had only 12% support. Support for rented housing of any kind was also low (17% social, 14% private).

Participant discussions at the Roadshows have also expressed local opinion about the need for smaller homes and a feeling that if suitable housing were available for older people to downsize, then enough larger homes would become available to meet an ongoing need for larger homes.

> We need to meet the needs of the population both now and in the future. But where can people in low-paid occupations live when the farmworkers' cottages have been taken over and converted into big, expensive houses? There is a need for larger houses too, because anyone who runs a small business from home does need a place of sufficient size to accommodate their office or workspace.
>
> www.cmaw-neighbourhoodplan.org.uk/blog/, report on Roadshow at Butterton, 9 December 2015
>
> A very interesting suggestion was that we need to look at subdividing larger houses into smaller units. … Little cottages have been joined together to make larger houses, or demolished to make way for large replacements. But now people voice a need for smaller dwellings for longer-term residents who want to downsize. And to enable younger people to live here and create a place for themselves in the local economy we need accommodation that will provide those lower rungs on the housing ladder.
>
> www.cmaw-neighbourhoodplan.org.uk/blog/, report on Roadshow at Aston, 8 March 2017

Moving intentions

Fifty-one per cent of respondents planned to stay in their own home during the Plan period. Twenty-four per cent planned to move to a smaller property in the NA, and 4% to move to a larger property, while 3% planned to buy their first home. Eleven per cent planned to move to specialist accommodation. Twenty-eight per cent of respondents indicated that they had family members who may either want or need to move into the NA in the next 15 years. These could be both younger families and older relatives. The 11% who planned to move into specialist accommodation indicate a demand for sheltered and other types of specialised housing for older people. If such a need were met locally, at least some of these people would be able to remain in the NA, close to friends and (maybe) relatives.

These intentions provide an indication of the type of housing need in the NA and again confirm the greater need for smaller dwellings than for larger ones. The 3% who planned to buy their first home could be young adults living with parents, indicating 'hidden families'; equally, they could be renters looking to buy.

Suitable sites and sizes for developments

Brownfield land and vacant/derelict buildings received 82% and 78% support, respectively. Support for building on greenfield land was only 7%.

For new housing in Baldwins Gate, small infills had the greatest level of support (63%), followed by small-scale developments of up to 9 homes (48%). Larger developments had significantly lower support (15%), and developments of 50+ homes only 5%. Only 15% agreed that the village envelope of Baldwins Gate should be extended to allow the village to grow. In the smaller settlements, infills of up to 4 dwellings were the most acceptable (63%); support for developments of up to 9 homes was significantly less than in Baldwins Gate, at 33%.

Property features

A property with its own garden was important for 96% of respondents, followed by adequate off-street parking (90%). The importance of a property with room for an office, space for a dependent person or space for a workshop ranged between 35% and 28%, pointing to some need for larger homes.

5.3 Dwelling consents and completions

Data held by the LPA on residential dwelling consents and completions shows that from 1 April 2013 to 31 March 2017 consents were granted for 144 dwellings and 142 dwellings were not completed (Table 5.2). There were 2 dwelling completions during the period, comprising two barn conversions in Whitmore parish (Table 5.3).

Table 5.2 Residential dwelling consents in the NA, 1 April 2013–31 March 2017

Planning application number	Development address and location	Description	Dwelling consents	Consent date
13/00523/FUL	Whitmore Riding School Shut Lane Head Staffordshire ST5 4DS	Conversion of barn into a single dwelling	1	17/09/2013
13/00599/FUL	Nags Head Farm Nantwich Road Blackbrook Staffordshire, ST5 5EH	Conversion of 3 holiday lets into single dwelling	1	23/09/2013
14/00654/OUT	Land south of Appleton Cottage Coneygreave Lane Whitmore Newcastle under Lyme Staffordshire	Residential development of four detached properties	4	30/10/2014
14/00669/FUL	181 Aston Market Drayton Shropshire TF9 4JF	Conversion of barn to residential use	1	14/11/2014
15/00134/FUL	The Old Dairy House Shut Lane Head Newcastle under Lyme Staffordshire ST5 4DS	Change of use to dwelling	1	22/04/2015
15/00238/COUNOT	Lilac Cottage Acton Lane Acton Staffordshire ST5 4EF	Conversion of agricultural building to residential us	1	15/05/2015
15/00281/FUL	Plot 37 Birch Tree Lane Whitmore Newcastle under Lyme Staffordshire ST5 5HS	Detached dwelling and new accesses	1	26/06/2015
15/00294/REM	Land off Watering Close Newcastle Road	Application for the approval of the details relating to	4	10/06/2015

Planning application number	Development address and location	Description	Dwelling consents	Consent date
	Baldwins Gate Staffordshire ST5 5DA	13/00551/OUT for 4 residential dwellings		
15/00319/FUL	1-2 Moss Cottages Moss Lane Baldwins Gate Staffordshire ST5 5D	Detached dwelling with associated car parking and amenity area	1	20/08/2015
15/00376/FUL	Plot 34 Eastwood Rise Baldwins Gate Newcastle under Lyme Staffordshire ST5 5EX	Detached dwelling	1	11/08/2015
15/00541/OUT	The Cottage Newcastle Road Baldwins Gate Newcastle under Lyme Staffordshire ST5 5DA	2 no. proposed 5 bedroom detached houses within rear garden	2	15/10/2015
15/00878/FUL	Red Gates Haddon Lane Chapel Chorlton Staffordshire ST5 5JL	Detached dwelling, double garage, alterations to vehicular access	1	19/06/2016
15/01140/FUL	Swinchurch Farm Haddon Lane Chapel Chorlton Staffordshire ST5 5JP	Retention of conversion of existing farmhouse into two dwellings	1	10/02/2016
16/00066/FUL	Aston Manor Barns Aston Staffordshire TF9 4JB	Removal of condition 3 of planning permission 09/00531/FUL to allow residential use of two units	2	17/03/2016
16/00080/ELD	Building at Rook Hall Farm Trentham Road Acton Staffordshire ST5 4DX	Conversion of barn into dwelling	1	24/03/2016
16/00577/COUNOT	Rook Hall Farm Trentham Road Acton Staffordshire ST5 4DX	Conversion of agricultural building to a dwelling	1	8/09/2016
16/00609/FUL	Land adjacent the Sheet Anchor Newcastle Road Whitmore Newcastle under Lyme	7 houses with access road and associated landscaping	7	16/12/2016

Planning application number	Development address and location	Description	Dwelling consents	Consent date
	Staffordshire ST5 5BU			
16/00676/REM	Land at end of Gateway Avenue Baldwins Gate Newcastle under Lyme Staffordshire	Residential development of 109 dwellings	109	20/10/2016
16/00962/COU	Holloway Farm Aston Market Drayton Shropshire ST5 5EP	Conversion of agricultural building to residential use	1	23/12/2016
16/00986/FUL	Land adjacent Holmcroft Newcastle Road Baldwins Gate Staffordshire ST5 5DA	Erection of single storey bungalow	1	16/01/2017
16/01064/FUL	H E Butters Newcastle Road Baldwins Gate Newcastle under Lyme Staffordshire ST5 5DA	Demolition of existing workshop, store and garage. Construction of two detached dwellings	2	14/03/2017
TOTAL			**144**	

Source: Compiled from NuL Borough Council planning applications database.

Table 5.3 Residential dwelling completions in the NA, 1 April 2013–31 March 2017

Planning application number	Development address and location	Description	Dwelling completions	Completion date
13/00523/FUL	Whitmore Riding School Shut Lane Head Staffordshire ST5 4DS	Conversion of and extension to barn to form dwelling	1	08/10/2015
16/00080/ELD	Rook Hall Farm Trentham Road Acton Staffordshire ST5 4DX	Conversion of barn into dwelling	1	06/14/2016
TOTAL			**2**	

Source: Completions information supplied by NuL Borough Council planning policy unit.

Box 5.4 Issue: housing land supply in the NA

From 1 April 2013 to 31 March 2017 planning consents were granted for 144 dwellings in the NA (see Table 5.2).

At the upper level of 'proportionate share' housing growth identified by AECOM in the HNA report, these planning consents have created a 14.7 years' supply of housing land in the NA. At the lower level of 'proportionate share' growth identified in the HNA, the consents have created a 19.5 years' supply of housing land.

If the higher level of growth were to be determined for an adopted JLP, the additional growth beyond the currently granted 144 dwelling consents could be accommodated during the course of the Plan by changes of use and small infills.

The Government's September 2017 consultation on a proposed methodology for calculating Objectively Assessed Need indicatively suggests that a lower range figure of 7.2 dwellings per annum for the period 2016–2026 would be more applicable to the NA.

5.4 Community facilities

Community facilities and services are mainly concentrated in the village of Baldwins Gate, which is the largest settlement in the NA and at the NA's geographical centre. In some settlements the only facilities are a letterbox, and sometimes a parish noticeboard. The following subsections review the facilities and services in each parish (see Maps 5a and 5b)

5.4.1 Chapel and Hill Chorlton parish

- Letterboxes at Chapel Chorlton, Hill Chorlton and Stableford
- Parish noticeboards at Chapel Chorlton and Hill Chorlton
- Licensed club and bar at the Stableford caravan park
- Village green at Chapel Chorlton
- C of E church and churchyard at Chapel Chorlton

Box 5.5 Opportunity

The large village green at Chapel Chorlton is valued by both residents and visitors. It is used for community events in the summer months and visitors picnic there. A small parking area on the green allows walkers to use Chapel Chorlton as a base. Other visitors often park on the green to watch the waterfowl and other wildlife on the nearby pond.

There is scope for the green to be used for a variety of events to promote the leisure opportunities offered by the NA, for example the footpaths and natural and historical heritage. There is also scope to install an information board with details of PRoWs, local walks and other information of local interest, or to convert the disused telephone kiosk into an information booth.

Box 5.6 Residents' Survey

The Residents' Survey revealed how the NA residents value the area's community facilities. The following 'key' facilities were rated as important or very important by 91% to 82% of respondents (in descending order): doctor's surgery, post office, local shops. The fire and rescue service, community police, first responders (all based at Loggerheads and/or Madeley) were also rated in this band. (Question 2)

Although the local shops received a high importance rating, only 63% of respondents said that the shops meet their day-to-day needs and only 56% shop regularly in the NA; 75% do their regular shopping in the urban area. This reflects the limits of the service that the local shops can offer in the face of competition from urban supermarkets and the high level of daily commuting into the urban area. (Question 3)

A 71% rating of importance for the village halls matched the 73% rating of importance for 'feeling part of the community'. Lower ratings for the primary school and toddlers' playgroup reflect the age profile of the community and of survey respondents. (Question 2)

5.4.2 Maer and Aston parish

- Letterboxes and parish noticeboards at Maer village, Blackbrook, Weymouth and Aston
- Brookfields farm shop on the outskirts of Blackbrook
- Public house/restaurant at the Swan with Two Necks, on the outskirts of Blackbrook (a 'drive to' destination); public house/restaurant with hotel accommodation at Slaters at Maerfield Gate
- Village halls at Maer village and Aston
- C of E church and churchyard at Maer; C of E chapel in Aston village hall
- War memorial by A51 roadside at Maer

Figure 5.3 Maer village hall

5.4.3 Whitmore parish

- Letterboxes at Baldwins Gate (2), Butterton, Acton, Whitmore village and Madeley Park Wood
- Parish noticeboards at Baldwins Gate, Butterton, Acton and Madeley Park Wood
- Public house at the Mainwaring Arms in Whitmore village and a teashop
- Whitmore village hall in Baldwins Gate village
- Playing field at Whitmore village hall, with outdoor gym and children's playground
- C of E churches and churchyards at Whitmore and Butterton; Methodist chapel in Baldwins Gate

5.4.3.1 Facilities in Baldwins Gate village

- Station Stores general store/post office/newsagent
- Hair/beauty salon
- Sheet Anchor public house/restaurant (a 'drive to' destination)
- Filling station and tool shop
- Plant and Wilton butcher's and delicatessen shop
- Car maintenance and repair business
- Primary school
- Part-time GP surgery (15 hours per week; doctor in attendance 9 hours per week)
- Open space at Jubilee Gardens and Chapel Green; private open space at Lakeside estate

Box 5.7 Issue: lack of defined village centre in Baldwins Gate

The early growth of Baldwins Gate as a ribbon settlement and piecemeal growth with planning for community facilities means that the village has no defined centre. Facilities within the settlement boundary are dispersed along a 740-metre stretch of the A53. The three premises housing retail businesses are separated by distances of 295 metres and 165 metres. Parking at two of these premises is very limited and the settlement itself has no public parking.

The AECOM TCA report notes that in Baldwins Gate 'A mixture of commercial and community functions are present along the intersecting A53; however, these are dispersed in location and cannot be read as a village centre' (p. 47). This has implications for the further development of facilities and for community feeling and participation within the settlement.

In a SWOT analysis of Baldwins Gate the AECOM TCA report (pp. 58–59) notes the following negative aspects of this issue:

Weaknesses: 'Community facilities are not obvious and there is no defined village centre which can confuse the legibility'; and 'Evolution of the centre/ facilities hasn't kept up with settlement growth'.

Threats: 'The lack of a clear settlement centre leaves the village vulnerable to piecemeal development of facilities which, as a result, could become inaccessible to each other'; and 'Risk of becoming more unsustainable due centre/ facilities failing to evolve to keep up with settlement growth'.

Opportunities

Whitmore Parish Council needs to be alert to any opportunities that might arise for developing a defined village centre, including a small community drop-in/café. However, this would have to be achieved without harming existing facilities (see also above, Box 2.7)

Box 5.8 Issue: impact of settlement growth

There are currently 315 dwellings within the Baldwins Gate village envelope. Completion of consents granted from 1 April 2013 to 31 March 2017 for new dwellings on land within and contiguous with the village envelope will add 129 dwellings, taking the settlement size to 444 and adding 41% to the population. This will have an impact on community facilities and services for the enlarged community and the surrounding settlements. Any changes or additions to facilities and services must be implemented in such a way as to avoid negative impacts on existing facilities and services.

Box 5.9 Issue: Baldwins Gate primary school

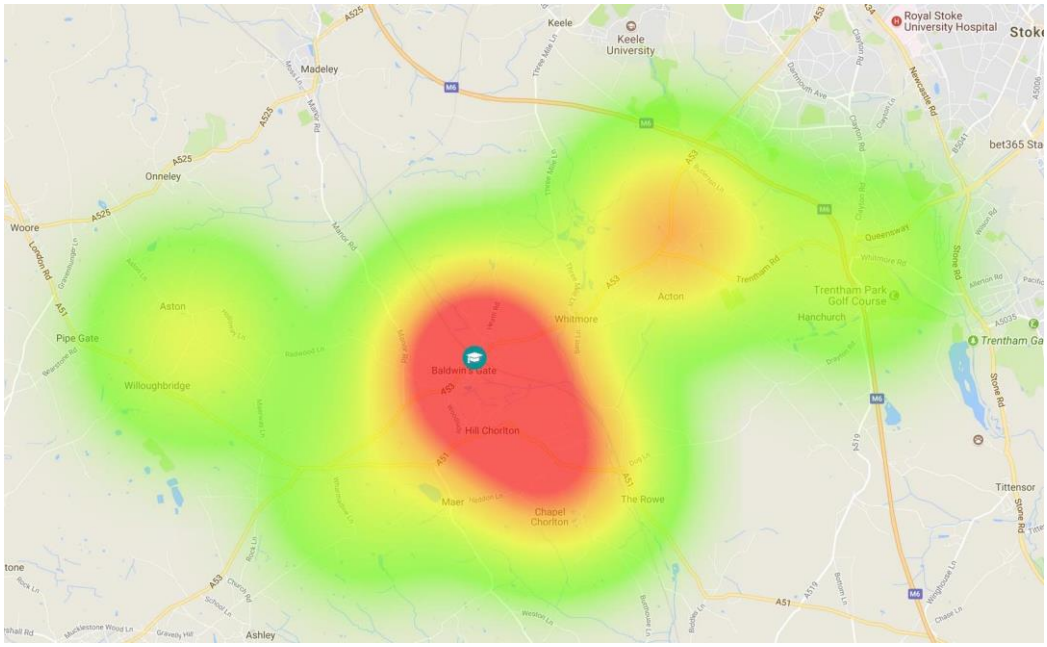
The school serves families living in Baldwins Gate and the other village and hamlet settlements of the NA. Its current published capacity is for 105 pupils and there are 120 pupils on roll.

The education authority announced a public consultation in October–November 2017 on plans to enlarge the school by building two additional classrooms and additional pupil toilets and providing additional playground and parking space to enable all class sizes to increase by 5 and to provide for a total pupil increase of 35, due to current new development at the

Gateway Avenue site in Baldwins Gate. The proposed enlargement was approved by the SCC Cabinet at its meeting of 17 January 2018 and went forward for further public consultation.

The proposed new classrooms would be ready for occupation in September 2020.

Figure 5.4 Baldwins Gate primary school catchment area



Source: https://www.schoolguide.co.uk/schools/baldwins-gate-cofe-vc-primary-school-newcastle

5.5 Sport and exercise facilities

In addition to the outdoor exercise facilities at the Whitmore village hall playing field, a variety of exercise and movement classes are held in the village halls both during the daytime and in the evenings, ranging from karate to ballroom dancing. The NA also has a number of sport facilities that are run either as clubs or as commercial enterprises.

5.5.1 Maer and Aston

Chipperfield rifle range at Red Hills; Aston Manor livery stables; Slaters bowling club; clay pigeon shooting

5.5.2 Whitmore

Cudmore Fishery; Whitmore Cricket Club; Whitmore Riding School; Acton Equestrian Centre; North Stafford Sport Ground at Whisper Lane (football, rugby union, cricket).

Box 5.10 Residents' survey

It is clear from responses in several parts of the Residents' Survey that the NA's most important leisure and exercise facility is access to the local lanes and footpaths for walking and running.

Eighty per cent agreed that provision for outdoor sport and leisure is important, but only 50% agreed that there are enough opportunities to keep fit in the NA (Question 7). From answers to Question 8, 'How could opportunities for recreation and leisure in the NA be improved?' it appears that there is not widespread awareness of the range of fitness activities in the village halls and that these could be (a) better promoted and (b) more varied to meet a wider range of needs.

A need for a larger and better playing field was expressed, with more games/play facilities for all age groups, from children to adults. Interest was expressed in having facilities such as tennis courts, a small indoor gym suitable for older people (and 'Useful for everyone in the evenings') or a leisure/fitness centre. A need for facilities for the disabled was also mentioned. Several people asked for a dog park.

Opportunity

Additional sport and exercise facilities in the NA could be provided either as community facilities or on a club/business basis. If on a club/business basis, this would contribute to the local economy and could have the additional economic benefit of bringing people into the NA to use the facilities.

5.6 Other land uses

5.6.1 Chapel and Hill Chorlton

- A small rural sewage works with reed bed is located on Chorlton Moss and serves the village of Baldwins Gate, dwellings at Parkwood Drive South and Walls Wood in Madeley Park Wood, and Maer village. It discharges into an ordinary watercourse that runs under the West Coast Mainline and flows into the Meece Brook in Whitmore parish. It is operated and managed by Severn Trent Water. The reed bed and its surroundings

contribute to the local green infrastructure.

- A 33kV electricity sub-station serving the area is located in Hill Chorlton and is managed by Western Power Distribution. Power is transmitted over 33kV overhead lines.

Figure 5.5 Reed bed at Baldwins Gate sewage works

- A static caravan site at Stableford has both permanent residences and holiday homes.
- Copeland Cottage Brownie and Guide Camp site on Haddon Lane is owned by the Guiding Divisions of Stoke, Longton and Newcastle-under-Lyme.

5.6.2 Maer and Aston

- A small sewage pumping station beside the A51 and SE of Maer War Memorial is operated and managed by Severn Trent Water.
- A communications mast on Camp Hill is believed to belong to Manchester University. Several mobile phone masts are attached to the structure.
- The Dorothy Clive Garden at Willoughbridge is a 12-acre ornamental and landscape garden owned by a charitable trust and is open to the public on a fee-paying basis.

5.6.3 Whitmore

- A garden waste composting site is operated in a worked-out sand and gravel quarry at Acton. It accepts domestic green waste for composting from a number of local authorities, including NuL borough council.

(http://moderngov.staffordshire.gov.uk/documents/s74711/Report - 5.11.15 - Acton - N.15 03 230 W.pdf)

- Network Rail operates a maintenance yard at the site of the former Whitmore station goods yard in Baldwins Gate.
- BT operates a local telephone exchange in Baldwins Gate.

5.7 Leisure and tourism

An established leisure and tourism base is supported by a variety of land uses in the NA, including through the diversification of land-based businesses and redevelopment of disused buildings. Many visitors to the NA bring custom to a variety of local businesses. The NA's rural character and the variety of attractions are mutually supportive.

Easy access by road to places such as Shrewsbury, Chester and the Peak District as well as the NA's own countryside and network of PRoWs, and a choice of farmhouse and village bed and breakfasts, hotel accommodation and self-catering cottages make the NA an attractive place for holiday makers to stay.

The Maer Hills, the NA's network of PRoWs and minor roads and lanes and its variety of tranquil places bring walkers, cyclists and countryside and nature lovers into the area.

The Grade I listed Whitmore Hall and the Dorothy Clive garden at Willoughbridge are open as fee-paying visitor attractions.

A number of equestrian businesses offer livery and other facilities for horse owners and riders, as well as riding lessons. The Cudmore Fishery in Whitmore parish, one of the largest fisheries in the country, attracts anglers from both the North Staffordshire area and further afield. Other sporting attractions are run on a club membership basis (see section 5.5).

The redevelopment of public houses as gastro-pubs and several 'destination' retail businesses also bring visitors into the area.

5.8 Roads and traffic data

A strategic description of the NA's transport network is provided in section 1.3.

Residential and business development beyond the NA is creating ever-increasing pressure on the highway network from through traffic. Highways issues are the biggest single set of issues facing NA residents but there are no comprehensive plans for highway improvements in the NA. A detailed review of issues, and opportunities for remediation or improvements, is presented in section 3.6.

5.8.1 A53

5.8.1.1 Description

The A53 is a single-carriageway primary route linking the North Staffordshire conurbation and the M6 (via the A5182) to Shrewsbury and routes into Wales. It enters the NA at the M6 motorway bridge east of Butterton cross-roads and traverses the NA east–west for a distance of 7.7km, passing through Whitmore village and Baldwins Gate to Blackbrook. The A5182 joins from the south at a roundabout 1.8km west of the M6, and traffic from the M6 and A500 joins the A53 at the A5182 roundabout. There is a speed limit of 40mph on the approaches to and through Whitmore village, where a pedestrian crossing enables safe crossing of the road. There is a speed limit of 30mph on the approaches to and through Baldwins Gate. Near the eastern end of Baldwins Gate, about 340 metres from the village boundary, the road crosses the West Coast Mainline on an overbridge. There is a pedestrian crossing at the eastern end of the bridge. On the western side of Blackbrook the A53 merges with the A51, which takes precedence for a distance of 320 metres. The A53 then turns south off the A51 and leaves the NA at the boundary with Loggerheads parish.

5.8.1.2 Footways

There is footway on the north side of the A53 carriageway from the M6 to Holly Bush Lane, 650 metres west of Baldwins Gate Farm. In Baldwins Gate there is also a footway on the south side of the carriageway, from Whitmore Village Hall near the eastern end of the village to the Woodside junction beyond the western end. In the centre of Baldwins Gate, for a distance of about 140 metres from Tollgate Avenue to Meadow Way, both the carriageway and the footways are of substandard width.

There are no grass verges on the northern footway in Baldwins Gate, and from Tollgate Avenue westwards the footway is narrow and there is little distance between pedestrians and passing vehicles. The footway on the south side has grass verges from Whitmore village hall to Appleton Drive, from Fair-Green Road to Tollgate Avenue and from Meadow Way to the butcher's shop. These provide pedestrians with some defence against passing traffic and protection from road spray in wet conditions. From Station Stores to Fair-Green Road, where the road is on the overbridge, the verge is on the inside of the footway, against the bridge parapet. From Tollgate House to Meadow Way and from the butcher's shop to Woodside there is no verge.

5.8.1.3 Traffic incidents

- The cross-roads in Whitmore village at the Bent Lane and Three Mile Lane junction is a known accident spot.
- There have been severe incidents, including fatalities, on the hill between Whitmore village and Baldwins Gate, some involving farm vehicles.
- There is a history of minor collisions and more serious incidents on the A53 all the way through Baldwins Gate.

Figure 5.6 HGV passing pedestrians in centre of Baldwins Gate

Figure 5.7 Traffic incident near site of planned pedestrian crossing in centre of Baldwins Gate, May 2014

- There is a history of traffic incidents, some severe and involving fatalities, between Lakeside estate and Baldwins Gate Farm and at Woodside junction/Baldwins Gate Farm. Many of these are due to excessive speeds on the bend at Baldwins Gate Farm. Most recently, there was a fatality at this site resulting from a crash during a police pursuit on 24 July 2016: http://www.bbc.co.uk/news/uk-england-stoke-staffordshire-36881671.
- There is a history of traffic incidents, some severe and involving fatalities, at and near to the Holly Bush Lane junction.
- There are frequent traffic incidents at Blackbrook at the staggered A51/A53 cross-roads.

5.8.1.4 Traffic volumes, flows and speeds

The Steering Group was unable to obtain up-to-date traffic survey data from SCC Highways for either the A53 or the A51. Data from surveys carried out in the area by HS2 Ltd between November 2015 and July 2016 was published by HS2 Ltd in summer 2017 and has been used to analyse the flow of traffic through Baldwins Gate and at the A51/A53 staggered cross-roads at Blackbrook (see section 5.10).

The Annual Average Daily Traffic (AADT) figures published by HS2 Ltd show that 12,329 vehicles leave/enter the eastern end of Baldwins Gate (Common Lane). Calculations from

readings at other survey points between Common Lane and Blackbrook indicate that on a daily basis 1,216 vehicles begin or end a journey in Baldwins Gate between Common Lane and Woodside.

At Blackbrook the A53 crosses the A51 by means of staggered junctions; A53 traffic travels on the A51 for a distance of 300 metres. HS2 Ltd's survey readings show that 13,636 vehicles travel on this 300-metre stretch on a daily basis. The eastern leg of the A53 (to/from Baldwins Gate) carries 10,270 vehicles and the western leg (to/from Loggerheads) carries 9,259 vehicles. The eastern leg of the A51 (to Stableford) carries 3,366 vehicles and the western leg (to Woore) carries 4,377 vehicles. HS2 Ltd states that 'the A53 Newcastle Road arm' 'operates close or over its capacity … in the AM and PM peak periods' and that the western arm 'is approaching capacity … in both the AM and PM peak periods'.[4]

A traffic survey was performed in Baldwins Gate, 7–13 March 2017, in connection with a planning application. Key data from the survey is summarised in Table 5.4. The March 2017 survey shows the AADT in Baldwins Gate to be 12,457, which is comparable to the numbers recorded by HS2 Ltd. Goods vehicles account for 6.5% of all traffic, or 810 vehicles per day.

The increase in traffic volumes on the A53 due to the amount of residential development beyond the NA, especially at Pipe Gate and Woore, and residential and business development at Market Drayton is a major concern. The Muller Dairy UK headquarters at Market Drayton and associated Culina logistics is the biggest single contributor to HGV traffic on the A53. Plans for further expansion of the facility were announced in September 2017: https://www.shropshirestar.com/news/business/2017/09/19/muller-to-expand-shropshire-factories-as-part-of-100m-investment/ (web link may need to be copied and pasted into browser).

5.8.1.6 Road safety and traffic calming

Road safety and traffic calming on the A53 in Whitmore village and Baldwins Gate are a major concern, due to the volume and speed of traffic, the number of HGV and other goods/commercial vehicles and conditions for pedestrians. For further information see sections 3.6.3 and 3.6.4.

[4] HS2 Ltd, High Speed Rail (West Midlands–Crewe), Environmental statement, Volume 5: Technical appendices, Traffic and transport, Transport assessment (TR-001-000) Part 1 (July 2017), paras 5.6.26 and 5.6.38.

Table 5.4 Key data from traffic survey on A53, Baldwins Gate, 7–13 March 2017

	NE bound (to Newcastle)	*SW bound (from Newcastle)*
5-day daily average no. of vehicles	6981	6734
7-day daily average no. of vehicles	6465	5992
Most vehicles on one day	7592 (Friday)	6922 (Tuesday)
Least vehicles on one day	4808 (Sunday)	4906 (Sunday)
Cars, LGVs, caravans	93%	94%
Ordinary goods vehicle class 1 (OGV1),[a] bus	4%	3%
Ordinary goods vehicle class 2 (OGV2)[b]	3%	3%
Average speed	28.5mph	28.3mph
85th percentile	34.6mph	34.3mph
% of vehicles above 30mph (Monday–Friday)	50%	30%
% of vehicles travelling above 30mph (Saturday–Sunday)	30%	30%

Notes: [a] OGV1 = all larger rigid vehicles with 2 or 3 axles, including vehicles with double rear wheels, tractors without trailers; [b] OGV2 = all rigid vehicles with 4 or more axles, all articulated vehicles, OGV1 vehicles towing a caravan or trailer.
Source: Planning application. 16/01101/FUL, Revised transport assessment, 03/04/2017 Appendix B, http://publicdocs.newcastle-staffs.gov.uk/AnitePublicDocs/00235107.pdf (web link may need to be copied and pasted into browser).

5.8.2 A51

5.8.2.1 Description

The A51 is a single-carriageway primary route originating from Kingsbury, Warwickshire and linking Lichfield and Rugeley to Chester. It enters the NA at Stableford Bridge over the Meece Brook, a few metres west of the WCML overbridge. It traverses the NA west–east for a distance of 8.1 km, passing through Stableford, Hill Chorlton, Blackbrook, Willoughbridge and Weymouth, and leaves the NA at the county boundary 360 metres west of Willoughbridge cross-roads. There is a speed limit of 50mph from Stableford to Hill Chorlton; and a limit of 40mph on the approaches to and through Hill Chorlton to east of Maerfield Gate, where the limit returns to 50mph, continuing to west of Blackbrook. The A53 merges with the A51 for a distance of 320 metres at the Blackbrook staggered cross-roads. For much of its length through the NA the carriageway is of substandard width.

5.8.2.2 Footways

Along much of the A51 through the NA there are no footways: from the former Cock Inn car park at Stableford to Chapel House, Hill Chorlton; from Maerfield Gate to Maer War Memorial; from Maer War Memorial to the Barbour clothing store, Blackbrook; from White Farm to Lilac Cottage, Blackbrook; from Maerway Lane to Minn Bank junction, Weymouth; from Weymouth Farm to Willoughbridge cross-roads; from Willoughbridge cross-roads to the county boundary with Shropshire, east of Pipe Gate.

At Stableford there is a footway on the north side of the carriageway, from Stableford Bridge to the site of the former Cock Inn car park.

At Hill Chorlton there is a footway from Chapel House, through the hamlet of Hill Chorlton to the Woodside junction at Maerfield Gate, where there is a bus stop in Woodside. From Chapel House to the access to the Old Cheese Factory there is a wide grass verge on the outside of the footway. From the Old Cheese Factory to Rose Cottage there is a narrow footway with a narrow grass verge on the outside. The condition of the verge has deteriorated over the years due to the increase in traffic volumes and vehicle sizes. During the growing season the hedge of the adjacent field boundary encroaches over the footway and bracken falls across the pavement, forcing pedestrians out to the edge of the footway.

From Rose Cottage to Moss Lane and from Moss Lane to Arnside there is no verge. Along this stretch, for a distance of 190 metres between Moss Cottage and Arnside, both the footway and the carriageway are below standard width and pedestrians have no protection from passing vehicles. Air turbulence from passing HGVs and the closeness of vehicles are unpleasant and intimidating. Overtaking by speeding westbound vehicles is a serious hazard for pedestrians.

From Arnside to Sandy Lane and from Sandy Lane to Maerfield Gate there is a verge on the outside of the footway. The footway from Sandy Lane to Maerfield Gate is broken, uneven, overgrown with weeds and has not been maintained since it was first laid in 1968. This footway is the route to the bus stop serving Hill Chorlton residents.

At Blackbrook there is a footway on the south side of the carriageway from the Barbour clothing store (former Maer primary school) to the western junction with the A53 at White

Farm. Further west, still at Blackbrook, on the south side of the carriageway there is a layby at Lilac Cottage from where a footway runs to the junction with Hungersheath Lane. There is a wide grass verge on the outside of the footway.

At Willoughbridge there is a very narrow footway on the north side of the carriageway for a distance of 100 metres from the Minn Bank junction to 167 London Road. There is no grass verge and pedestrians have no protection from passing vehicles. The carriageway is of substandard width.

5.8.2.3 Traffic volumes and speeds

No recent traffic speed survey data is available for the A51. The last known survey by SCC Highways was undertaken in Hill Chorlton in 2013, following implementation of new speed limits from Stableford to Blackbrook. Traffic speeds are a particular concern to residents on the A51 in Hill Chorlton and at Weymouth.

HS2 Ltd has published traffic counts from surveys taken in 2015/2016 (see below). The A51 is a less busy road than the A53, none the less since 2000 residents report a significant increase in commuter traffic travelling eastbound in the mornings and westbound in the evenings. Much of this increase is likely to be due to the growth of residential development in Pipe Gate and Woore and business centres in the towns of Stone and Stafford.

There is a significant amount of HGV and other goods/commercial traffic, the majority of which leaves or joins the A51 at Blackbrook. The Müller Dairy UK headquarters at Market Drayton and associated Culina logistics is the biggest single contributor to HGV traffic between Stableford and Blackbrook.

The road also carries a large amount of agricultural traffic, including tractors towing large waggons or with mounted machinery, and harvest machines. Some vehicles are wider than the lane widths. At harvest times convoys of machinery and waggons travel in both directions. The volume of agricultural traffic is greater on the A51 than on the A53.

The A51 is a relief road when carriageways are closed on the M6 motorway. It is also a popular biker route.

5.8.2.4 Traffic incidents

A series of bends between Stableford and the Coombesdale junction are very hazardous. There have been serious traffic incidents and fatalities on the bend at Weston Lodge. From time to time there are incidents involving motorcycles and incidents involving slow-moving agricultural vehicles pulling out onto the A51 at junctions, e.g. the Kennels Lane junction. SCC Highways has recorded 11 accidents in 5 years at the A51/53 staggered cross-roads at Blackbrook (the actual number of incidents is higher, but SCC Highways and the police do not log incidents below a certain level of severity).

Box 5.11 Transport network and highways issues

Highways issues emerged in discussion at the Roadshows in November and December 2015 as the biggest single set of issues facing residents. They were also the greatest single topic of comment in the Residents' Survey in September 2016. A specific question on highways issues (28a 'Do you have any other comments about traffic and transport in the Neighbourhood Area?') drew 154 responses. Question 4a 'Are there any other issues of concern to you that are not mentioned in Question 4?' also drew 69 comments on highways issues (out of a total 99 comments). (See Introduction.6.2 'Community engagement' and report on Residents' Survey.)

A wide range of highways issues discourage active travel (walking and cycling) and increase reliance on private motor cars. For further information on highways issues see Chapter 3.

5.9 Infrastructure and infrastructure deficiencies

Infrastructure refers to the basic physical systems and services that a society or an economy requires in order to function effectively.

5.9.1 Electricity

Across much of the NA the electricity supply is carried on overhead lines. In recent years Western Power Distribution has carried out intensive programmes of tree felling and lopping to protect the lines from storm damage. This has led to the loss of some significant trees in parts of the NA (Figure 5.8).

The government has announced that the manufacture and sale of petrol and diesel cars will cease from 2040. Over the course of the Plan the number of hybrid plug-in cars in the NA can be expected to grow. The resulting rising demand for electricity will place a burden on the network and distribution system across the NA, necessitating significant infrastructure upgrades.

Under the UK's legally binding carbon reduction targets the burning of gas in home heating systems could be phased out as soon as 2030. As householders switch to non-gas heating systems, and when the final changeover happens, a further burden will be placed on the local electricity infrastructure.

Figure 5.8 Stump of mature hedgerow oak felled near overhead power lines

5.9.1.1 Renewables

Paragraph 148 of the NPPF states that 'The planning system should support the transition to a low carbon future in a changing climate', including by 'support[ing] renewable and low carbon energy and associated infrastructure'. there is a 'responsibility on all communities to contribute to energy generation from renewable or low carbon sources'.

> To help increase the use and supply of renewable and low carbon energy and heat, plans should:
>
> - provide a positive strategy for energy from [low carbon] sources, that maximises the potential for suitable development while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);
>
> …
>
> - identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.
>
> Local planning authorities should support community-led initiatives for renewable

> and low carbon energy, including developments outside areas … that are being taken forward through neighbourhood planning.
>
> Paras. 151 and 152

None of the housing developments currently permitted in the NA includes provision for renewable and/or low-carbon energy installations of any kind.

At present there is also very limited take-up of renewable energy technologies on existing development within the NA, either residential or business. Some residents and businesses have solar panel installations. A producer of free-range eggs in the NA has installed a solar field to power its operation.

Box 5.12 Residents' Survey

The Residents' Survey showed little support for renewable energy at scale: 17% each for solar fields and biomass energy, and 8% for wind turbines.

Of the 21 responses to question 11a 'Other (please specify) [appropriate uses of land in the Neighbourhood Area]', 8 were comments on the siting of solar fields and wind turbines. Only 2 responses were completely negative; 6 expressed the acceptability of such projects when carefully sited.

> 'I know we need energy but we all become selfish and say not on our patch, but it has to be on someone's patch. If we can produce energy that does not spoil the landscape then great.
>
> 'Farms and other rural businesses should be allowed to install renewable energy installations such as wind turbines and/or solar fields to meet their operational energy needs.'

5.9.2 Gas

Mains gas supply is limited to Baldwins Gate, Madeley Park Wood, Heath Road on Whitmore Heath and the Swan with Two Necks public house at Blackbrook. Other parts of the NA are dependent on electricity, bottled gas, oil and LPG for cooking and heating, all of which are more expensive.

5.9.3 Sewerage

Mains sewerage is limited to Baldwins Gate, the Parkwood Drive South and Walls Wood developments in Madeley Park Wood, and Maer village. All disposal is to the Baldwins Gate

sewage works at Chorlton Moss. At The Croft former council houses at Blackbrook a small private sewage works serves the development. In all other locations sewage disposal is by septic tank, cess pit or package treatment plant.

Box 5.13 Issue: capacity of sewerage system

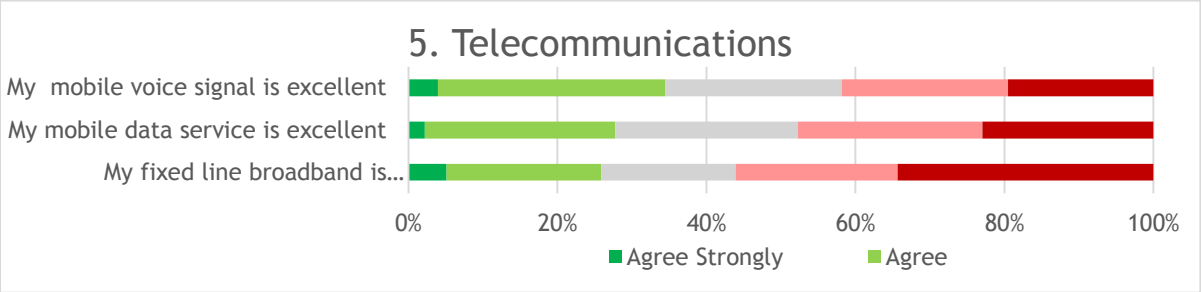
Severn Trent has indicated that the Baldwins Gate sewage works and the terminal pumping station at Baldwins Gate are currently under pressure and do not have capacity to serve the Kier site for 109 dwellings currently under development in Baldwins Gate. Upgrades are planned for completion during Severn Trent's current planning cycle, which ends in April 2020 (see Severn Trent consultation responses in NuL Borough Council planning application 16/01101/FUL).

5.9.4 Telecommunications

A small telephone exchange in Baldwins Gate serves the majority of the NA for fixed-line telephone and broadband.

Box 5.14 Residents' Survey

Both the mobile and broadband services received poor ratings in the Residents' Survey.



5.9.4.1 Broadband internet

Broadband internet is variable in quality across the NA. Map 6 illustrates the status of superfast broadband rollout in the NA and surrounding areas at September 2017.

5.9.4.2 Mobile communications

Mobile phone and data service is patchy across the NA. Some areas have no service at all; others are served by a limited number of providers and the quality of service is not uniformly good. 4G is available in some parts of the NA. Maps 7a and 7b show coverage by all providers of 2G/3G and 4G services.

5.10 Appendix: Analysis of traffic flows in Baldwins Gate and at Blackbrook staggered junctions

By Richard Latham, IEng., FIHIE (Retired)

This appendix deals with traffic situations now and for the foreseeable future in the NA.

Figures are taken from the most recent available data, High Speed Rail (West Midlands – Crewe), *Environmental Statement Volume 5: Technical Appendices – Transport Assessment (TR-001-000) Part 1* (July 2017).

Figures on the accompanying linear drawings (Plan 1 and 2) show the *total* average daily flow (i.e., both directions added together), known as the Annual Average Daily Total or AADT.

It must be emphasised that traffic data was obtained at different times between November 2015 and July 2016, and therefore strict mathematical calculations are not possible, owing to differing recorded volumes.

The NA is served by two major routes: A51 Stone to Nantwich road and A53 Newcastle to Market Drayton road. Numerous side roads intersect with these two and connect with areas such as Keele, Stableford, Chapel Chorlton, Maer, Madeley and Aston. A51 and A53 intersect at Blackbrook, where they run together as A51 for 300 metres before dividing.

This appendix deals with two areas of principal concern, Baldwins Gate (in Whitmore parish) and Blackbrook (in Maer parish).

5.10.1 Baldwins Gate

Plan 1 shows the diagrammatical layout of the area together with HS2 traffic figures underlined. Computed volumes have been extrapolated from this information and the calculations are shown; these are in ***bold italics***.

There is one anomaly of particular note: to the west of Holly Bush Lane there is a recorded volume of 9,855 but at Blackbrook (see Plan 2) there is a computed volume of 10,270 – a difference of 415 and with no junctions of note between the two sites. Consequently, the mean of these two, i.e. 10,063, is considered in the following calculations. Deducting Holly Bush Lane traffic of 542 suggests 9,521 vehicles pass the end of Madeley Road.

Consideration should now be given to Manor Road (referred to as Madeley Road by HS2) and Woodside. On Madeley Road 1,592 vehicles are recorded; allowing a 50/50 split of this traffic between A53 to/from the east with Woodside, then 796 vehicles can be added to the 9,521 above. Local knowledge and experience suggests that a similar amount of A53 traffic to/from the east uses Woodside. Adding these in results in an estimated AADT at the western end of Baldwins Gate of 11,113 (9521 +796 + 796).

Moving to the eastern end of the village, 12,672 vehicles are recorded on A53 east of Common Lane, which itself carries 343 vehicles. As most of these will travel to/from the east, it is reasonable to say that 12,329 vehicles (12,672 – 343) will enter Baldwins Gate.

In conclusion, it can therefore be realistically assumed that on a daily basis 1,216 vehicles (12,329 – 11,113) vehicles start or finish a journey in the Baldwins Gate area between Common Lane and Woodside.

5.10.2 Blackbrook

A51 passes through the area of Blackbrook and is crossed by A53 by means of staggered junctions, i.e. A53 runs within A51 for 300 metres. Although A53 traffic is required to give way or stop where it intersects A51, it carries the heavier volume of traffic. The area is subject to a 50mph speed limit.

Because the heavier traffic flows are on A53 queuing is inevitable at the junctions with A51. Dealing first with the eastern-most of these, Table 79 of the HS2 Ltd *Technical Appendices*

turning volumes, and paragraph 5.6.26 states: 'The model shows that this junction operates close or over its capacity on the A53 Newcastle Road arm in the AM and PM peak periods.'

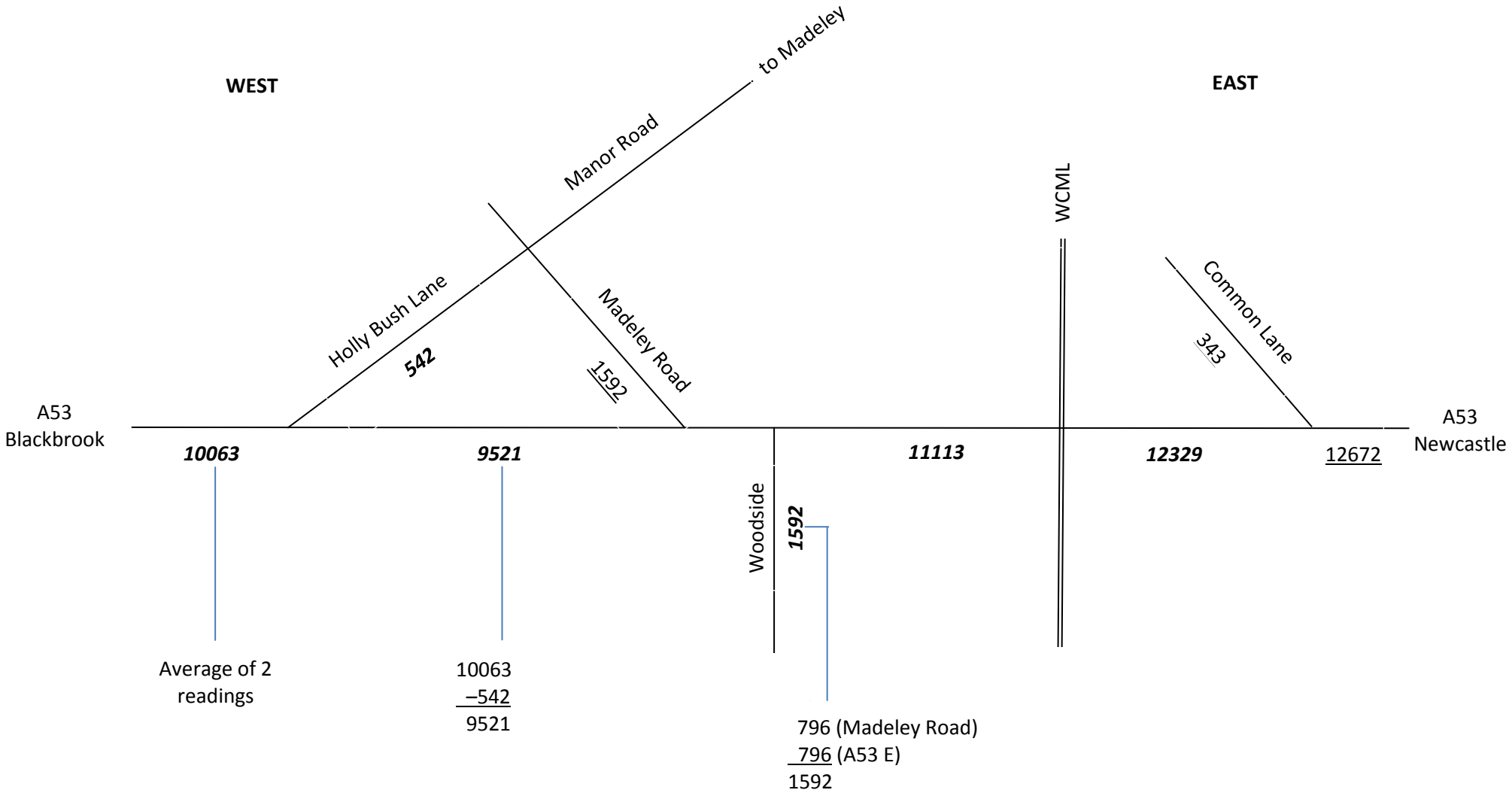
Turning to the western intersection, Table 85 of the HS2 Ltd *Technical Appendices* shows the turning volumes, and paragraph 5.6.38 states: 'The model shows that this junction is approaching capacity on the A53 arm in both the AM and PM peak periods.'

Plan 2 shows the diagrammatical layout of the area, together with HS2 Ltd's traffic figures underlined. Computed volumes have been extrapolated from this information and the calculations are shown; these are in ***bold italics***.

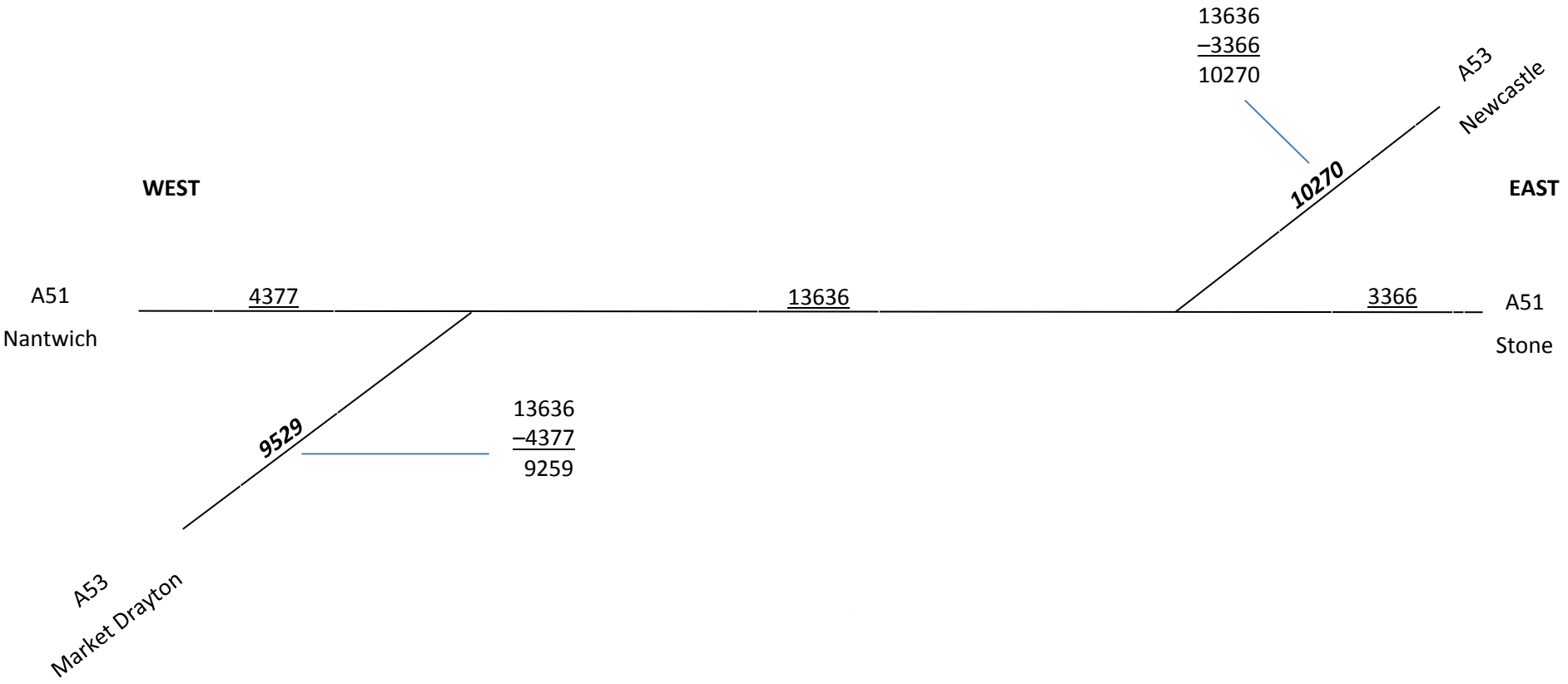
It is evident that these two intersections will become seriously overloaded with natural traffic growth and, more importantly, by HS2 construction traffic, most of which will be HGVs. (Figures are available at Table 338 of the HS2 Ltd. HS2 Ltd *Technical Appendices.*

Implementation of junction improvements prior to the commencement of HS2 phase 2a construction is essential.

Plan 1 Baldwins Gate A53



Plan 2 Blackbrook A51 and A53



6 Environment

Content of this chapter:

The NA has a rich natural and historic environment, as described in the following sections.

6.1 Character

The NA is a rural area, comprising 50% of the total area of the 'Rural South-West' of NuL borough. It is an agricultural area with predominantly diary and livestock farming and a lower proportion of arable. There is also a significant amount of woodland. Across the NA development consists of a series of small villages (lower order villages), hamlets and cluster hamlets and isolated dwellings and farms that were established in historical times (some settlements have Saxon origins). Three larger settlements, comprising a higher order village in the centre of the NA and two modern wooded settlements grew up during the 20th century (AECOM, TCA, 2017).

The AECOM TCA provides the following cumulative description of the area:

> The natural landscape provides a shared mutual identity for settlements across the Neighbourhood Plan Area, and is considered to be one of the Neighbourhood Area's most significant features. The undulating landform, and the numerous controlled views which this topography offers, are valuable assets to the Parishes, and are crucial in defining the character of the Neighbourhood Plan Area.
>
> Development and infrastructure are settled in the landscape and often screened [Figure 6.1]; as such, there is a high scenic quality across the landscape. This is

punctuated in parts by isolated farmsteads and nucleated settlements which are notable in views, given that the area is generally defined by the pastoral landscape of medium-scale fields and hedgerow boundaries.

Roads and lanes are generally narrow and sunken, and have a low visual presence due to being effectively screened by roadside vegetation. This almost eliminates them from view, helping to reduce their visual impact on the Neighbourhood Area and again reinforcing notions of seclusion.

The agricultural narrative is common across the Neighbourhood Area, with settlements often enclosed by open farmland. Despite the presence of the WCML and the A51/A53, the overall impression across the neighbourhood area is one of tranquillity.

Woodland blocks and ridges help to frame the higher elements of the rural landscape and provide strong skylines against the open views. Tree lined wetlands and ditches contribute to the landscape value of the valleys, whilst narrow roads and sunken lanes create loose linkages between the settlements.

Development is generally well screened from the long views across the Neighbourhood Area. Where the views are interrupted, this is usually in the form of singular units. The sensitivity with which these units have been built in relation to these long views varies, with some contributing to the scenic rural landscape whilst others are more prominent and modern in appearance, and can detract from local character.

The location of the West Coast Mainline following the Meece Valley and the Whitmore Trough means that the railway line and its supporting infrastructure are common in many local views in Chapel and Hill Chorlton parish and in the south-eastern and western part of Whitmore parish.

Settlements and lanes have a close relationship to the local topography, creating an awareness of the landscape when moving through the Neighbourhood Area.

Figure 6.1 'Development and infrastructure are settled in the landscape.' Rooftops of Acton village viewed from Chorlton PRoW No. 8 (left); Maer village from Haddon Lane (right)

> Views are subject to seasonal change due to the growth of vegetation, and proximity of this vegetation to the road and recreational networks. As such, the visual experience across the neighbourhood changes through the year.
>
> AECOM, TCA, p. 43

6.2 Landscape and natural environment categorisations

The environmental and landscape setting of the NA is assigned to a number of categorisations, as follows.

- Shropshire, Cheshire and Staffordshire Plain (Natural England, National Character Area (NCA) 61)
- West Midlands Meres and Mosses (Natural England, Natural Area 27)
- Woodland Quarter (SCC, Planning for Landscape Change SPG)
- Ancient Redlands (SCC, Planning for Landscape Change SPG)
- Sandstone Hills and Heaths (SCC, Planning for Landscape Change SPG)

6.2.1 Shropshire, Cheshire and Staffordshire Plain

The NA is located on the eastern side of the Shropshire, Cheshire and Staffordshire Plain, Natural England's NCA 61. To the east, the NA borders NCA 64, Potteries and the Churnet Valley.

6.2.1.1 Landform

The NA is characterised by a series of sandstone ridges, small plateaux, steep hillsides, hollows and deep coombes and is dominated by the Maer Hills (within the NA) and the Hanchurch Hills (adjoining to the east, Figure 6.2), both of which are under commercial conifer forestry.

> The Shropshire, Cheshire and Staffordshire Plain National Character Area (NCA) comprises most of the county of Cheshire, the northern half of Shropshire and a large part of north-west Staffordshire. This is an expanse of flat or gently undulating, lush, pastoral farmland …
>
> A series of small sandstone ridges cut across the plain and are very prominent features within this open landscape. The Mid-Cheshire Ridge, the Maer and the Hanchurch Hills are the most significant. They are characterised by steep sides and woodland is often ancient semi-natural woodland …

> The landscape character of the plain owes much to its glacial origins. A thick layer of glacial till covers the lower slopes of the ridge and the surrounding plain and is punctuated by numerous ponds and meres. Subsequent colonisation by vegetation has resulted in the establishment of large areas of bog, known as mosses. … The meres and mosses of the north-west Midlands form a geographically discrete series of nationally important, lowland open water and peatland sites; the finest examples are considered to be of international importance.
>
> The NCA is important for food production. Throughout the plain, the water retention and fertility of the clay soils support lush pastures for grazing dairy cattle. … The lighter soils in Staffordshire and parts of Shropshire support more mixed farms, combinable crops and potatoes in rotation.
>
> Natural England, NCA profile 61, p. 4

Figure 6.2 The Hanchurch Hills dominate the NA to the east: views from Whitmore Heath and Chorlton PRoW No. 19

Box 6.1 The 1951 County Plan

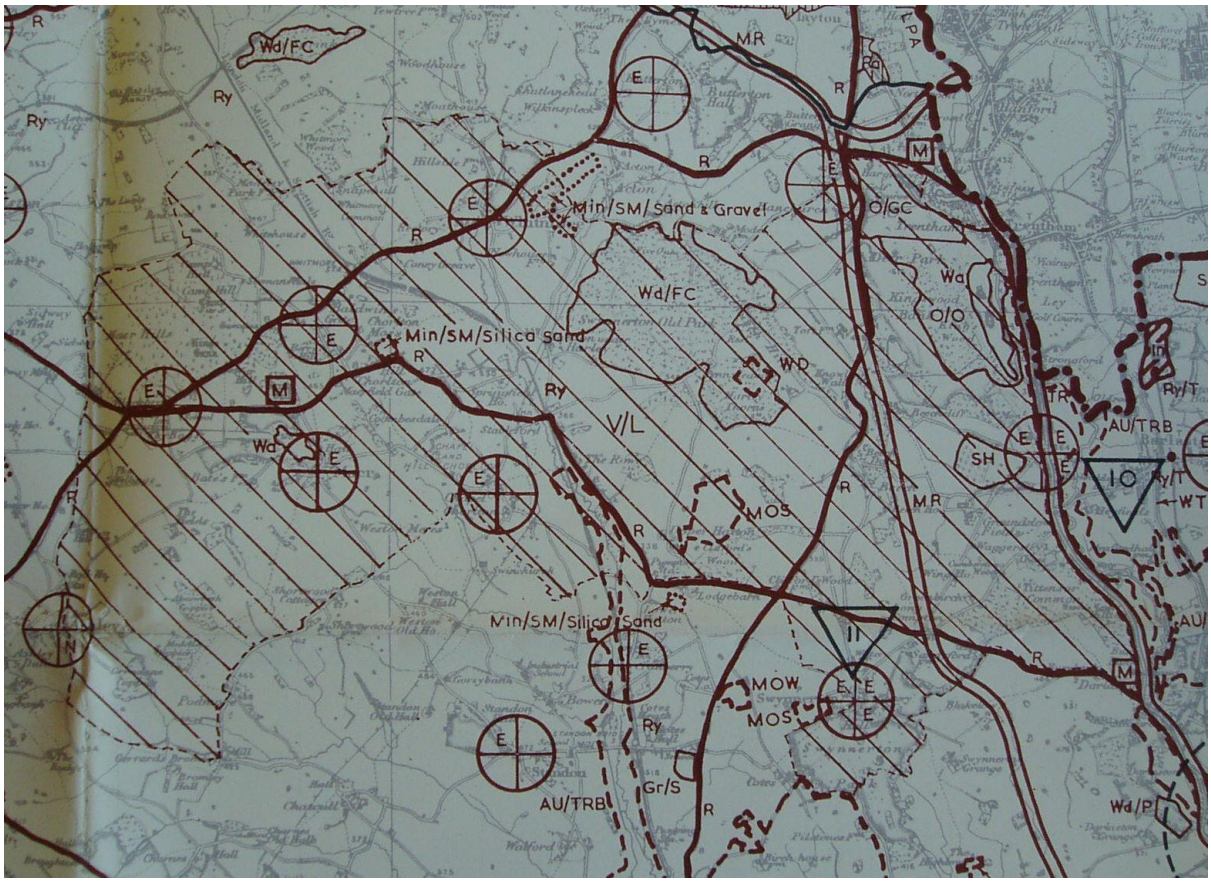
The first County Plan for Staffordshire under the Town and Country Planning Act 1947 designated 6 Special Landscape Areas, one of which was Maer and Hanchurch Hills, described in the Plan as follows:

> *Maer and Hanchurch Hills* (area about 22 sq. miles). – This area extends from the Maer Hills at the north-west to Trentham Park at the north-east and includes Whitmore and Swynnerton Old Park. Towards the south-west the boundary extends to near Ashley and at the south it includes the villages of Maer and Swynnerton. Tittensor Common and Bury Bank are included at the south-east.

The area (Figure 6.3) covered the whole of Chorlton parish with the exception of Swinchurch and the southernmost tip of the parish; Maer parish south of Radwood Lane and east of

Maerway Lane and Hungersheath Lane; and the southern part of Whitmore parish, including Madeley Park Wood, the whole of Whitmore Heath, Moat Wood and Brick Kiln Wood, Whitmore village and the park and grounds of Whitmore Hall and land to the south-west of Acton.

Figure 6.3 Maer and Hanchurch Hills Special Landscape Area – hatched area on the 1951 County Map



6.2.1.2 Views

From high points in the NA there are distant views to the Wrekin in Shropshire (Figure 6.4), Welsh mountains, Pennines and Peak District and across the Cheshire Plain.

> The plain is visually constrained by the higher land around it. In the south, there are long views from the plain to the prominent hills of the Shropshire Hills NCA, notably the Wrekin and Wenlock Edge. The foothills of the Welsh mountains can be seen from areas in the west. In the east, the peaks of the Pennines and Peak District can be seen.
>
> Natural England, NCA profile 61, p. 6

6.2.1.3 Transport network

> An extensive transport network crosses the plain: the M6, … and a web of railway lines which emanate from Crewe, an important node in the national rail network.
>
> Natural England, NCA profile 61, p. 7

Figure 6.4 The Wrekin, Shropshire, viewed from Haddon Lane, Chapel Chorlton

The area is bounded on its north-eastern side by the M6 and is crossed from east to west by the A51 and A53. The West Coast Mainline (WCML), with its nearest stations at Crewe (north) and Stafford (south) crosses the NA from north-west to south-east. The proposed High Speed 2 (HS2) railway will cross the NA, shadowing the path of the WCML.

6.2.2 West Midlands Meres and Mosses

The NA is located on the eastern side of the West Midlands Meres and Mosses, Natural England's Natural Area 27, which covers most of Cheshire, the northern half of Shropshire and part of north-west Staffordshire.

> [E]cologically, the Meres and Mosses landscape [Figure 6.5] is valued on a par with the Norfolk Broads and the Lake District […] the open water of the meres and the lowland raised bogs of the mosses … are the primary habitat interest, although associated swamp, fen and wet woodland habitats are of secondary interest.
>
> M. Jones, 'Landscape-scale Conservation in the Meres and Mosses', *British Wildlife*, June 2015, pp. 337–344, p. 338

These wetlands have not only an international importance for nature conservation but also provide evidence of glacial retreat in their mineral soils and local records of the vegetation colonisation of those bare soils to the present day, from the layers of preserved pollen found in the peatland 'archives'.

Although dominated by the low lying plain, there are scattered outcropping sandstone hills, glacial moraine and steep stream and river valleys, which provide relief to this otherwise homogeneous landscape. These features also endow this area with a variety of habitat types such as … heath which are able to survive where intensive agriculture is not possible due to factors such as the steepness of slope, or the poorness/acidity of the sandy soils.

Natural England, Natural Area profile 27, p. 6

Figure 6.5 Meres and Mosses landscape at Chorlton Moss in winter (Photos: Richard Oppenheimer)

The boundary to the south east in Staffordshire is less well defined and landscape and ecology merge gradually into the Trent Valley system. In this transitional corner of the Natural Area are dry and marshy grasslands on mineral soils which are infrequently encountered across the plain to the north west.

Natural England, Natural Area profile 27, p. 7

Human activity has contributed both positively and negatively to the nature conservation resource of this area, as a by-product of agricultural and industrial activity and as a consequence of direct action. … the greatest pressures on the resource are from intense agricultural activity, transport infrastructure, housing and waste disposal. This invariably results in the continued loss, fragmentation and degradation of remaining sites and their linking habitats with the inevitable consequential loss of biodiversity and viability of populations of rare species characteristic of the Natural Area.

Natural England, Natural Area profile 27, p. 6

> A key feature of the Mosses is the preservation within the peat of pollen from plant species growing in and around the moss since the last glaciation. By taking cores of peat it is possible to 'read' the sites' vegetational history in the layers of peat up to the present day.
>
> Natural England, Natural Area profile 27, p. 52

6.2.3 Ancient Redlands

Almost the whole of Whitmore parish and the Chorlton Moss area and the northern end of Chorlton parish come under this landscape type (see Map 8). The following extracts from Planning for Landscape Change SPG by Staffordshire County Council (SCC) briefly summarise the characteristics of this landscape.

> *Visual character*
> … Landform variations are very important in defining the differing scales and character, with areas of rolling or strong small-scale landform undulations allowing or controlling views across the landscape. …
>
> The woodlands … have a large visual influence on the landscape … enclosing views and giving the whole area an impression of being well wooded in character. The numerous mature hedgerow oaks … reinforce the land cover pattern and wooded appearance of the landscape …
>
> Settlement within this landscape reflects its ancient character, with narrow winding lanes, often sunken [Figure 6.6], linking hamlets, scattered houses and farms. Medium sized farms of Staffordshire red brick and halls with associated parkland impart a localised, distinctive character …
>
> Generally, this is a landscape where everything is on view, including intrusive elements such as commuter properties, main roads and electricity pylons.
>
> *Characteristic landscape features*
> Hedgerow field pattern with mature hedgerow oaks and some ash; broadleaved woodland; pronounced rolling landform; narrow sunken lanes; steep sandy slopes; well treed stream corridors and field ponds; parkland and pasture farming; isolated red brick farmhouses; straight lanes.
>
> *Incongruous landscape features*
> Expanding urban edge; busy main roads; power lines.
>
> SCC, Planning for Landscape Change,
> vol. 3, Landscape Descriptions (2000), p. 29

6.2.4 Sandstone Hills and Heaths

Chorlton and Maer parishes come under this landscape type, as well as three small areas of Whitmore parish: land south of Acton; Madeley Park Wood and hillside west of Manor

Road; land west of Radwood (see Map 8). The following extracts from SCC's Planning for Landscape Change SPG briefly summarise the chief characteristics of this landscape.

> *Visual character*
> … a landscape varying from intensive arable and pastoral farming, where hedgerows are closely trimmed and in decline, to small-scale intimate areas in which large grown-up intact hedges and numerous hedgerow oaks limit views …
>
> … steep sided valleys and associated extensive broadleaved woodlands [are] important factors in controlling scale. In these smaller scale valley landscapes … commuter pressures are apparent and these are subtly changing the character of settlements.
>
> … winding ancient lanes … often sunken … dictate views and give a very rural feel to the landscape. Areas of former heathland are apparent … and … are often associated with newer rural properties.
>
> … The open flatter areas where everything is on view … are characterised by medium sized farms and large estates, … the ancient pattern of small fields … of the steep valleys imparts a more peaceful character to the areas of smaller scale.
>
> *Characteristic landscape features*
> Strongly undulating landform with steep sided valleys; a well treed landscape of field ponds, stream valleys and meres; ancient narrow sunken lanes; farms of traditional red brick; intensive arable and pasture farming; hedged field boundaries; hedgerow oaks; broadleaved and conifer woodlands.
>
> *Incongruous landscape features*
> Introduction of extensive post and wire fencing; field trees; modern housing; industrial development; busy main roads.
>
> SCC, Planning for Landscape Change,
> vol. 3, Landscape Descriptions (2000), pp. 39–40

6.2.5 Woodland Quarter

The NA is located in the 'Woodland Quarter' of Newcastle-under-Lyme. The following extracts briefly summarise the chief characteristics of the landscape.

> This is a local name, of unknown provenance, for a distinctive region of sandstone hills and large woodlands to the south west of Newcastle-under-Lyme. At its core is an area of strongly rising landform, culminating in the Maer and Hanchurch hills, with their extensive conifer plantations and remnant heathland character … This is predominantly a livestock farming area with dairying the main farm type. Cereals and other more demanding arable crops including potatoes are grown mainly in the south and west of the area where land quality is generally better than further north.
>
> …

Figure 6.6 Sunken lane between Acton and Whitmore villages

The undulating landform is a unifying feature; to the west of the core area, approaching the boundary with north Shropshire, it supports a medium scale landscape with an intact field pattern and conifer woodlands on a pronounced rolling landform, whilst to the south it develops into an elevated plateau of intensive farmland and dispersed hamlets. This is an area of scattered woods and regular to semi-regular medium sized fields, where the mixed arable and pastoral farming, with few trees, sculpted hedges and strong landform, results in extensive views across the landscape

SCC, Planning for Landscape Change,
vol. 3, Landscape Descriptions (2000), p. 11

Box 6.2 Issue: trees in the landscape

In parts of the NA there are isolated trees, significant groups and larger plantings of mature and over-mature trees in the landscape that are at risk due to decay, lack of maintenance and absence of succession planting. Some of these trees are protected under Tree Preservation Orders (TPOs).

Opportunity

The Town and Country Planning Act 1990 s.206 places a duty on landowners to replace a protected tree that is removed, uprooted or destroyed in contravention of the Town and Country Planning (Tree Preservation) (England) Regulations 2012, or a tree that is removed,

uprooted or destroyed because it is dead or presents an immediate risk of harm.

There is an opportunity for the parish councils to work with landowners and landscape officers at NuL Borough Council to ensure that replacement planting is carried out as required under the Act.

6.2.6 Landscape policies in Planning for Landscape Change SPG

Planning for Landscape Change SPG has defined landscape policy areas and objectives for the Staffordshire landscape and also identifies areas of landscape sensitivity.

6.2.6.1 Landscape policy objectives

Planning for Landscape Change SPG identifies landscape policy areas in the NA (see Map 9), to which the following policy objectives apply.

6.2.6.1.1 Landscape maintenance

In most cases the existing economically-determined pattern of land use has resulted in these landscapes of high quality. There is therefore a lesser need for the targeting of landscape conservation resources to these areas. However, there is a danger that a change in the farming or land use pattern could have rapid and serious consequences for landscape quality. Such changes may already be underway, with their effects on the landscape currently not apparent. They could also be precipitated by future developments in national or international agricultural or forestry support policies, by the introduction of new technologies, or by novel misfortune with consequences similar to those of Dutch elm disease or BSE. There is a particular need for vigilance in these areas, and for a means of predicting and moderating the impact of changes in land use policy.

SCC, Planning for Landscape Change,
vol. 2, Supporting Documentation (2000), p. 3

6.2.6.1.2 Landscape enhancement

These areas have suffered some erosion of strength of character and loss of condition of landscape elements. In some, but by no means all cases, this appears to be linked to a change in the farming pattern, from grassland to arable production. It may be that in time a new character will emerge from that change, but it is unlikely that the condition of traditional features such as small woodlands and hedges will improve without intervention. There is a particular need, therefore, to encourage relatively small-scale landscape conservation schemes such as hedgerow maintenance, habitat creation and tree and woodland planting, to stem the decline in landscape quality that will otherwise become more evident.

SCC, Planning for Landscape Change,
vol. 2, Supporting Documentation (2000), p. 4

6.2.6.1.3 Landscape restoration

> A range of causes have contributed to the decline of these areas: in some it has been mineral working and industrial activity which has left dereliction in its wake; in others the problems are largely those of the urban fringe, and in the deeper countryside it has often been a change to intensive arable farming that has led to the loss of landscape elements that formerly contributed to character and quality. In each case, enough of that character survives to guide restoration efforts, which must be pursued with some commitment if the decline in these areas is to be halted and reversed.
>
> SCC, Planning for Landscape Change, vol. 2, Supporting Documentation (2000), p. 4

Box 6.3 Issue: areas of landscape restoration

- The landscape quality designations and policies from the Planning for Landscape Change SPG have been translated into the NuL Local Plan 2011 as policies N18–N22 and are shown on the Proposals Map. NuL Saved Policy N21: Areas of landscape restoration states that:

  > Within Areas of Landscape Restoration, as shown on the Proposals Map, the Council will support, subject to other plan policies, proposals that will help to restore the character and improve the quality of the landscape. Within these areas it will be necessary to demonstrate that development will not further erode the character or quality of the landscape.

  Saved Policy N21 does not fully translate the policy intention of Planning for Landscape Change SPG and allow that landscape restoration in the countryside should focus on halting decline in landscape quality and be guided by surviving landscape character. Consequently, the policy has been used by developers to justify large-scale housing development in the open countryside on the premise that the landscape in these areas is of low value and that the introduction of development would constitute landscape restoration. This approach has not been resisted by planning officers.

- The area of landscape restoration defined in the NA includes all of the peatland areas in the west and south of Whitmore parish, including the lowland raised bog habitat at

Chorlton Moss Local Wildlife Site (Maps 10 and 12), which has deteriorated as a result of historical land enclosure, over-draining of the land and the intensification of agriculture.

Maer and Hanchurch Hills (area about 22 sq. miles). – This area extends from the Maer Hills at the north-west to Trentham Park at the north-east and includes Whitmore and Swynnerton Old Park. Towards the south-west the boundary extends to near Ashley and at the south it includes the villages of Maer and Swynnerton. Tittensor Common and Bury Bank are included at the south-east.

The area (Figure 6.6) covered the whole of Chorlton parish with the exception of Swinchurch and the southernmost tip of the parish; Maer parish south of Radwood Lane and east of Maerway Lane and Hungersheath Lane; and the southern part of Whitmore parish, including Madeley Park Wood, the whole of Whitmore Heath, Moat Wood and Brick Kiln Wood, NuL Borough Council's misapplication of the SCC policy for this landscape designation puts these ecologically sensitive, fragile and important areas at risk.

Opportunities

- The Neighbourhood Plan provides an opportunity to protect the rural character of the NA and to promote appropriate actions in areas of landscape restoration. This is supported by the Staffordshire Biodiversity Action Plan and its objective of carrying out habitat restoration work at landscape scale.
- By highlighting the Borough Council's misapplication of county-level policy the parish councils can work to protect the biodiversity and environment of these sensitive areas.
- There is scope to work with landowners and the Staffordshire Wildlife Trust to carry out landscape-scale habitat restoration at Chorlton Moss and to combine restoration of the habitat with educational objectives. (See also section 6.7, Biodiversity opportunity zones.)
- See also below section 6.3.2, Peatland sites

6.3 Geology

The underlying geology of the NA is Triassic sandstone, overlaid with clay, sand and gravel deposits formed during the retreat of ice at the end of the last Ice Age. The geological

formation is the source of the peatlands in the valley areas of all 3 parishes (Map 12) and the regionally important Meres and Mosses landscape that characterises parts of the NA.

> The underlying geology of the area is mostly Triassic rocks formed between 195 to 225 million years ago. These rocks have been covered with a layer of clays, sands and gravels, deposited by the retreating glaciers of the late Pleistocene era (which ended approximately 12,000 years ago). It is these glacial sediments which have produced the characteristic landforms and features within the Meres and Mosses Natural Area.
>
> Natural England, Natural Area profile 27, p. 51
>
> Glacial activity has affected the whole plain by rounding off hard outcrops of sandstone, creating meltwater channels and lake beds and depositing a variety of materials from boulder clay to marls, sands and gravels. These deposits have in places caused the formation of a number of shallow meres and some peat filled mosses.
>
> Natural England, NCA profile 61, p. 29

Box 6.4 The Whitmore Trough[5]

The Whitmore Trough is a long, wide valley with virtually no drainage that runs in a south-easterly direction from the disused Silverdale–Market Drayton railway line and joins the Meece Brook to the south-east of Baldwins Gate. A shallow watershed between the Trent and Mersey drainage systems runs through Baldwins Gate.

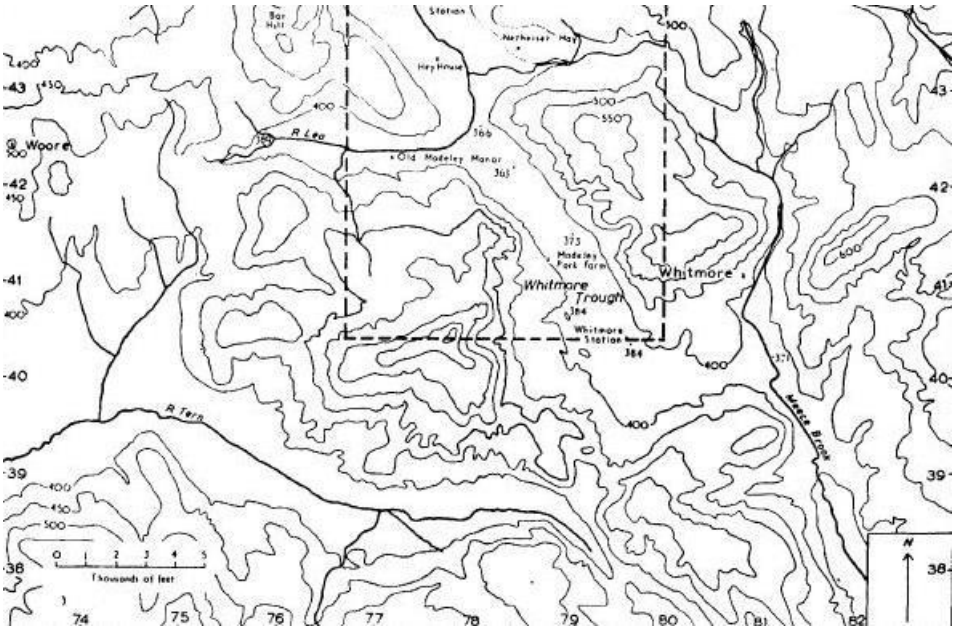
The northern part of the trough is about 0.4km wide. About 0.4km south of Madeley Park Farm it widens out to the west to form the broad, flat valley about 0.8km wide in which the village of Baldwins Gate is situated. About 0.8km south-east of Whitmore station it makes a double bend towards the east, joining with the Meece Valley 1.5km from Whitmore station. At its widest point south of Whitmore station the trough is 1km in width (Figure 6.7).

'The trough at its maximum height of 384 feet AOD, at Whitmore Station, is an imperceptible watershed which is part of the divide between the North Sea and Irish Sea drainage' (Yates and Moseley, 1957). North of Whitmore station the trough extends for

[5] E.M. Yates and F. Moseley, Glacial lakes and spillways in the vicinity of Madeley, North Staffordshire, Quarterly Journal of the Geological Society, 1957, vol 113, pp. 409–428.

4.8km until it meets the valley of the River Lea. At the Silverdale railway line the valley floor is 365 feet AOD, i.e. over a distance of almost 4.8km there is a fall of a mere 19 feet and the valley has virtually no drainage. At the point where the trough meets the Meece Brook the level is 371 feet AOD, i.e. the area south of Whitmore station also has virtually no drainage. The sand deposits at Whitmore Station are 20 feet deep; peat deposits north of Whitmore station are 'usually 5 feet thick, resting on sand'. South of Whitmore station the peat deposits form Chorlton Moss and the Chorlton Moss lowland raised bog.

Figure 6.7 The Whitmore Trough



Source: Yates and Moseley, Figure 1.

Box 6.5 Historic mineral extraction in the NA

- A fine white sandstone was quarried at Chapel Chorlton in the 18th and early 19th centuries. St George's church on The Brampton, Newcastle-under-Lyme, was built of Chapel Chorlton stone in 1828. (*The Life and Times of the Villages* [2012], Chapel and Hill Chorlton, pp. 24–25). The quarries were filled in during the 1960s with spoil from the construction of the M6 motorway.
- In the 19th and 20th centuries sand was quarried in Chorlton and Whitmore parishes, at

sites north of Hill Chorlton, on Whitmore Heath and at Acton. Newcastle Rural District Council infilled the two Hill Chorlton sites with household refuse in the 1960s and early 1970s. Sludge from rural sewage works was also dumped at the larger of the two sites. Subsequently both sites were capped and restored to agricultural land. See sections 5.6.3 and 6.11.8.1 for further reference to the Acton and Whitmore Heath sites.

- Throughout the NA there are old clay and marl pits where clay was dug for brickmaking and marl for spreading on the fields. Some pits have now been filled in (e.g. at Chapel Chorlton); others survive as ponds.

6.3.1 Soilscape

The NA has a varied but acid soilscape, comprising 8 of the 27 soil types defined in the soilscape of England. (Table 6.1 and Map 12)

6.3.2 Peatland sites

England's peatlands perform important ecosystem services, through carbon capture and storage and flood control, and are a source of 70% of the country's drinking water. The NPPF (para. 118b) states that planning policies and decisions should

> recognise that some undeveloped land can perform many functions, such as for wildlife, recreation, flood risk mitigation, cooling/shading, carbon storage or food production.

In July 2017 Defra announced a £10 million grant scheme for the restoration of England's peatlands.

Peatlands comprise approximately 220ha (5%) of the NA (see Map 12) and overlie a principal aquifer (see section 6.4.4). Geological surveying has shown that fen peat deposits in the Whitmore Trough are 'usually about five feet thick' (see above, Box 6.5).

- In Whitmore and Chorlton parishes a continuous strip of fen peat runs south-east from the NA boundary at the Silverdale–Market Drayton railway line, along the Whitmore Trough and WCML, through Baldwins Gate to Chorlton Moss and the Meece Valley (Map 12).

- **Snape Hall Bogs**, at the northern end of the Whitmore Trough, was formerly a Local Wildlife Site (LWS) but was downgraded as a result of the land being ploughed.
- **Chorlton Moss LWS**, a Meres and Mosses site, is one of only two lowland raised bogs in Staffordshire. In their response to the HS2 Phase 2a Hybrid Bill Environmental Statement SCC and district councils note the need to protect the peatland in this area:

Table 6.1 Soil types in the NA (see Map 12 legend)

Number	*Type*
6	Freely draining slightly acid loamy soils
8	Slightly acid loamy and clayey soils with impeded drainage
10	Freely draining slightly acid sandy soils
14	Freely draining very acid sandy and loamy soils
18	Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
20	Loamy and clayey floodplain soils with naturally high groundwater
23	Loamy and sandy soils with naturally high groundwater and a peaty surface
27	Fen peat soils

> CT-06-229 The route crosses river valley peat associated with the Meres and Mosses NIA [Nature Improvement Area] Chorlton Moss Site of Biological Importance (LWS) at E5-F5. As stated in the Working ES response, a slight northwards readjustment of the proposed viaduct, supported by soils mapping to identify the peat area, would maximise the peat area to be retained and allow for specialised wetland habitat creation to contribute to NIA objectives while avoiding the need to realign Meece Brook.
>
> (Map 10. See above, Box 6.3, for opportunities to restore the site.)

- **Maer Pool SSSI** and **New Pool and Oak Wood LWS** in Maer parish are 2 further Meres and Mosses sites in the NA.
- **The Bogs LWS** and **Maer Moss** in Maer parish are fen peat sites in the Tern valley. Charles Darwin first observed the action of earthworms on the soil at a field on Maer Moss.

  (See also below, section 6.4.3)

Box 6.6 Issues affecting peatland sites

Land drainage and the general intensification of agriculture since the 19th-century land enclosures has put pressure on the NA's peatlands.

- Chorlton Moss LWS, Maer Pool SSSI and New Pool and Oak Wood LWS are sensitive Meres and Mosses sites that are dependent on their associated water catchments (Map 11).
- Over-draining of land at Chorlton Moss has enabled trees to become established on the lowland raised bog, resulting in the drying out of the habitat. Natural England has assessed that although the habitat is degraded it is capable of restoration.
- In recent times land at Snape Hall Bog at the northern end of the Whitmore Trough, formerly designated as a Local Wildlife Site (LWS), has been ploughed, resulting in the LWS being delisted.
- Drainage work continues to be carried out on agricultural land north of Baldwins Gate.

Opportunity

The NDP provides an opportunity to establish policies and promote actions that will contribute to the protection of peatland sites from certain types of damage.

6.3.3 Regionally Important Geological/geomorphical Sites (RIGS)

The NA has two RIGS.

Figure 6.8 Darwin's Dyke at Butterton Church Quarry RIGS (Photo: Colin Perry)

- To the west of Baldwins Gate the Red Hill Rifle Range in Maer parish was designated in 2003 for its examples of Triassic braided riverplain and aeolian dunefield sedimentary structures.
- At Butterton in Whitmore parish Butterton Church Quarry was designated in 2003 as being a prime example of the effects of an igneous dyke (Darwin's Dyke) intruding into sandstone (Figure 6.8).

6.4 Hydrology

The NA lies on the watersheds of three of England's great river systems: the Trent, the Severn and the Mersey.

> Although relatively flat, this NCA is a watershed for several major river systems.
>
> (Natural England, NCA profile 61, p. 6)
>
> The Meece Brook, a tributary of the River Sow and hence the Trent, rises north of Whitmore Hall and flows southwards through Whitmore and Stableford, towards Stafford. Chorlton Moss, a peat wetland area to the south of Baldwins Gate, drains into the Meece. The River Lea, a tributary of the River Weaver and hence the Mersey, rises east of Aston and flows east and then north of the area, through Madeley. The River Tern, a tributary of the River Severn, flows inside the south-western perimeter of the area. Its source is considered to be the lake in the grounds of Maer Hall.
>
> In the centre of the area Baldwins Gate is located in a broad, flat valley that links the Whitmore Trough to the Meece valley. An imperceptible watershed between the Trent and Weaver catchments runs through the village. About 1km south-west of Baldwins Gate a col separates the Severn and Trent catchments. A major aquifer lies below and to the south of Baldwins Gate. Artesian wells sunk near to Whitmore Station in the early 1860s supplied water for the railway and the locomotive works at Crewe, and also to the town of Crewe (1866–1940). Severn Trent operates a borehole near to Stableford.
>
> (AECOM, HCA, p. 19)

6.4.1 Watercourses

The land is drained by both main rivers and ordinary watercourses. Main rivers are designated by the Environment Agency. All watercourses that are not so designated are ordinary watercourses.

6.4.1.1 Main rivers

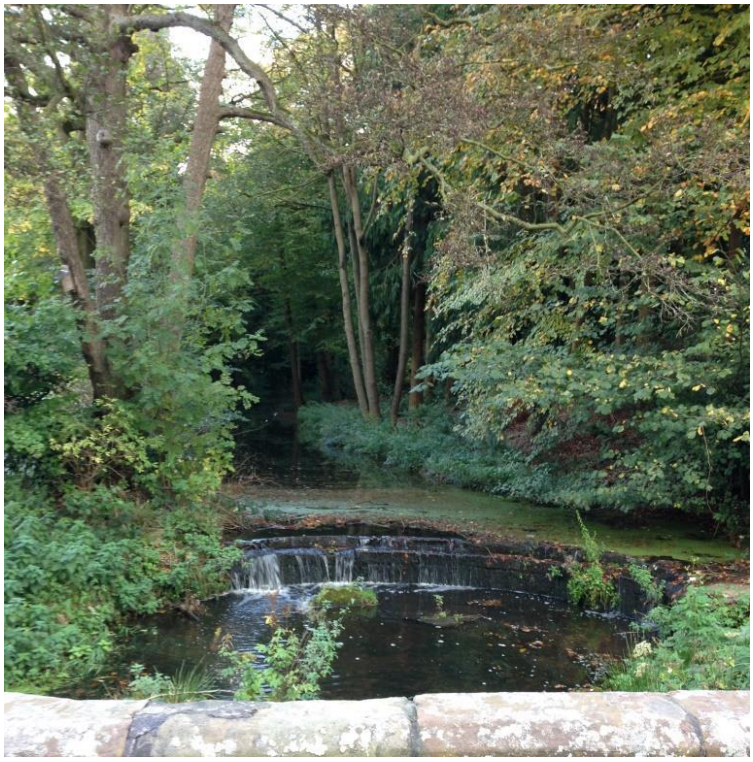
The NA has one main river, the River Lea, which forms the NW boundary of the NA from Lea Head Manor NW of Aston village, to north of Aston Cliff Farm.

6.4.1.2 Ordinary watercourses

Ordinary watercourses are found across the NA.

The **Meece Brook** rises in Whitmore parish, north of Whitmore Hall and flows southwards through Whitmore village. It then flows through farmland on the eastern side of the WCML and crosses under the railway line into Chorlton parish just north of Chorlton Mill. From here it follows a very twisting and meandering course, forming the south-eastern boundary of Chorlton parish. It is designated a main river at the boundary of Chorlton and Standon parishes and is a tributary of the River Sow, which flow through the centre of Stafford. Church House Farm in Chorlton parish and the Whitmore Estate in Whitmore parish have installed flood attenuation measures which contribute to the flood control scheme for the Borough of Stafford.

Figure 6.9 The Meece Brook in Whitmore village



Swinchurch Brook rises east of Weston Meres Farm in Maer parish and generally forms the south-western boundary of Chorlton parish with Maer and Standon parishes. Its natural course appears to have been modified in the past: for a distance of about 800m the course south and south-west of Swinchurch Farm is smoothly curved and no longer matches the

tightly twisting and meandering parish boundary. Swinchurch Brook joins the Meece Brook east of Butt House, near the southern tip of Chorlton parish.

The **River Tern** emerges from Maer Pool. For the first few kilometres its course appears to have been straightened in past times to serve as a drain, as it follows a straight course west and north-west along field boundaries to Willoughbridge. It then flows west and south-west and enters Loggerheads parish at Dorrington Bogs. The very twisting and meandering parish boundary to the south of the watercourse from Blackbrook to Dorrington Bogs suggests that the river's course has changed over time and that it may have originally formed the parish boundary. It is designated a main river after leaving Loggerheads parish at the county boundary with Shropshire.

- Chorlton parish has a network of drains on Chorlton Moss.
- In Maer parish there is a network of drains in the Tern valley, on Maer Moss and The Bogs and at Blackbrook.
- In north-western Whitmore parish there is a network of drains in the Whitmore Trough: east of the WCML, below Whitmore Heath and Whitmore Wood; and further north, on Snape Hall Bogs, west of the WCML.

Figure 6.10 Watercourse on Chorlton Moss

In northern Chorlton parish the ditches and field drains flow east to join the Meece Brook; in the southern part they flow south to join Swinchurch Brook.

In Maer parish south of Aston ditches and field drains flow south and west to join the River Tern. North of Aston they flow east and join the River Lea in Madeley parish.

In western Whitmore parish ditches and field drains flow north to join the River Lea in Madeley parish. In the northern part of the parish they flow south-east, south and south-west to join the Meece Brook. In the north-eastern part of the parish (Butterton) they flow north and north-east out of the parish and join watercourses that flow into the River Trent.

6.4.2 Standing water

6.4.2.1 Maer Pool SSSI

Maer Pool, in the grounds of Maer Hall, is a Meres and Mosses site. It

> is a small, shallow mere in a setting of parkland and mixed woodland and is the source of the River Tern. It is a good example of a naturally eutrophic (nutrient rich) water body with marginal fen and well-developed reedswamp, and is of special interest for its freshwater invertebrates.
>
> … Around much of the pool margin there is a narrow fringe of emergent vegetation … This zone grades into species-rich marginal fen with plants such as meadowsweet *Filipendula ulmaria*, greater tussock-sedge *Carex paniculata*, cyperus sedge *C. pseudocyperus*, water-plantain *Alisma plantago- aquatica*, water dock *Rumex hydrolapathum* and bittersweet *Solanum dulcamara*. At the north end of the mere this fen community broadens into reedswamp dominated by common reed *Phragmites australis*, with most of the aforementioned emergent plants occurring locally. Reed beds are rare habitats in Staffordshire and their associated fauna is correspondingly restricted. An example of this fauna is the reed warbler *Acrocephalus scirpaceus* which breeds here. …
>
> The assemblage of aquatic invertebrates is typical of small eutrophic meres where a relatively high degree of naturalness has prevailed. Drainage and pollution have commonly modified the invertebrate community of many Midlands meres of this type and such intact examples are increasingly scarce. The invertebrate fauna includes representatives of most aquatic groups and is particularly important for the variety of water bugs *Hemiptera* and snails *Mollusca*. Several regionally or locally uncommon species are recorded including the water boatmen *Sigara concinna* and *Hesperocorixa linnei* and the giant water flea *Daphnia magna* – this last is found in very few of the meres. The water beetles have received little attention to date but the nationally uncommon *Ilybius fenestratus* is present.
>
> Natural England, Designated Sites View, Maer Pool SSSI, Citation https://necmsi.esdm.co.uk/PDFsForWeb/Citation/1000283.pdf

The site is 9.25ha in area. The Functional Ecological Unit (FEU) and water catchment of Maer Pool are shown on Map 11.

6.4.2.2 Ponds

There are many small natural and manmade ponds across the NA.

The natural pool at New Pool and Oak Wood LWS in Maer parish is a sensitive Meres and Mosses site. Its FEU and associated water catchment are shown on Map 11.

Some ponds have formed in areas where clay and marl have been extracted for brick making and for spreading on the fields. There is a notable concentration of such ponds

Figure 6.11 Roadside pond, probably an old marl pit, in Whitmore parish

at Chapel Chorlton.

North of Whitmore Hall the Meece Brook has been dammed to create a lake in the grounds of the hall. Further to the north, the watercourses feed a series of manmade pools at Cudmore fishery.

6.4.3 Wetlands

See above, Box 6.4, section 6.3.2 and section 6.4.2.1. All of these are wetland areas. In the Meece Valley south of Whitmore village and in Chorlton parish, and in the Tern Valley in Maer parish, the watercourses are bordered by marshy land (see Map 12).

In Chorlton parish the peatland area adjoining Baldwins Gate to the south, including Chorlton Moss, provides natural flood attenuation and control of flows into the Meece Brook, which is a main river south of the NA. See also section 6.4.1.2 for flood control on the Meece Brook and the flood control scheme for the Borough of Stafford. See Map 11 for the water catchment of Chorlton Moss.

6.4.4 Principal aquifer

A principal aquifer and high groundwater vulnerability zone underlies much of the NA (Maps 13 and 14). Severn Trent operates water extraction boreholes to the north of Stableford, a short distance east of the NA boundary, and at Blackbrook, a short distance south of the NA

boundary (Map 15).

Box 6.7 Water extraction in Whitmore parish

For a period of 76 years, from 1864 to 1940, domestic water supplies to Crewe came from artesian wells sunk into the aquifer at Whitmore (Baldwins Gate). In the early 1860s a reliable water supply for the LNWR Locomotive Works at Crewe was sourced from Whitmore. The LNWR (additional powers, England) Act, 1865, s.75 gave the Company powers to supply water to the town of Crewe; in 1880 a new Act conferred these powers indefinitely. Water supplied to the town was always surplus to the requirements of the locomotive works.

In 1874 town residents' water consumption was 6 gallons per head per day; by 1911 it had risen to 14.2 gallons per day. By 1936 the town's daily water consumption was 809,000 gallons (this excludes water consumed by the locomotive works and the population housed by the LNWR on its estate).

During the 1930s Crewe Town Council searched for a new water supply that would be under its own control. The town's supply from Whitmore ceased in 1940, but Whitmore continued to supply water to the locomotive works and to the railway troughs at Whitmore. In 1976 during the summer drought Whitmore supplied water to Crewe Town to alleviate the shortage of the municipal supply.

Source: W.H. Chaloner, *The Social and Economic Development of Crewe*, 1780–1923 (Manchester University Press, 1950); L. Gallimore, 'Whitmore Water Supply (Crewe Works and Town)' (Crewe Library Local Studies Collection, 2003).

6.4.5 Flood zones

The valley of the Meece Brook is a continuous Flood Zone 3 from Cudmore fishery in the north of Whitmore parish to the southernmost boundary of Chorlton parish. In the Whitmore Trough there is a continuous Flood Zone 3 from SJ 79376 40809 north-west of Baldwins Gate to SJ 78002 42628 on the northern boundary of the NA; and a small Flood Zone 3 at SJ 79348 40610 on the WCML west of New House Farm, Baldwins Gate (Map 16).

6.5 Special designations (landscape and natural environment)

6.5.1 Green Belt

The North Staffordshire Green Belt extends over about 83% of Whitmore parish, from the M6 motorway in the east to the WCML in the west. A small area of land in the south of Chorlton parish lies on the eastern side of the WCML and is therefore in the Green Belt. (See Map 4 and section 1.6.)

6.5.2 Site of Special Scientific Interest (SSSI)

See above, section 6.4.2.1 Maer Pool SSSI.

6.6 Habitats and wildlife

The NPPF recognises the importance of conserving and enhancing the natural environment.

Paragraph 170 states:

> Planning policies and decisions should contribute to and enhance the natural and local environment by:
>
> a) 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);
>
> b) 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;
>
> …
>
> d) minimising impacts on biodiversity and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
>
> e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. …; and
>
> f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

6.6.1 Designated ecological sites (Maps 17a–b)

The NA has 1 SSSI (see above) and 21 sites designated by Staffordshire Wildlife Trust as follows: 17 Local Wildlife Sites (LWS); 1 Retained Grade 1 Site of Biological Importance (SBI);

3 Retained Biodiversity Alert Sites (BAS). Retained SBI and Retained BAS are considered to be equivalent to LWS (Staffordshire Ecological Record, SBI Guidelines Appendix 1: SBI Criteria Definitions). Most of these sites are on private land with no public access. The following site descriptions have been supplied by the Staffordshire Ecological Record. Where a PRoW crosses the site this is noted in parentheses.

6.6.1.1 Retained Grade 1 SBI

- Hatton Mill (partly in Chorlton parish): 'The area marked as woodland on the OS map has been felled recently [1979] and much of it has been replanted with poplars and conifers. There is also some oak and birch regeneration.'

6.6.1.2 Retained BAS

- New Pool and Oak Wood (Maer parish, partly in Loggerheads NA): 'Pool with emergent vegetation and with developing deciduous woodland.'
- Radwood Copse and Railway Verges (Maer parish): 'A birch dominated canopy over a heavily grazed turf.'
- Maer Hills (Maer parish): 'A predominantly coniferous plantation over dry heath and acidic ground flora. The hills are bisected by many paths that reflect a slightly different flora which are consistent throughout.' (PRoWs Maer 4 and Maer 5)

Figure 6.12 Heathland habitat under the canopy on Maer Hills

6.6.1.3 Local Wildlife Sites

6.6.1.3.1 Chorlton parish

- Bluebell Bank: 'A complex of habitats have developed on a steep slope that adjoins an improved pasture. The habitats present include predominantly ash woodland, bracken with scattered broadleaved trees and a small area of unimproved acidic grassland.' (PRoWs Chapel and Hill Chorlton 12, 13 and 14)
- Broughton Plantation and Coombes Dale: 'A narrow broadleaf wooded valley with standing and running water which supports a wet woodland flora and in drier parts ancient woodland indicator species.' (PRoW Chapel and Hill Chorlton 9)
- Chorlton Moss: 'Raised peat bog that is rapidly drying out, which now contains coniferous and broad-leaved woodland. There is also an area of acidic grassland in the north-west corner of the site surrounded by an area of birch and alder carr.' Extensions to this wildlife site were identified by the Grading Committee of Staffordshire Wildlife Trust at its meeting on 25 January 2018.
- Swinchurch Rough: 'A narrow broadleaf wooded valley with standing and running water which supports a wet woodland flora and in drier parts ancient woodland indicator species.' (PRoW Chapel and Hill Chorlton No. 16)

Figure 6.13 Bluebell Bank Local Wildlife Site (Photo: Val Follwell)

6.6.1.3.2 Maer parish

- The Bogs: 'Three woodlands, one of which is wet woodland, and two grazed fields which are separated by a drainage ditch. The more westerly of the two fields supports semi-improved acidic grassland and where drainage is impeded; rushes dominate in the sward.'

6.6.1.3.3 Whitmore parish

- Bentilee Wood: 'A broadleaved woodland of which parts are noted on Natural England's ancient woodland inventory. The ground flora support a variety of woodland hers typical of ancient woodlands. A stream runs through the wood.'
- Butterton Meadows: 'Several un-improved and semi-improved lowland meadows with areas of marshy grassland managed as traditional hay meadows.'
- Church Wood: 'A linear broadleaved woodland with some ancient woodland indicator species in the ground flora. A small pool lacking in marginal vegetation is also present.'
- Cliff's Rough (partly in Whitmore parish): 'Ancient woodland site supporting a diverse woodland ground flora with many ancient woodland indicator species under a broad-leaved tree canopy.'
- Hey Sprink (wood south-west of): 'A narrow ravine colonised by broadleaved woodland with a mixed range of ancient woodland indicator species.'
- Unnamed wood south of Hey Sprink: This site was designated by the Grading Committee of Staffordshire Wildlife Trust at its meeting on 25 January 2018 and is not shown on Map 17a.
- Holbrook's Wood: 'Mixed plantation with wet and dry woodland ground flora with species-rich pockets.'
- Knight's Wood: 'A broadleaved woodland dominated by Bluebell and Creeping Soft-grass in the ground flora with localised pockets of other woodland herbs as well a bramble patches.'
- Moat Wood and Brickyard Wood: 'An open broadleaved woodland with a ground flora of mainly Bramble and Bluebell. The woodland has previously been managed for timber.'

- Pleck Farm (north of): 'A shallow valley with a stream and broadleaved woodland. Ancient woodland indicator species are in localised patches and there are a few wet species adjacent to the stream.'
- Swynnerton Old Park (partly in Whitmore parish): 'Ancient replanted woodland, now an extensive conifer plantation with an often heathy ground flora, especially adjacent to and along the rides.'
- Whitmore Wood: 'Coniferous plantation and a stand of semi-natural broadleaved woodland with most of the diversity in the ground flora confined to rides and tracksides. A stream supports wet woodland vegetation.'

Two areas of woodland north-west of Whitmore Wood were graded as SBI by the Grading Committee of Staffordshire Wildlife Trust at its 25 January 2018 meeting. These are the same as the 2 additional areas of ancient woodland identified by HS2 Ltd (see section 6.6.2).

Gathering of habitat information in the NA is an on-going process; for example, survey and mapping work by HS2 Ltd has identified further areas of habitat, the data for which is not yet available. New habitats data for the NA will be incorporated into the evidence base as it becomes available.

Box 6.8 Heathland habitats on Maer Hills BAS

Maer Hills is the largest BAS in Staffordshire. Historically, the area was lowland heathland. It is now largely under commercial conifer forestry, with some areas of broadleaf woodland. The lowland heathland habitat with bilberry and heather survives under the canopy.

Opportunity

The aims and objectives of the NDP provide an opportunity to work with landowners and the Staffordshire Wildlife Trust to restore heathland habitats in parts of Maer Hills and to combine habitat restoration with educational objectives. (See also below, section 6.4.)

6.6.2 Ancient woodland

The NA has 18 areas of ancient woodland, as listed in Table 6.2.

On 20 February 2018 HS2 Ltd published its Ancient Woodland Strategy for HS2 Phase 2a, in

which it identifies 2 further areas of ancient woodland within the NA: these are 'Hey

Table 6.2 Ancient woodlands in the NA

Parish	*Ancient and semi-natural woodland*	*Ancient replanted woodland*
Maer	The Ridding Willoughbridge Bogs	The Ridding
Whitmore	Bentilee Wood (2 areas) Church Wood Grange Wood Holbrook Wood Knights Wood Moat Wood (2 areas) Pleck Wood Radwood Copse Whitmore Wood (2 areas)	Hey Sprink (on border) Swynnerton Old Park (on border) Whitmore Wood

Sprink (wood south-west of)' (it is in fact south-east of Hey Sprink) and 'Unnamed wood south of Hey Sprink'. Natural England has confirmed that these 2 areas are to be added to the Ancient Woodland Inventory. Both areas are of 'county value'.

Ancient woodland in Whitmore parish will be adversely affected by HS2 Phase 2a construction; see section 6.6.2.2 for further details.

6.6.3 Veteran trees

A number of veteran trees were identified during a Phase 1 Habitat Survey in the environs of Baldwins Gate (see section 6.18.2.3). Further veteran trees have been identified by HS2 Ltd during environmental surveying in connection with the planned HS2 Phase2a railway (Table 6.3). A complete survey of veteran trees in the NA has not been carried out. Survey work has focused on areas at greatest risk.

6.6.5 Wildlife

6.6.4.1 Species of principal importance in England

The Staffordshire Ecological Record (SER) holds records of sitings in the NA of 232 of the 943 Species of Principal Importance in England, and 49 protected species. SER depends on members of the public submitting reports of sitings.

Table 6.3 Veteran trees in the NA (partial survey)

Parish	*Location*	*Species*	*Survey*	*Impact of HS2 works*
Chorlton	SJ 79614 39657	Oak	Phase 1	n/a
Chorlton	SJ 79563 39446	Oak	Phase 1	n/a
Chorlton	SJ 79535 39406	Oak	Phase 1	n/a
Chorlton	SJ 79521 39399	Oak	Phase 1	n/a
Chorlton	SJ 79407 39681	Oak	Phase 1	n/a
Maer	SJ 79364 39225	Oak	Phase 1	n/a
Maer	SJ 78624 39772	Oak	Phase 1	n/a
Whitmore	SJ 78799 40020	Oak	Phase 1	n/a
Whitmore	SJ 78781 40030	Oak	Phase 1	n/a
Whitmore	SJ 78533 40602	Oak	Phase 1	n/a
Whitmore	SJ 78567 40524	Oak	Phase 1	n/a
Whitmore	SJ 812 400	Pedunculate oak	HS2	Permanently lost, Stableford North satellite compound; temporary works
Whitmore	SJ 807 408	Pedunculate oak	HS2	Permanently lost, A53 temporary roundabout; temporary works
Whitmore	SJ 804 407	Pedunculate oak	HS2	Permanently lost, A53 reinstatement; permanent
Whitmore	SJ 800 406	Pedunculate oak	HS2	Permanently lost, balancing pond north of A53; permanent
Whitmore	SJ 800 406	Pedunculate oak	HS2	Permanently lost, balancing pond north of A53; permanent
Whitmore	SJ 793 414	Pedunculate oak	HS2	No impact
Whitmore	SJ 775 428	Ash	HS2	No impact

6.6.4 Habitats of Principal Importance in England

The Natural Environment and Rural Communities Act 2006 s.41 defines a list of 56 Habitats of Principal Importance in England. Of the 35 habitat types that are not either coastal or marine, 16 are identified in the NA (Table 6.4). These habitats have been identified from the

Defra Magic mapping system. As Defra Magic is not up to date, other habitats may have been identified that are not recorded on the map (Map 18).

Table 6.4 Habitats of Principal Importance in England in the NA

Broad habitat type	*Habitat type*
Arable and horticulture	Arable field margins
	Traditional orchards
Boundary	Hedgerows
Freshwater	Ponds
	Rivers
Grassland	Good quality semi-improved grassland (non priority)
	Lowland meadows
	Purple moor-grass and rush pastures
Heathland	Lowland heathland
Wetland	Coastal and floodplain grazing marsh
	Lowland fens
	Lowland raised bog
	Reedbeds
Woodland	Lowland mixed deciduous woodland
	Wet woodland
	Wood-pasture and parkland

Source: Compiled from Defra Magic mapping

6.7 Biodiversity opportunity zones

Staffordshire Wildlife Trust has carried out biodiversity opportunity mapping of habitat zones in Newcastle-under-Lyme borough. The report, Newcastle under Lyme Biodiversity Opportunity Mapping (March 2014), is part of the evidence base for the emerging SoT and NuL JLP.

> The biodiversity opportunity map for the Borough of Newcastle under Lyme will form an essential component of a planning officer's checklist in establishing how a planning proposal can contribute appropriate maintenance, enhancement or restoration for local biodiversity. In addition, the map can inform the targeting of agri-environment schemes, the compilation of Neighbourhood Development Plans

> [and] development of landscape-scale initiatives.
>
> Staffordshire Wildlife Trust, Newcastle under Lyme Biodiversity Opportunity Mapping (BOM) (2014), p. 5

The report identifies 8 types of biodiversity opportunity zone in the borough, 5 of which are present in the NA. Each zone type contains a range of priority habitats in addition to the primary habitat.

Box 6.9 Biodiversity opportunities

- The Biodiversity Opportunity Mapping report signposts priorities for natural environment conservation projects and can help to guide the biodiversity and natural environment aims of the Plan.
- The report forms part of the NuL evidence base for the JLP. The parish councils need to refer to it when responding to planning applications that affect ecologically sensitive areas and use it to support the case for the protection of such areas.

6.7.1 Meres and Mosses

> The Borough contains more Meres and Mosses sites than any other district/borough in the county and these are of significant importance at local, county, national and international scales. (BOM, p. 24)

Three such sites are located in the NA: Maer Pool SSSI, Chorlton Moss LWS and New Pool and Oak Wood LWS (Map 11).

By the nature of their formation, Meres and Mosses are isolated, unconnected sites, formed in glacial hollows during the retreat of the ice at the end of the last Ice Age. They are associated with wider wetland complexes and are an integral part of larger catchment areas. They provide a habitat for a range of rare and highly specialised plants and animals. Their isolation in the landscape, combined with land drainage and improvement and agricultural intensification, puts them at risk.

6.7.1.1 Objectives and opportunities

> The primary objective for this habitat type within the borough is the maintenance, restoration and expansion of wetland complexes, with particular emphasis on the mosses resources. (BOM, p. 24)

> Each site will have some specific management requirements to maintain or restore the priority habitat quality; there are some unifying core issues that can be addressed. Tackling these on a landscape scale is critical to the robustness and long term future of Meres & Mosses within Newcastle under Lyme Borough. (BOM, p. 25)

Targeted opportunities for sites within the NA include:

> • Improve condition of Maer pool and improve water quality along the length of the River Tern and its catchment and control discharges into watercourses.
>
> • Restoration and improvement of existing biodiversity interest at Chorlton Moss to ensure more favourable conditions and improve resilience to environmental change. (BOM, p. 25)

(See above, Box 6.3, regarding opportunities to implement landscape and habitat restoration work at Chorlton Moss.)

6.7.2 Woodland

The Woodland opportunity zone covers almost the whole of NuL borough, and the whole of the NA. The NA plays a significant role in this opportunity zone, which

> sits within a distinctive region of sandstone hills; at its core is an area of strongly rising landform, culminating in the Maer and Hanchurch hills, with their extensive conifer plantations and remnant heathland character. (BOM, p. 30)

A sub-zone of Sprinks, Drumbles and Wet Woodland is mainly concentrated in the NE part of Whitmore parish. Sprinks and Drumbles generally consist of a canopy of mixed deciduous trees with a single, or several streams flowing through the main body of the woodland and associated wet ancient woodland ground flora (BOM, pp. 31–32) (Figure 6.14).

Figure 6.14 Watercourse in wet woodland in Moat Wood ancient woodland

6.7.2.1 Objectives and opportunities

> The primary habitat objectives … are the maintenance, restoration and expansion of Wood-Pasture, Parkland and Native Woodland. (BOM, p. 33)

Specific opportunities for sites within the NA include:

> • Thinning of conifer plantations in areas such as Maer hills … to increase the quantity and quality of semi-natural broadleaved woodlands.

6.7.3 Grassland

This opportunity zone includes the southern half of Chorlton parish and the southern tip of Maer parish. 'The southernmost areas of grassland within the Borough vary from large intensive mixed units, to collections of smallholdings. Small watercourses seem to be present in much of the landscape, with the catchment of the River Tern … and the Meece Brook along with numerous drainage ditches and small infield ponds and pools' (BOM, pp. 39–40).

6.7.3.1 Objectives and opportunities

> The primary habitat objectives are the maintenance, restoration and expansion of species-rich grasslands, particularly Lowland Meadows and also Lowland Heathland where applicable. (BOM, p. 41)

Targeted opportunities for sites within the NA include:

> • Maintain appropriate management for small areas of wood pasture in the south of the borough.
>
> • Restoration of grasslands in areas with intensive agricultural practices such as Chapel Chorlton, Maer …
>
> • Encourage sympathetic management and reduced use of inorganic fertilisers and pesticides, particularly in areas around the Tern [and] Meece … catchments as well as areas surrounding Meres and Mosses to safeguard current biodiversity. (BOM, p. 43)

6.7.4 River Valley

The River Tern (tributary of the Severn) and the Meece Brook (tributary of the Sow) both rise in the NA.

> [M]uch of the initial section of the [Tern] sits on significant deposits of peat suggesting that bog and moss habitats were present prior to agricultural

> improvement; woodlands and agricultural land are the two predominant habitat types. (p. 51)
>
> The Meece Brook forms the boundary between Newcastle and Stafford Boroughs near Chapel Chorlton, the land along its catchment within Newcastle under Lyme Borough is a mixture of improved farmland and areas of marshy grassland and marginal vegetation. There are several small scrapes which hold water and give rise to marshy grassland and ephemeral pools throughout its length. The land along the Meece appears relatively diverse and is part of an important habitat network linking the borough to a diverse network of Local Wildlife Sites. (BOM, pp. 51–52)

6.7.4.1 Objectives

> The primary objective for this opportunity area is to improve water quality to benefit aquatic diversity as well as ensuring that water quality remains at sustainable acceptable levels. (BOM, pp. 52–53)

Broad objectives include:

> • Wetland features such as ponds and reedbeds conserved and where possible expanded …
>
> • Natural features such as meanders, riffles and backwaters should be maintained and enhanced. (BOM, p. 54)

6.7.5 Urban

Baldwins Gate and Madeley Park Wood are identified in the mapping of the Urban opportunity zone.

6.7.5.1 Objectives and opportunities

> Primary objectives … are the provision of as many semi-natural habitats as possible within the urban environment to strengthen habitat networks and connectivity as well as creating corridors for wildlife …
>
> Secondary objectives include providing more direct links both for the public and wildlife from urban to rural locations via the use of existing infrastructure such as dis-used railway lines … (BOM, p. 59)

Broad objectives include:

> • Relaxing of Mowing Regimes … in areas of amenity grassland …
>
> • Securing appropriate management for conservation in publicly owned and managed sites … (BOM, p. 60)

Targeted opportunities for sites within the NA include:

> • Utilisation of dis-used railways linking rural and urban areas … as a network for both public access and biodiversity connectivity.

• Implementation of SuDS in new developments to provide migratory habitat as well as contribute towards improving water quality. (BOM, p. 60)

Box 6.10 Residents' Survey

The Residents' Survey shows that residents put a very high value on the NA's natural environment. The rural location is valued by over 97% (Question 1), and 90% value the lanes, PRoWs and bridleways (Question 6). Sixty-seven respondents answered Question 6a 'Are there any other places/open spaces which are important to you?' and mentioned a wide variety of specific routes, long views and intimate landscapes. Maer Hills, Whitmore Heath and Chorlton Moss are some of the spaces of importance to the greatest number of residents. Places in or near to people's home settlements are also important.

6.8 Built environment

The NA's built environment comprises a number of small settlements in which the structures date chiefly from the 19th and 20th centuries. In Baldwins Gate 21st-century development is taking shape on land at the end of Gateway Avenue, where a new estate of 109 dwellings is under construction, and on two smaller sites on land at the Sheet Anchor (7 dwellings) and land at Appleton Drive (4 dwellings).

6.8.1 Townscape Character Appraisal

AECOM has carried out a Townscape Character Appraisal (TCA) (2017) of the NA as a technical assistance package provided by Locality. The report analyses and documents the rural character of the NA's settlements and their relationship to the landscape. As such, its findings and conclusions confirm and support the overarching aim of the Plan 'to protect rural character while allowing for appropriate development', as well as the aims of both the adopted CSS and the emerging JLP to respect townscapes and landscapes and the rural settings and settlement patterns of the Local Plan area.

Section 4 of the TCA report identifies and describes a hierarchy of settlement types across the NA (Table 6.5). The report provides a thorough review of the hierarchy of planning policy and statutory spatial studies in relation to the NA, starting with the NPPF and

National Planning Practice Guidance, drilling down through the polices of the CSS and the Saved Policies of the NuL Local Plan and considering the emerging JLP and its supporting evidence, as well as county policy on landscape. It also reviews statutory designations in the NA. The hierarchy of governance structures and powers for maintenance of the public realm are also reviewed, from the level of county council to the parish councils and private landowners.

The report's Section 5, Townscape Environmental Resource, constructs a picture of the NA's settlement character by defining historic morphology, land use distribution, landscape type, urban structure, landform, building typologies and movement and legibility for each settlement type. The report also quotes at length from the AECOM Heritage and Character Assessment (HCA) (2016) of the NA.

In a SWOT analysis of the different settlement types (Table 6.6) the report identifies that development that is insensitive to the distinctive features of individual settlements and their relationship to the landscape and countryside would undermine their character. The report notes that:

> Hedgerows and other vegetation help to screen the narrow lanes which connect the settlements, and mask the various PRoW which intersect the landscape. Also common in the parishes are both small and larger areas of mature woodland. In some places this has been used as a context for development. The structural landscape features of the woodland, hedgerows and vegetation mitigate development impact and help to give the impression of an uninterrupted countryside. (TCA, pp. 47–48)
>
> There is a close relationship between the settlements, the local topography and vegetation. Many of the settlements are assimilated into the landscape by either the undulations of the land, or the presence of trees and hedgerows which help to screen the developments from views. (TCA, p. 48)

It also notes that there have been instances of inappropriate development across the NA:

> Various buildings across the parishes have been subject to enlargement through restoration, redevelopment, and demolition, contributing to an inconsistent style. In some cases, these alterations have been insensitive to both the existing building style/ character within the settlements and the surrounding natural landscape. (TCA, p. 52)

The report highlights that:

> The emerging Local Plan discusses various Key Messages and Key Challenges regarding the historic characteristics and the natural environment. These include the need to recognise the contribution of historic assets, ensure development is of an appropriate scale and location, safeguarding characteristic landscapes … (TCA, p. 42)

and that:

> The Neighbourhood Planning process offers the Steering Group an opportunity to shape development in its area. The emerging Joint Local Plan's statement that future development strategies should safeguard characteristic landscapes whilst taking opportunities to improve lower quality landscapes, offers the potential for the Neighbourhood Planning process to define distinctive aspects of the area's landscape character. (TCA, p. 42)

Table 6.5 Settlement typology: proposed descriptions

Settlement type	*Description*	*Suggested settlements within category*
Modern Elevated Wooded Settlements	Developed as a series of small estates and individual properties, these areas now have some scale and are among the larger settlements in the parishes. They are set outside the village typology, and defined as 'modern' given that they have evolved over a relatively short period in the mid to late twentieth century. These settlements are typically only residential in nature and their evolution is often driven by landownership rather than other catalysts. The layout of these developments has evolved around individual, mid-sized development plots and low-order circulation routes. The settlements lack a cohesive street hierarchy and a defined centre. Though individual properties will have merit the character of this type of settlement is considered ordinary. Developed in wooded areas, the woodland infrastructure is mature and of a scale and pattern which relates to similar wooded areas in the south of the borough. We can assume that this wooded location has been chosen in order to mitigate the impact of these settlements on the wider rural character.	1.Whitmore Heath (c.50 dwellings) 2.Madeley Park Wood and Manor Road (c.150 dwellings)

	These areas feature a post-1920s and suburban housing typology, with a number of large family houses in sylvan garden settings. A number of these dwellings have views which overlook the surrounding landscape.	
Higher Order Rural Village	These settlements have developed from a small centre, usually associated with transport catalysts such as a railway station or key vehicular routes. The most desirable and well considered of these have grown in correlation to the size of the historic village centre. The heart of these villages is usually centred on the railway station, with some local store functions and higher order community uses located as ribbon developments. Residential development is served via a number of perpendicular secondary routes and tends to be one to two blocks in depth, helping to retain a rural scale These settlement are circa 150–200 dwellings. As their evolution doesn't often relate to agricultural uses, higher order rural villages usually have a well-defined and tightly drawn envelope.	3.Baldwins Gate (315 dwellings)
Lower Order Rural Village	These are low density settlements which have circa 20-30 dwellings. They have often evolved in associated with local Estates or farms for the provision of workers' cottages. The form is usually ribbon development, with occasional agricultural uses behind which are often arranged in a stable yard form. Access is generally via private drives, and there is rarely a second tier of street hierarchy. Typically these villages have a single community building (e.g. a parish hall, church or pub) which is loosely fitted into the granular form.	4.Acton 5.Whitmore village 6.Maer village 7.Aston (with Minn Bank)
Cluster Hamlet	This designation includes a collection of hamlets which are physically separated by areas of undeveloped/agricultural land, but are linked by the nature of their connectivity and cultural association (such as the parish/community identity).	8. Chapel Chorlton (comprising settlement around village green and church, Haddon Lane, Swinchurch, Mill Lane,

		Butt House Lane)9. Hill Chorlton (comprising Hill Chorlton, Chorlton Moss, Kennels Lane, Mill Lane, Chorlton Mill, Coombesdale) 10. Blackbrook (comprising Blackbrook, Willoughbridge, Weymouth) 11. Butterton (comprising Butterton village, Shut Lane Head, Lymes Road, Butterton Lane, Park Road)
Hamlet	These settlements typically consist of a collection of up to 10 residential dwellings, loosely spread out in ribbon development form. The layout is more difficult to predict as there is very little repetition of footprint, and there is often a mix of building typologies. Broadly, however, these are detached dwellings on larger plots which may have been established in relationship to a farmstead. The land use is residential, with occasional agricultural uses and farmsteads. As such, these settlements include large amounts of agricultural land within their settlement envelope. Civic and community facilities are not common.	12. Stableford 13. Springfield (ST5 5JQ)

Table 6.6 SWOT analysis of individual settlements

Modern settlements: Whitmore Heath and Madeley Park Wood (MPW)	
Strength	**Weakness**
- Attractive setting and domestic landscaping which contributes to the quality of the settlements - Clearly defined and contained settlement boundaries - The majority of the settlements are contained within wooded areas and screened from long views - Architectural diversity, but units consistently of a high quality - Aspirational homes for families	- No facilities or public transport (MPW) - Illegible layouts create a confused orientation (MPW) - Occasional breaches of the settlement from woodland can disrupt local views across the landscape (MPW) - Access achieved by self-serving routes, and there is a degree of disconnect between the PRoW and roads to village centres (MPW) - Unadopted and unsurfaced access roads, steep roads inaccessible in winter - Disconnect to wider parish area (MPW)
Opportunity	**Threat**
- To further mitigate any breaches of woodland cover (MPW) - Improve strategic active travel links and public transport links to the settlements (MPW)	- Further development would breach settlement boundary and woodland cover - Tranquillity of settlements will be undermined by the crossing of HS2 - Whitmore Heath will become depopulated due to impending HS2 blight - HS2 proposals to permanently close Snape Hall Rd will create illegibility on Whitmore Heath - HS2 proposal to permanently widen Common Lane and Snape Hall Road will destroy character - HS2 proposals will lead to loss of important pedestrian and cycling routes
Baldwins Gate	
Strength	**Weakness**
- Unique purpose and typology within the Neighbourhood Area as the only higher order village - Provision of a limited level of local services and facilities - Direct links to Newcastle-under-Lyme and connections beyond the neighbourhood area - Pockets of accessible public open space - Sense of space/ openness afforded to the settlement by the surrounding landscape	- There is no sense of arrival when entering the settlement - Lack of townscape cues to indicate the significance of the village - Community facilities are not obvious and there is no defined village centre which can confuse the legibility - Bisection by the A53 and WCML rail line undermines the potential for a village 'core' - Evolution of the centre/ facilities hasn't kept up with settlement growth.

- Mixture of housing typologies and architectural diversity - Areas of high quality and unique housing units which are sympathetic and complementary to each other	- WCML prevents east/west movement across village, except via the A53 - Piecemeal housing development - Poor interconnections between different parts of the village
Opportunity - Historic units by the rail line have the potential for improvements and restoration - Reintroduction of a rail link into the settlement (Whitmore station) - There is an opportunity to create softer landscaped edges to the settlement to better integrate it into the landscape	**Threat** - Risk of the size of the village growing beyond that of the higher order village typology. - The lack of a clear settlement centre leaves the village vulnerable to piecemeal development of facilities which, as a result, could become inaccessible to each other Risk of becoming more unsustainable due [to] centre/ facilities failing to evolve to keep up with settlement growth - Additional piecemeal development would further worsen the village's incohesiveness and illegibility - Housing extensions disproportionate to the existing housing profile and size risk undermining cohesiveness of the village's character - Risk that further development would result in visual coalescence with neighbouring settlements - Unclear street hierarchy contributes to an illegible understanding of space which is difficult to navigate - Impermeable culs-de-sac discourage active transport (ie walking and cycling) - Lack of affordable, smaller housing units - Uniform architecture along certain streets, creating a homogenous street scene - Greater density of new developments on edge of village - Speed and volume of traffic on A53 - Increasing volume of traffic due to development outside the Neighbourhood Area - Difficult vehicle access onto A53 from residential streets and from dwellings on A53 - Speed and volume of traffic on A53 creates an unpleasant pedestrian experience

	- Overdevelopment of plots on more modern estates, with larger buildings/ smaller frontages and a closer relationship to the road, creating a suburban rather than rural character - Lack of public car parking
Lower order villages: Acton / Whitmore / Maer / Aston	
Strength - Maer and Whitmore villages are designated as Conservation Areas, and as such are served by a degree of protection - Strong village architecture and character within each settlement - Good relationship with the surrounding countryside through estate/farming units, reinforcing the rural narrative of these settlements - Identifiable community assets located among the housing units - Clear heritage permeates the settlements - There is a sense of approaching and 'dropping down' into settlements, glimpsed views into the settlement, sense of arrival through change in landscape (pastoral to gardens), formalised boundaries, crumbling edge towards compact centre and narrowing /enclosing roads	**Weakness** - Lack of connectivity - Low level of facilities, or of access to a variety of facilities - Poor/hazardous pedestrian access due to fragmented footway and footpath network - The presence of parked cars and traffic moving through the villages undermines character/ tranquillity - Speed and volume of traffic increasingly creates an unpleasant pedestrian experience
Opportunity - Integrate settlements more into local recreational/ strategic footpath networks, so they become places of exploration. - Improvements to walking and cycling connectivity and facilities for visitors - Designate 'quiet lanes' and cycle routes - Highlight the historic recreational value that these destinations could offer to visitors (e.g. churches, estate buildings)	**Threat** - Loss of small, incidental pieces of rural space which cumulatively contribute to the character of these villages - Upgrading of unadopted roads using practical measures (such as tarmacing) could detract from local character, and could increase the amount of impermeable pavement - Modernisation of housing features, which could undermine the traditional architectural qualities - Inappropriate property extensions unsympathetic to the environment - Continuing growth in traffic volumes and use of village roads as 'rat runs'

Cluster hamlets: Chapel Chorlton, Hill Chorlton, Blackbrook and Butterton	
Strength - Topography of the landscape offers long views across the neighbourhood area - Good balance between residential and other building types. - Preservation of small hamlet charm and identity, clearly defined use of buildings (e.g. houses and farmsteads) - Strength in the collective identity of these ribbon settlements - Rhythm to the size/scale of buildings. Relationship in scale and massing is fluid. There are no incongruous features which detract from this appearance. - Development frontages are orientated to the road, and settlement character is dependent on this relationship	**Weakness** - Lack of facilities and public transport - Dispersed nature of the settlements impedes formation of a sense of community - Clusters fragmented by A51 and A53 - Intrusive presence of A51 in Hill Chorlton, Blackbrook and Weymouth - Clutter of road signs on A51 - Pedestrian access within clusters fragmented by A51 and A53 - Heavy agricultural vehicles and machinery on roads and lanes - Excessive traffic speeds on lanes - Lack of traffic calming measures and passing places - Small front gardens in linear settlements lead to car-dominated frontages/ on-street parking - Overhead 'wirescape' of electricity, telephone and fibre broadband cables suspended from poles. Introduction of new services results in more poles and wires
Opportunity - Retain traditional relationships between notable rural development within the countryside/ protect rural assets. - The charm of the individual hamlets within the ribboned cluster should be retained - Designate 'quiet lanes' and cycle routes	**Threat** - Development could lead to coalescence between pockets of settlement within the clusters - The shallow depths of the linear settlements means the cluster hamlets are more susceptible to poor/ insensitive design or development - Development which increases the depth of these settlements could undermine their character and their close relationship to the road - Greater flow of traffic or numbers of parked cars could interrupt the experience of passing through the cluster hamlets - Street lighting would detract from the remote atmosphere and impact negatively on the night-time landscape - Development in exposed positions or along ridgelines could have a greater impact on long views across the neighbourhood area than development in other settlement types

	- Upgrading of unadopted roads would detract from local character/ and increase the amount of impermeable pavement - Replacement of domestic hedges with laurel, conifer, and non-native species. - The lack of depth to these settlements means that non-traditional planting/ vegetation/ ornate landscaping may weaken the traditional rural character - Land use which is not residential or agricultural may not be suited to these settlements.
Hamlets: Stableford and Springfield	
Strength - Provide pockets of architectural character and history within the rural landscape, and add to the tapestry of the rural narrative - Well integrated into the rolling landform, and complementary to the local topography (Springfield)	**Weakness** - The hamlets may not always be recognised as settlements in their own right, rather as individual units - The small size leaves hamlets susceptible/ vulnerable to insensitive development, which could easily undermine their local character and charm
Opportunity - To preserve and recognise the rural value of these smaller settlements.	**Threat** - Hamlets may not be recognised as settlements, which could leave them to be susceptible to development without due consideration. - Development may capitalise on the open space of these locations - HS2 proposals will undermine tranquillity

6.8.1.1 Building typologies of the NA's settlements

The following section is quoted verbatim from the AECOM TCA, section 5.8.2, pp. 52–54. It should be read with Tables 6.5 and 6.6 to guide design in the NA's different settlements (for the Baldwins Gate design statement see section 2.8).

Modern settlements: Whitmore Heath and Madeley Park Wood

The buildings are spacious residential properties, mostly of 1 or 2 storeys.

Large detached housing units with an individual style and character. Almost all buildings serve residential purposes and many include outhouses or individual garage units. The buildings are exposed within the individual plot areas, and are of a large scale, creating an

impression of grandeur.

Some units have undergone a process of modernisation in recent years which detracts from the rural architecture as exhibited in other settlements.

High Order Village: Baldwins Gate

Baldwins Gate expresses a suburban residential character, with a spacious layout of post-war estate development. The overall impression is one of a pleasant, albeit ubiquitous, residential area, with streets of differing architectural styles as a result of piecemeal development.

The following statement from the Heritage and Character Assessment (HCA), AECOM, 2016, discusses the wide variety building typologies in the village.

> 'At the western end of the village is a later 19th century terrace comprising the Methodist chapel and three workmen's cottages. The A53 is lined on both sides by ribbon developments of two-storey detached and semi-detached houses of the 1920s and 1930s. These are constructed in red and blue brick or are rendered and are in a variety of styles. At the north-western side of the village Sandyfields estate, built from 1947 to the 1950s, is a development of individually designed, mostly detached, houses and bungalows on large plots with mature gardens. In either sideof the A53.
>
> Appleton Drive, Gateway estate and Meadowfields estate, built by volume house builders from 1959 to 1968, consist of detached houses and bungalows of mellow and red brick with a variety of render and horizontal boarding finishes. The buildings and gardens have matured and alterations and extensions make for some variety. A few more recent large houses have been built on garden land in Appleton Drive and adjacent to Station Stores. The plots are smaller than on Sandyfields but front gardens are generally generous. Meadowfields estate has an open plan layout, although some plots are now edged with hedges and shrubs. In Appleton Drive and Gateway estate there are low front garden walls. Appleton Drive is a tree-lined street with grass verges. The dwellings in these developments all have individual garages or carports and off-street parking in front of the houses. The most recent developments (late 1990s) are Fair-Green Road on the site of the former railway reservoir and the Lakeside estate at the western end of the village. Both developments consist of large detached houses, set back from the road with small front gardens, off-street parking in front of the houses and individual garages. They express some features of the local vernacular, such as red or mellow brick, dark tiled roofs and deep window cills. However, there is little variation from building to building.' (p. 24)

Lower Order Villages: Acton / Whitmore / Maer / Aston

Lower order village settlements tend to be of an older era, and exhibit slightly more

consistency in terms of physical features than the higher order village settlement, potentially due to the smaller size of the settlement areas.

The following statement from the HCA discusses the building typologies in the villages.

> **Acton:** 'is a small hamlet which was formerly part of Whitmore Hall estate. There is a mixture of housing styles: the larger 20th century houses generally have white or cream painted brickwork; and the remainder are red or black brick, and some have timber cladding. There is a large equestrian centre at the northern edge of thesettlement. The former Wesleyan Methodist chapel has been converted into a dwelling.' (p. 25)
>
> **Whitmore:** 'comprises a small number of individual dwellings and two terraces of workers' cottages. The houses are predominantly two storeys, of cottage style with pitched roofs, chimneys, inset windows, decorative fascia boards, and mostly of white painted brickwork, although one terrace on Bent Lane is of red brick. The roofs are of Staffordshire Blue tile, some with alternate rows of straight and scalloped tiles and others completely of scalloped tiles. The Grade I listed Whitmore Hall and the Parish Church of Saint Mary and All Saints (Grade II*) are at the centre of the village …On Three Mile Lane white painted brick cottages with pitched roofs and chimneys face the church. Lower down Three Mile Lane, near the brook, Ivy House has a large walled garden. Further along Three Mile Lane, on the periphery of the village, there are farm buildings. The Mainwaring Arms public house faces the A53 at the corner of Three Mile Lane. On the other side of the A53 is a range of brick farm buildings.' (p. 25)
>
> **Maer:** 'Many of the houses have red brick or white painted frontages, and create a strong sense of identity for the Conservation Area and the village's historical connection with Maer Hall. Cottages have front gardens, with low walls of local red sandstone abutting the road or narrow pavement. The village hall at the southern end of the village is of rough dressed red sandstone … There is very little modern development. The mellow brick Maer Estate Cottages are contemporary with the Hall and have been renovated to a similar style to the period properties in the village. There is modern glazing in the square glass lanterns atop the towers at either end of the stable block, replacing the original leaded diamond panes. South of the estate buildings is the walled garden, which contains a modern bungalow. Adjacent to the former Home Farm on Haddon Lane a range of farm buildings have been converted into mews dwellings.' (p. 23)
>
> **Aston:** 'The village and its environs have a number of Grade II listed buildings. Lea Head Manor, to the north west of the village, is Grade II* listed. There is a mixture of building styles and periods, with large barns and farm buildings sitting adjacent to modest cottages. Some of the barns have been converted into dwellings. Most houses are two-storey, with the exception of the three-storey Aston Manor House (Grade II listed), which is imposing in its largely open setting. There are two black and white houses, but red brick is the most common building material with roofs finished

in Staffordshire Blue tiles, including scalloped tiles, or in slate. Occasional buildings have been rendered or pebbledashed which adds variety to the streetscape.' (p. 24)

Cluster Hamlets: Chapel Chorlton, Hill Chorlton, Blackbrook and Butterton

Singular farmhouses, mixed with detached and semi-detached residential units. Places of worship are present.

Farmsteads take up a considerable portion of the built environment footprint. Otherwise residential, with some alternative uses present which capitalise upon the farmstead typology. Housing is detached, relatively large, and of no particular consistency. Typically, dwellings are of 1 or 2 storeys, with a few farmhouses of 3 storeys. The HCA refers to the settlements in the following way.

Chapel Chorlton: 'most of the houses are detached and are set within relatively large plots with private driveways. A cluster of smaller dwellings close to the church have been converted from old farm buildings. To the west of the settlement is Haddon Lane, which is lined on the northern side by a mixture of large detached and smaller semi-detached houses and bungalows, ranging from 19th to late 20th century construction, including a row of former council houses.' (p. 23)

Hill Chorlton: 'There is a variety of architectural styles, depending on the period of construction. In the main settlement dwellings are mostly modernised 18th and 19th century cottage properties, many of which have been extended. A small group of 20th century houses located off the road at the eastern end is less prominent. There are a few replacement dwellings, some of which contrast starkly in style and materials. Notable at the eastern end of the village is the former Wesleyan Chapel, now converted into a dwelling. It has a slate roof. The inscribed plaque on its front gable has been painted over … Most houses are two-storey and detached. Materials include red brick and white-painted brick or render. Older roofs are finished in Staffordshire Blue tile, some patterned with alternate rows of plain and scalloped tiles. Newer buildings and some reroofed buildings have dark brown or cement tiles or pan tiles. Most houses have chimneys. Other characteristic features include deep stone or brick window cills.' (p.23)

Blackbrook: 'Houses are generally rebuilt estate cottages, in a mixture of styles, and set back within private gardens accessed via private drives. A former chapel building, St Mary's Mission, now derelict, occupies a key position at the node formed by the junction of the A51 and Maerway Lane. The Croft is a group of ten semi-detached former council houses built of buff-coloured brick in Hungersheath Lane, off the A51. The Swan with Two Necks gastro-pub restaurant with its large car park is prominent on the A51. Nearby, also on the A51, the red brick former Maer village school is now a clothing store.' (p. 24)

Butterton: 'Many of the old estate houses, including the old school, have been renovated and modernised. The houses are predominantly two-storey, of individual

style and design, with pitched roofs and chimneys, inset windows and built in soft red brick with plain clay tiled roofs.' (p. 25)

Hamlets: Stableford and Springfield

These buildings have an individualistic character. Stableford is described in the HCA in the following way.

Stableford: 'is characterised by the former Cock Inn, a large building with a mock "black and white" exterior finish which abuts the A51 and which is a listed building, and an extensive static mobile home park. A modern development behind the Cock Inn and between Stableford Bank and the A51 comprises three blocks of two- and three-storey red-bricked terraced housing. The blocks are arranged around a central courtyard in a layout similar to farmsteads in the area.' (p. 23)

6.8.2 Heritage and Character Assessment

The AECOM Heritage and Character Assessment report (HCA) (2016) for the NA notes a range of issues to be addressed through new development or active management:

- Paving over of some front gardens in some settlements, and driveway parking in front of residences in newer estates in Baldwins Gate, contributing to car-dominated streetscapes.
- Lack of wooded margins to new developments, such as Fair-Green Road in Baldwins Gate and Walls Wood in Madeley Park Wood.
- High volumes of high speed traffic on the A51 and A53.
- The conversion of former estate buildings has introduced domestic and sometimes suburban architecture which at times jar with the historic landscape and parkland setting.
- Unsympathetic extensions, domestic porches to former agricultural buildings, the insertion or alteration of openings, the use of non-traditional materials in historic buildings, which cumulatively may undermine the historic character and appearance of the area.
- Newer development within the villages, particularly infill plots and the more recent estates in Baldwins Gate, have not respected the well-established post-war estate village style in terms of the established scale, height, massing, density alignment and materials.
- Inappropriate boundary treatments, such as manor gates and railings and red brick walls, that are not in keeping with the rural character of many of the settlements.

AECOM, HCA, p. 32

The HCA also notes elements that are particularly sensitive to change:

These relate to the value and setting of heritage assets and the rural characteristics of the surrounding landscape.

- Heritage buildings and their settings, in particular the clusters of listed buildings in the Whitmore, Butterton and Maer Conservation Areas
- Areas of ancient woodland and mature hedgerows and trees across the parishes
- The parkland landscapes of Maer and Whitmore, including the registered park and gardens of Maer Hall
- The wooded valley of the Meece Brook
- Wetland and peat bed areas around Baldwins Gate and in the Tern Valley
- The open farmland and woodland blocks which maintain separation between settlement areas

AECOM, HCA, p. 32

In terms of protecting the NA's rural character, the aspects of character, issues to be addressed and elements of sensitivity identified in the AECOM reports provide a cumulative assessment of issues that need to be taken into account in the design, character and siting of new developments.

Figure 6.15 Traditional boundary treatments in Baldwins Gate: original hedgerow retained on edge of housing estate, and stone wall and hedges in Maer village

6.9 Historic environment

6.9.1 Conserving the historic environment

The NPPF recognises the importance of conserving the historic environment. Paragraph 185 states:

> Plans should set out a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats. This strategy should take into account:
>
> a) the desirability of sustaining and enhancing the significance of heritage assets, and putting them to viable uses consistent with their conservation;
>
> b) the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring;
>
> c) the desirability of new development making a positive contribution to local character and distinctiveness; and
>
> d) opportunities to draw on the contribution made by the historic environment to the character of a place.

The NPPF, para. 192 also states:

> In determining planning applications, local planning authorities should take account of:
>
> a) the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
>
> b) the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
>
> c) the desirability of new development making a positive contribution to local character and distinctiveness.

6.9.2 Historic environment in the NA

The NA's rich historic environment dates back to the Iron Age, when the Celtic tribe of the Cornovii (which was headquartered at the Wrekin in Shropshire) constructed and occupied a multivallate hillfort on Berth Hill in Maer parish. The remains of this structure are a scheduled monument. Other remains and traces of prehistoric and pre-medieval structures and habitation that have been found in the NA are recorded as find spots and monuments in the Staffordshire Historic Environment Record (HER).

The historic environment in the NA is an important aspect of the area's rural character and heritage. It is categorised, documented and protected in a variety of ways: through statutory designations; designation of conservation areas; designation of structures as monuments in the Staffordshire HER; the county survey and record of historic farmsteads; and local listing of buildings. However, many elements of the historic environment are uncategorised, undocumented and unprotected and exist in the form of a variety of structures ranging from 18th- and 19th-century workers' cottages and other dwellings to structures such as former school and chapel buildings, the kennels of the North Staffordshire Hunt, and a former cheese factory now converted to a specialist car maintenance and restoration business.

A separate Historic Environment Report has been prepared for this Neighbourhood Plan. It comprises a compendium of historic environment, scheduled monument, listed building, historic park and garden, and farmstead records for the Neighbourhood Area of Chapel and Hill Chorlton, Maer and Aston, and Whitmore and has been compiled from records supplied by Staffordshire County Council Historic Environment Record.

The following sections review the existing categorisations, designations, documentation and protections and identify further areas where identification and protection of heritage assets would be beneficial.

Box 6.11 Residents' Survey

The Residents' Survey (Question 9) identified that people value the NA's built heritage, in particular the three 3 conservation areas (94%). However, only 65% felt that it was important to identify further structures that should be protected. There was only 48% of support to promoting the local heritage to attract tourism. Responses to Question 10, 'Are there any buildings, structures or areas that you would like to see protected or listed?' drew few suggestions and generally revealed a lack of knowledge of the local heritage, as they mentioned a significant number of structures that are already protected. The high level of support for the conservation areas may be due to a conception that the status of conservation area provides immunity from new development.

Opportunity

There is an opportunity for the parish councils to work with the Conservation officer for NuL and the Staffordshire HER to develop information about the local built heritage for the use of both NA residents and visitors. Project groups could be formed to involve the local community in this work.

6.10 Designated heritage assets

6.10.1 Scheduled monuments

The NA has two scheduled monuments, located in Maer parish (Table 6.7).

Table 6.7 Scheduled monuments in the NA

ID	*Description*	*Grid reference*	*Date scheduled*
1009771	Multivallate hillfort at Berth Hill	378772 339054	30/11/1925
1011892	Lea Head moated site	375002 342111	20/12/1968

6.10.2 Listed buildings and structures

The NA has 63 listed buildings and structures, comprising 1 Grade I, 7 Grade II* and 56 Grade II (Table 6.8).

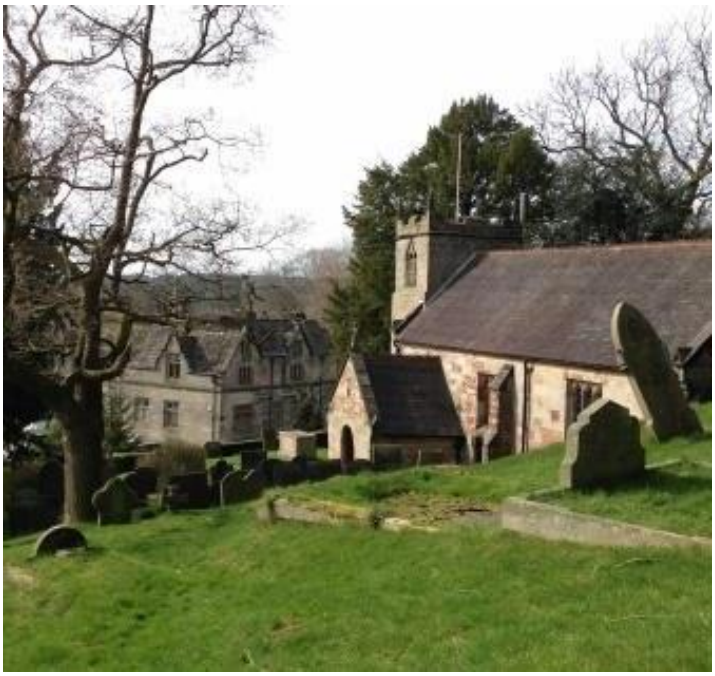
Table 6.8 Listed buildings and structures in the NA

ID	*List entry*	*Grade*	*Grid reference*	*Date listed*
	Chapel and Hill Chorlton parish			
1029829	Green Farmhouse	II	381165 337975	14/05/1985
1029826	Church of St Lawrence	II	381294 337760	17/11/1966
1029828	Sundial approximately 15 metres north of east end of Church of St Lawrence	II	381305 337777	14/05/1985
1027837	Milepost at NGR SJ 8132 4112	II	381306 341119	14/05/1985
1029827	Delves memorial and railed enclosure about 2m north of the chancel of the Church of St Lawrence	II	381311 337766	14/05/1985
1377611	Church House Farmhouse	II	381335 337844	14/05/1985
1029824	Chorlton Mill	II	381442 339197	14/05/1985
1096033	Former Cock Inn	II	381486 338724	26/11/2002

ID	*List entry*	*Grade*	*Grid reference*	*Date listed*
	Maer and Aston parish – Aston			
1027830	Gate piers about 150 metres south west of Lea Head Manor	II	374966 341959	17/11/1966
1027829	Lea Head Manor	II*	375064 342023	02/12/1952
1028011	Milepost at NGR SJ 7527 3984	II	375270 339833	14/05/1985
1353778	Aston Manor Farmhouse	II	375327 341122	14/05/1985
1353779	201 Aston	II	375381 341241	14/05/1985
1027828	Yew Tree Farmhouse	II	375464 340930	17/11/1966
1027826	181 Aston	II	375714 341095	17/11/1966
1027827	Cowhouse attached at right angles to east end of Number 181	II	375723 341094	14/05/1985
1353780	Aston Cliff Farmhouse	II	376068 342116	14/05/1985
	Maer and Aston parish – Maer			
1206278	Milepost at NGR SJ 7665 3897	II	376647 338948	14/05/1985
1027824	Milepost at NGR SJ 7724 3878	II	377237 338787	14/05/1985
1028012	Milepost at NGR SJ 7823 3884	II	378249 338829	14/05/1985
1027825	Milepost at NGR SJ 7853 3968	II	378525 339678	14/05/1985
1353777	Maer Hall Lodge, walls, gate piers and gates	II	378929 338804	14/05/1985
1206418	Boathouse and causeway approximately 100 metres north west of Maer Hall	II	379110 338340	14/05/1985
1027833	Stone balustrade approximately 70 metres west of Maer Hall	II	379173 338297	14/05/1985
1027835	Outbuildings to outer stable yard to south west of Maer Hall	II	379191 338231	14/05/1985
1027836	Park bridge, steps and revetment walls about 100 metres north of Maer Hall	II	379194 338420	14/05/1985
1206392	Maer Hall and attached garden wall to south	II	379207 338332	30/07/1964
1206432	Stable block at Maer Hall	II	379212 338279	14/05/1985
1027834	Gatehouse, flanking walls and bollards to Maer Hall	II*	379242 338292	14/05/1985
1206384	Harding Memorial approximately 4 metres south west of tower of Church of St Peter	II	379250 338319	14/05/1985
1280206	The Vicarage	II	379257 338253	14/05/1985
1027831	Aston memorial approximately 2 metres south of nave of Church of St Peter	II	379267 338318	14/05/1985
1206359	Church of St Peter	II*	379268 338329	17/11/1966

ID	*List entry*	*Grade*	*Grid reference*	*Date listed*
1353781	Sundial approximately 6 metres south of chancel of Church of St Peter	II	379275 338314	14/05/1985

Figure 6.16 Maer church and Maer Hall



ID	*List entry*	*Grade*	*Grid reference*	*Date listed*
	Whitmore parish – Whitmore			
1027832	Harding memorial approximately 20 metres south east of Church of St Peter	II	379292 338322	14/05/1985
1206528	Snape Hall Farmhouse	II	379294 341233	14/05/1985
1280212	Station House	II	379569 340332	14/05/1985
1206444	Milepost at NGR SJ 7980 4054	II	379804 340536	14/05/1985
1206497	Lake House	II	379823 341612	14/05/1985
1025828	House approximately 130 metres west north west of the Church of St Mary and All Saints	II	380910 341070	14/05/1985
1354782	Cottages dated 1877	II	380947 341018	14/05/1985
1353786	Williams memorial approximately 25 metres south west of Church of St Mary and All Saints	II	381001 341024	14/05/1985
1029825	Milepost at NGR SJ 8101 3879	II	381010 338789	14/05/1985
1027844	Malkin memorial approximately 14 metres north west of Church of St Mary and All	II	381018 341047	14/05/1985

ID	*List entry*	*Grade*	*Grid reference*	*Date listed*
	Saints			
1353785	Fitch Memorial	II	381023 341042	14/05/1985
1280154	Rhodes memorial approximately 13 meters south of the Church of St Mary and All Saints	II	381033 341020	14/05/1985
1280181	Church of St Mary and All Saints	II*	381034 341032	17/11/1966
1027845	Old stable block	II*	381035 341258	17/11/1966
1354781	Bridge approximately 15 metres south east of old stable block	II	381040 341240	14/05/1985
1025827	Gate Piers to Whitmore Hall, immediately to west of Whitmore Hall Lodge	II	381059 340982	14/05/1985
1025826	Whitmore Hall Lodge	II	381066 340989	14/05/1985
1206579	Whitmore Hall	I	381090 341266	02/12/1952

Figure 6.17 Whitmore church

ID	*List entry*	*Grade*	*Grid reference*	*Date listed*
	Whitmore parish – Butterton			
1027841	Barn attached to west end of Shutlanehead Farmhouse	II	381976 342476	14/05/1985
1027838	Milepost at NGR SJ 8242 4217	II	382403 342179	14/05/1985
1206538	Milepost at NGR SJ 8257 4183	II	382552 341820	14/05/1985

ID	*List entry*	*Grade*	*Grid reference*	*Date listed*
1027839	Ivy Cottage	II	382649 343253	14/05/1985
1280200	Gate Piers immediately to south west of Park Lodge	II	383142 342793	14/05/1985
1027840	Park Lodge	II	383152 342802	17/11/1966
1353782	Church of St Thomas	II*	383189 342242	14/05/1985
1353783	Park House	II	383410 342559	14/05/1985
1206523	Ruins of Old Butterton Hall	II	383494 342530	14/05/1985
1027843	Milepost at NGR SJ 8400 4186	II	384002 341857	14/05/1985
1027842	Butterton Grange Farmhouse	II*	384308 342111	14/05/1985

6.10.3 Registered parks and gardens

The park, gardens and pleasure grounds of Maer Hall, designed and laid out by John Webb for Josiah Wedgwood II in the early 19th century, are a Grade II registered park and garden (ID 1001246, listed 23/10/1991).

6.10.4 Conservation areas

The NA has three conservation areas. The latest available documentation on conservation areas can be found on the LPA's website.

6.10.4.1 Maer

Designated November 1970, SCC Conservation area no. 31. The conservation area covers Maer Hall and its park, garden and pleasure grounds, St Peter's church and churchyard, the village of Maer and Berth Hill hillfort. This conservation area was under review in 2018.

6.10.4.2 Whitmore

Designated November 1971, SCC Conservation area no. 37. The conservation area covers Whitmore Hall and its grounds, St Mary and All Saints church and churchyard and the village of Whitmore. The conservation area is under Article 4 direction.

6.10.4.3 Butterton

Designated 31 January 2006, NuL Borough Council, Plan BT1. The conservation area covers the parkland of former Butterton Hall and includes a group of buildings around the site of the old hall, St Thomas church and surrounding woodland, Butterton Dyke and Park Lodge. The conservation area is under Article 4 direction.

6.11 Non-designated heritage assets

6.11.1 Locally listed structures

Local listing provides a degree of protection to structures that contribute to the local character and distinctiveness, e.g. through their historic nature or associations or as local landmarks. It is a material consideration in planning applications affecting a structure or its setting. NuL Borough Council's Register of Locally Important Buildings and Structures is used to raise awareness of local heritage and to protect structures from harmful change or demolition.

Table 6.9 Locally listed structures in the NA (September 2018)

Chapel and Hill Chorlton parish
Old Rectory, Haddon Lane, Chapel Chorlton
K6 telephone box, Chorlton Green, Haddon Lane, Chapel Chorlton
Maer and Aston parish
Camp Hill House, Camp Hill, Baldwins Gate
St Margarets Mission, Maerway Lane, Blackbrook
Maer Village Hall, Maer village
Maer War Memorial, Stone Road, Maer
Signpost, bottom of Haddon Lane, Maer
Whitmore parish
Mainwaring Arms, Newcastle Road, Whitmore
Former Post Office, Three Mile Lane, Whitmore
Former Methodist Church, Acton
Baldwins Gate Farmhouse, Baldwins Gate
Former station Booking Office, Baldwins Gate

Box 6.11 Opportunity: local listing

Local listing provides a means to take forward the Plan's built heritage aim to protect, preserve and promote the area's conservation areas and heritage. There is scope to nominate additional structures in the NA that would benefit from local listing. Parish councils need to consider this matter and seek input from residents

Box 6.12 Issue: Whitmore station booking office

The booking office of former Whitmore station is a locally listed building occupying a prominent position at the western end of the WCML overbridge at Baldwins Gate. It is unused and derelict, with metal shutters on the doors and windows. Approaches from Whitmore Parish Council to Network Rail to discuss opportunities to renovate the building and bring it back into use, possibly for a community purpose, have been unsuccessful.

Opportunity

There is scope for Whitmore Parish Council to work with the NuL Conservation Officer and the Heritage Lottery Fund to devise a plan for the building that would further the built heritage and leisure and tourism aims of the Plan or meet an identified community need, and to negotiate with Network Rail for the building's return to use.

Figure 6.18 Whitmore station booking office

6.11.2 Staffordshire Historic Environment Record (HER)

The Staffordshire HER, maintained by SCC, is a database of over 20,000 records of archaeological sites, monuments, historic buildings and historic landscapes in the county. Thus it supplements statutory designations and local listings by identifying and documenting other historic features in the county's landscapes and townscapes. The Staffordshire HER contains 193 records for the NA, including the designated heritage assets reviewed in section 6.10; i.e. it contains records of a further 127 non-designated sites of historic or

archaeological interest. The records for the NA have been compiled into a compendium (see the Historic Environment Report in the Evidence Base).

6.11.3 Farmsteads

SCC has done extensive work on the county's historic farmsteads and has recorded all farmsteads that are mapped on the Ordnance Survey 2nd edition 25 inch mapping of circa 1895. The Staffordshire Farmstead Assessment Framework 'provides a step-by-step approach to considering the reuse of traditional farm buildings and the sustainable development of farmsteads, through identifying their historic character, significance and potential for change'.

> Farmsteads are an integral part of rural settlement and the landscape. Many of Staffordshire's farmsteads are associated with the 18th and 19th century reordering of its landscape, which worked upon pattern of fields, routeways and woodland inherited from the medieval period. Staffordshire is predominantly a county of dispersed settlement, often with high densities of farmsteads and historic houses, linked to an intricate network of winding lanes, in areas of woodland, common and heath.
>
> SCC, Staffordshire Farmsteads Character Statement, p. 2
>
> At a basic level, and whether designated as heritage assets or not, significant farmsteads and buildings contribute to local character and distinctiveness. They can do this if they have retained their traditional farm buildings and some or all of their historic form, where the historic farm buildings, any houses and spaces relate to each other. The greater the survival of the historic form and detail, the greater will be its significance as a traditional farmstead.
>
> SCC, Staffordshire Farmsteads Character Statement, p. 3

The survey work shows that '82% of Staffordshire's recorded farmsteads have heritage potential as traditional farmsteads because they have retained some or all of their historic form' and '73% have high heritage potential because they have retained more than 50% of their historic form, this being much higher than the average across the West Midlands (66%)' (SCC, Staffordshire Farmstead Character Statement, p. 3).

The North Staffordshire Plain area, where the NA is located, is described as follows:

> Historic character
>
> • High numbers of small-scale farmsteads intermingled with large-scale courtyard farmsteads reflect a diversity of enclosure scale and type in this landscape.

> • The smaller steadings mostly comprise dispersed plan types, loose courtyard plans with buildings to one or two sides of the yard and regular courtyard L-plans: the latter consist of cowhouse/fodder ranges of a type characteristic of the Cheshire Plain. Larger scale regular courtyard plans include U- and E-plans and some regular courtyard multi-yard farmsteads.
>
> • The eastern border is becoming increasingly urbanised with the expansion of the Potteries and Newcastle-under-Lyme. Woodlands (both ancient and plantation) are a feature of the southern part and some of the smaller farmsteads may have been established through the clearing of woodland before 1800.
>
> Significance
>
> • 65% of farmsteads have been identified as having high heritage potential and 14% have some heritage potential.
>
> • 15% of the farmsteads with a high heritage potential have one or more listed buildings.
>
> SCC, Staffordshire Farmsteads Character Statement, p. 41

Guidance has been provided for each of the county's local authority areas. The guidance for NuL Borough includes the following:

> Local plan policy generally supports the re-use of significant historic buildings, and includes specific requirements and planning considerations, particularly in relation to residential additions and alterations, neighbourhood issues and taking account of biodiversity.
>
> SCC, Farmsteads in Newcastle-under-Lyme borough, p. 1
>
> Historic farmstead character
>
> • 8% of the county's farmsteads lie within the Borough. The farmsteads tend to be associated with hamlets or form loose clusters, with only a small number forming isolated farmsteads …
>
> • Small-scale farmsteads (38%) including linear plans, dispersed cluster plans and loose courtyard plans with working buildings to only one or two sides of the yard slightly outnumber the large-scale courtyard farmsteads (35%). The farmsteads are associated with a mix of planned and irregular field patterns.
>
> Significance
>
> • 63% of recorded farmsteads (county average 59%) have high heritage potential as traditional farmsteads, because they have retained more than 50% of their historic form.
>
> • 11% (county average 9.5%) have some heritage potential because they have retained less than 50% of their historic form. The remainder may have retained a house (which may be a listed building) or have lost all of their buildings. These may still retain archaeological deposits which can be revealed through development.

> Present and future issues
>
> Research led by English Heritage … has shown that historic farm buildings have been more prone to both neglect and development than any other historic building type. They are also associated with high levels of home-based business use.
>
> • 23% of listed working farm buildings [in NuL borough] have evidence for non-agricultural reuse (23% being residential and these being associated with a very high proportion of directorships).
>
> SCC, Farmsteads in Newcastle-under-Lyme borough, p. 2

It is clear from the above that NuL borough scores higher than the county as a whole on the heritage potential of its traditional farmsteads. The 23% rate of conversion to residential use compares favourably to the national level of 30%, although applications for conversion of farmstead buildings in the NA are continuing.

Traditional farmsteads are an essential feature in the NA's landscape and rural character. The historic farmsteads in the NA have been recorded and mapped by SCC (Maps 20a–c). Table 6.10 is a summary listing of the farmstead types in each parish of the NA and Table 6.11 provides a full listing. Further detail is included in the Historic Environment Report for this Neighbourhood Plan. Across the NA, 35% of historic farmsteads are recorded as monuments in the Staffordshire HER and 14% are associated with a listed building.

In all three parishes larger historic farmstead buildings (typically barns) have been converted to residential use. Less frequently conversions have been to commercial use, as at Maerfield Gate Farm, where the courtyard farmstead buildings have been converted into a country pub, restaurant and hotel accommodation.

Figure 6.19 Nineteenth-century farmstead buildings in use in the NA

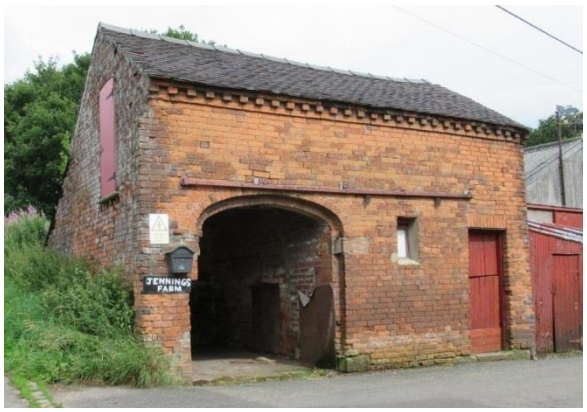


Table 6.10 Summary listing of historic farmstead types in the NA

Type	*Chorlton*	*Maer*	*Whitmore*
Regular courtyard plan (Medieval)	1		1
Loose courtyard plan (C17th)		2	1
L-plan (C17th)		1	
Regular courtyard plan (C17th)	2	1	1
Dispersed plan (C18th)		1	
Linear plan (C19th)	1	2	4
Dispersed plan (C19th)	2	3	1
L-plan (C19th)		1	2
Loose courtyard plan (C19th)	2	11	13
Regular courtyard plan (C19th)	5	10	19
Total	**13**	**32**	**42**
With monument status in Staffordshire HER	5	10	15
Associated with statutory listed building	3	5	4

Table 6.11 Historic farmsteads in the NA

Site name	*Date*	*Location*	*Survival*	*Grid reference*	*Postcode*
Chapel and Hill Chorlton parish					
Moss Hall Farm	19th cent	Isolated	Significant loss	SJ 79750 39556	ST5 5DS
Woodside Farm	19th cent	Isolated	Extant	SJ 79251 39594	ST5 5EB
Grooms House	19th cent	Hamlet	Partial loss	SJ 80763 39274	ST5 5JG
Hill Chorlton Farm	19th cent	Hamlet	Partial loss	SJ 80667 39214	ST5 5JG
Jennings Farm	19th cent	Hamlet	Extant	SJ 80559 39203	ST5 5JG
Chorlton Green Farm	19th cent	Hamlet	Partial loss	SJ 81033 38090	ST5 5JH
Green Farm	Medieval	Hamlet	Extant	SJ 81156 37974	ST5 5JH
Yard attached to Cock Inn	17th cent	Hamlet	Significant loss	SJ 81468 38725	ST5 5JH
Yard NW of Greenbank/ Manor House	19th cent	Hamlet	Partial loss	SJ 81097 37925	ST5 5JL
School House Farm	19th cent	Hamlet	Partial loss	SJ 81255 37746	ST5 5JL
Church House Farm	17th cent	Hamlet	Significant loss	SJ 81299 37866	ST5 5JN

Site name	*Date*	*Location*	*Survival*	*Grid reference*	*Postcode*
Swinchurch Farm	19th cent	Isolated	Partial loss	SJ 80972 37119	ST5 5JP
Farm SE of Chapel Chorlton	19th cent	Isolated	Total change to plan	SJ 81514 37608	ST5 5JW

Figure 6.20 Residential barn conversion in the NA

Site name	*Date*	*Location*	*Survival*	*Grid reference*	*Postcode*
Maer and Aston parish					
Redhills Farm	19th cent	Isolated	Partial loss	SJ 78640 39737	ST5 5EA
Maerfield Gate Farm	19th cent	Isolated	Partial loss	SJ 79354 39140	ST5 5ED
Home Farm	19th cent	Hamlet	Partial loss	SJ 79241 38197	ST5 5EE
Stone Cottage	19th cent	Hamlet	Partial loss	SJ 79256 38007	ST5 5EF
Maer Hills	19th cent	Isolated	Farmhouse only survives	SJ 76844 39334	ST5 5EJ
Sidway Mill Farm	19th cent	Isolated	Extant	SJ 76132 39206	ST5 5EL
Wayside Farm	19th cent	Hamlet	Significant loss	SJ 76398 39053	ST5 5EL
Hawthorne Cottage	19th cent	Loose farmstead cluster	Extant	SJ 76467 39120	ST5 5EL
Fields Farm	19th cent	Loose farmstead	Partial loss	SJ 76615 39108	ST5 5EL

Site name	*Date*	*Location*	*Survival*	*Grid reference*	*Postcode*
		cluster			
Bank House	19th cent	Isolated	Extant	SJ 76449 39619	ST5 5EL
Maerway Lane Farm	19th cent	Isolated	Totally demolished	SJ 76199 40280	ST5 5EN
Farmstead on W side of Maer Hill	19th cent	Hamlet	Totally demolished	SJ 76367 40049	ST5 5EN
Holloway Farm	19th cent	Isolated	Extant	SJ 76273 40632	ST5 5EP
Lunts Farm	19th cent	Isolated	Extant	SJ 76522 41210	ST5 5EP
Holme (Bates) Farm	19th cent	Isolated	Significant loss	SJ 78496 38006	ST5 5EQ
Hopewells Farm	19th cent	Isolated	Partial loss	SJ 77705 38335	ST5 5EQ
Radwood Farm	19th cent	Isolated	Extant	SJ 77470 40732	ST5 5ER
Holloway Lane Farm	19th cent	Isolated	Partial loss	SJ 76661 40409	ST5 5EW
Sidway Hall Farm	19th cent	Isolated	Partial loss	SJ 75749 39850	TF9 4ET
Lea Head Manor (Lea Head)	17th cent	Isolated	Partial loss	SJ 75071 42040	TF9 4JA
Aston Farm	19th cent	Village	Extant	SJ 75402 41151	TF9 4JB
Yard N of Rock House	19th cent	Village	Farmhouse only survives	SJ 75319 41217	TF9 4JD
Aston Manor Farm	18th cent	Village	Partial loss	SJ 75293 41128	TF9 4JD
Aston Cliff Farm	17th cent	Isolated	Significant loss	SJ 76024 42111	TF9 4JE
Yew Tree Farm	17th cent	Village	Significant loss	SJ 75486 40929	TF9 4JF
Brookside Farm	19th cent	Village	Partial loss	SJ 75504 40970	TF9 4JF
181 Aston	17th cent	Village	Extant	SJ 75718 41087	TF9 4JF
Small Farmstead W of 181 Aston	19th cent	Village	Totally demolished	SJ 75629 41055	TF9 4JF
Minn Bank Farm	19th cent	Isolated	Extant	SJ 75339 40377	TF9 4JG
Bank Farm	19th cent	Isolated	Farmhouse only survives	SJ 75548 40623	TF9 4JG
Willoughbridge Farm	19th cent	Isolated	Significant loss	SJ 74232 39701	TF9 4JH
Weymouth Farm	19th cent	Hamlet	Partial loss	SJ 74970 39983	TF9 4JQ
Whitmore parish					
Lymes Farm	19th cent	Isolated	Partial loss	SJ 82533 43401	ST5 4DR
Shutlanehead Farm	17th cent	Hamlet	Extant	SJ 81971 42467	ST5 4DS
Yard S of Hilltop	19th cent	Hamlet	Significant loss	SJ 82119 42510	ST5 4DS
Upper Farm	19th cent	Hamlet	Extant	SJ 82056 42529	ST5 4DS

Site name	*Date*	*Location*	*Survival*	*Grid reference*	*Postcode*
Lilac Cottage, Acton	19th cent	Village	Extant	SJ 82235 41342	ST5 4DW
Brook Farm, Acton	19th cent	Village	Partial loss	SJ 82353 41184	ST5 4DW
Fairbanks	19th cent	Village	Partial loss	SJ 82386 41307	ST5 4DW
Hayes Farm	19th cent	Isolated	Extant	SJ 83052 41708	ST5 4DX
Outfarm S of Butterton Hall	19th cent	Within park	Totally demolished	SJ 83317 41957	ST5 4DX
Former Field barn N of Rook Hall Farm	19th cent	Isolated	Partial loss	SJ 83571 41704	ST5 4DY
Butterton Grange	19th cent	Isolated	Extant	SJ 84259 42105	ST5 4DY
Butterton Hall	19th cent	Isolated	Partial loss	SJ 83426 42626	ST5 4DZ
Lymes Farm, Butterton Lane	19th cent	Isolated	Significant loss	SJ 82890 43085	ST5 4ED
Newhouse Farm, Acton	19th cent	Isolated	Extant	SJ 81717 40515	ST5 4EE
Acton Farm	19th cent	Village	Extant	SJ 82476 41575	ST5 4EF
Acton Hill Farm	19th cent	Isolated	Partial loss	SJ 82857 41025	ST5 4EG
Chorlton Grange	19th cent	Isolated	Totally changed	SJ 79422 40086	ST5 5DS
Radwood Hall Farm	19th cent	Isolated	Farmhouse only survives	SJ 77419 41128	ST5 5ER
Outfarm NNW of Old Barn	19th cent	Isolated	Totally demolished	SJ 78386 40946	ST5 5ET
Outfarm NNW of Old Barn	19th cent	Isolated	Totally demolished	SJ 78386 40946	ST5 5ET
Old Barn	19th cent	Isolated	Significant loss	SJ 78409 40845	ST5 5ET
Farm W of Church Farm	19th cent	Village	Farmhouse only survives	SJ 80889 40908	ST5 5FD
Woodrow	19th cent	Hamlet	Significant loss	SJ 79599 40512	ST5 5HD
Newhouse Farm, Baldwins Gate	19th cent	Hamlet	Extant	SJ 79524 40563	ST5 5HD
Snapehall	17th cent	Isolated	Extant	SJ 79281 41282	ST5 5HE
Bromley Green Farm	19th cent	Isolated	Extant	SJ 80206 43520	ST5 5HJ
Yew Tree Farm	19th cent	Isolated	Extant	SJ 80514 43293	ST5 5HJ
Dab Green Farm	19th cent	Isolated	Extant	SJ 79881 42176	ST5 5HL
Woodhouse Farm	19th cent	Isolated	Partial loss	SJ 79968 42655	ST5 5HL
Moat Farm	19th cent	Isolated	Partial loss	SJ 80295 42078	ST5 5HL
Wilkins Pleck	19th cent	Isolated	Extant	SJ 81359 42089	ST5 5HN

Site name	*Date*	*Location*	*Survival*	*Grid reference*	*Postcode*
Church View	19th cent	Village	Partial loss	SJ 80922 41014	ST5 5HR
Ivy House	19th cent	Village	Partial loss	SJ 80913 41082	ST5 5HR
Coneygreave Farm	19th cent	Hamlet	Partial loss	SJ 80050 40409	ST5 5HU
Hillside Farm	19th cent	Isolated	Significant loss	SJ 80990 41552	ST5 5HW
Whitmore Hall	Medieval	Village	Partial loss	SJ 81071 41319	ST5 5HW
Outfarm NE of Whitmore Hall	19th cent	Isolated	Significant loss	SJ 81495 41456	ST5 5HW
Range S of Coneygreave Farm	19th cent	Hamlet	Partial loss	SJ 80058 40335	ST5 5HX
Limpits Farm	19th cent	Isolated	Extant	SJ 79977 41434	ST5 5JA
Church Farm	19th cent	Village	Extant	SJ 81022 40885	ST5 5JE
Madeley Park Farm	19th cent	Isolated	Partial loss	SJ 78755 41214	ST5 5LD
Baldwins Gate Farm	19th cent	Isolated	Partial loss	SJ 79110 39975	ST5 5LP
Moss Cottage Farm	19th cent	Isolated	Partial loss	SJ 79972 40118	ST5 5LS

Box 6.13 Issue: farmstead buildings

- While it is preferable for historic farmstead buildings to remain in agricultural use, maintenance and restoration of these buildings may not be a high priority for owners.
- Changes in agricultural practice, including the absorption of small and medium-sized farm holdings into larger units and the continual introduction of new regulations and standards risk creating obsolescence in historic farmstead buildings, resulting in either their neglect or replacement.
- Development pressures in rural locations create an ever-present risk that traditional farmstead buildings may be demolished to make way for housing development.
- Demolition of traditional farmsteads and their replacement with modern structures has occurred in the NA in the past, resulting in local change of character as well as loss of the buildings themselves.
- Residential conversions may be unsympathetic to the character of original buildings and their surroundings, or have extensions that are out of scale with the original buildings.

Opportunities

- Parish councils can exercise their powers as consultees in planning applications to protect traditional farmstead buildings against demolition or inappropriate alteration or extension. Where traditional farmsteads have been recorded as monuments by the Staffordshire HER this status should provide a safeguard against demolition or inappropriate conversion or extension works. Local listing would also provide a degree of protection for farmsteads. Parish councils need to be aware of the monument or local list status of farmsteads in their parishes and should consider nominating farmsteads for local listing.
- Where traditional buildings are no longer suitable or required for agricultural use, diversification into rural business uses in keeping with the character of the NA or rurally appropriate tourism and leisure activity can be encouraged as a means to restore and maintain historic farmstead buildings and keep them in active use.

6.11.4 Workers' cottages and council houses

Across the NA are groups of workers' cottages associated with the historic local economy. These cottages, which are intrinsic to the local rural character, are the survivors of a larger number of such cottages that have been demolished and either have not been replaced (as the Roll Cottages and Roll of Tobacco public house by the Kennels Lane junction on the A51, demolished in 1966), or have been replaced with modern dwellings (as one pair and one end-of-terrace cottage in Hill Chorlton), or have been modernised beyond recognition of their origin.

The cottages are frequently of 19th century date, in semi-detached pairs or terraces of 3. Exceptions include the Malt Kiln cottages on Bent Lane, Whitmore village, a row of 5 estate cottages of late 18th-century origin with later additions, and the railway cottages in Baldwins Gate, originally a terrace of 6 dating from 1837, with the later addition of 4 further dwellings.

Workers' cottages in Baldwins Gate, Chorlton Moss and Hill Chorlton were often associated with the local economy of Baldwins Gate, where the railway, Whitmore Station and

Figure 6.21 (Left) Row of 3 19th-century workers' cottages at Chapel Cottages, Baldwins Gate. A metal plaque on cottages is dated 1859. The adjoining Methodist chapel is contemporary with the cottages and originally had 2 storeys. (Right) Estate workers' cottages in Whitmore village. Two plaques on the cottages are dated 1796 and 1903.

Figure 6.22 Estate cottages of different periods in Maer village

Figure 6.23 Former council houses at The Croft, Blackbrook (left) and Aston (right)

businesses that grew up around this nucleus created local employment and a concomitant housing need. The cottages in Figure 6.21 are typical of the local style.

Elsewhere, workers' cottages were associated with landed and farming estates, as in Whitmore and Maer villages, where they housed estate workers and domestic servants of the Whitmore and Maer estates, respectively. A pair of cottages belonging to the Madeley estate is found on Manor Road. The each estate has its own style of cottage architecture. The cottages in Maer village are a fine example of an estate village built over an extended period. Changing details and finishes identify different building periods, although the basic design remains the same (Figure 6.22).

Semi-detached tied agricultural workers' cottages of 20th-century date are found in all 3 parishes, as at Maerfield Gate cottages, but are not so numerous as the cottages of earlier date. Groups of 1950s council houses, built to house workers in the rural economy, are found at Chapel Chorlton, Blackbrook and Aston. Like the earlier cottages, these 20th-century workers' dwellings are also intrinsic to the area's rural character (Figure 6.23).

Cottages in Maer and Whitmore villages are protected by the conservation areas. In Maer village modernisations and extensions have been carried out discreetly at the rear of dwellings. Outside the conservation areas, these distinctive buildings that characterise the local rural landscape and narrate the history of its life and economy have no protections against the risks of demolition or alterations and modernisation that may significantly alter their character.

6.11.5 Schools

Across the NA are a number of former village primary schools that have been converted to other uses. The village schools of Aston, Butterton, Chapel Chorlton and Whitmore have been converted to residential use. Maer school has been converted to commercial use and has been substantially extended (Figure 6.24).

6.11.6 Chapels

There are a number of 19th-century Methodist chapels in the NA. While the majority of these distinctive buildings have been converted into dwellings, the Methodist chapel in

Baldwins Gate remains in use. It was originally a 2-storey building. The upper storey was dismantled in the mid-1960s and a new entrance vestibule was built at the eastern end. The

Figure 6.24 Maer school converted to commercial use and extended

original design of the chapel in Baldwins Gate was very similar to that of the Methodist chapel at Hill Chorlton, which was converted into a dwelling in the early 1970s.

St Margaret's Mission (Figure 6.25) at the junction of Maerway Lane and the A51 at Blackbrook is disused and boarded up. In 2012 a planning application for change of use drew the following comments from the Conservation Officer of NuL Borough Council.

> This modest chapel, is typical of a simple 19th century nonconformist chapel and has similar features and detailing of a recently converted Wesleyan Chapel in the vicinity. It has a certain presence from the main road and is neatly shielded from the road by the small brick wall with rounded copings. It has clearly been neglected for many years and its use as a chapel is expired. Nevertheless, it has an architectural and historical quality which should be retained and in order for that to happen it requires a new use.
>
> The building is brick with symmetrical large metal windows, central timber boarded door with arched fanlight decorated with arched blue brick heads. Two windows of the same pattern are on the rear. The clay tile roof is generally in good shape with a king post roof truss in the centre. The roof timbers appear to be the only features of interest internally and therefore should be retained. The scheme proposes to use the timbers for a previous ceiling which will reveal the lower portion of the truss.
>
> Planning application 12/00829/FUL

Figure 6.25 St Margaret's Mission, Blackbrook

Box 6.14 Issue: disused chapels

- These buildings make a significant contribution to the built heritage of the NA and are an important of part of the NA's social history, but for the most part they are not protected.

Opportunities

- Seek heritage recognition and protection for all former and disused chapels in the NA by nominating them for inclusion in the Register of Locally Important Buildings and Structures, if they have not already been so listed. Local listing would qualify these buildings to be considered for grants for conservation and restoration work.
- Look for opportunities to preserve and maintain St Margaret's Mission, Blackbrook, by converting it to an appropriate use, possibly in support of the leisure and tourism aims of the Plan.

6.11.7 Cheshire railings

The NA has a number of sets of Cheshire railings, known locally as 'daylight fencing' (Table 6.12, Figure 6.26 and Map 21). The distinctive wrought iron railings were first installed on Cheshire's highways in 1929 as a safety feature to provide visibility at junctions and on

bends. They spilled over into NW Staffordshire in the 1950s and are a heritage feature on highways in the Three Counties border area of North Staffordshire. A few of these railings are regularly maintained and painted white, most notably in Chorlton parish, where they make an important contribution to the hamlet's rural character. More recently three sets of railings in Whitmore parish have been cleaned up and painted white. In other locations the railings are neglected, rusty and in need of restoration and maintenance. In all locations hedges and other vegetation have been allowed to encroach over them over recent decades.

Table 6.12 Cheshire railings in the NA

Parish	*Location*	*National grid reference*
Chapel and Hill Chorlton	Hill Chorlton, junction A51 and Moss Lane	SJ 79866 39382, 79871 39374, 79855 39367
	Hill Chorlton, junction Sandy Lane and Chorlton Moss Lane	SJ 79494 39356, 79486 39347, 79481 39357
Maer	Blackbrook, junction A51 and Hungersheath Lane	SJ 76495 39061, 76495 39071, 76477 39083
	Blackbrook, junction A51 and Wharmadine Lane	SJ 77497 38796, 77516 38798, 77520 38786
	Blackbrook, junction A51 and Wharmadine Lane	SJ 77527 38785, 77528 38801, 77544 38804
	Blackbrook, junction A53 and Wharmadine Lane	SJ 77517 38869, 77536 38880, 77536 38874
	Blackbrook, junction A53 and Wharmadine Lane	SJ 77542 38875, 77543 38883, 77561 38892
	Aston Lane, Aston	SJ 75221 41039 to SJ 75190 41020
Whitmore	Baldwins Gate, junction Madeley Road and Manor Road	SJ 78553 40177 to SJ 78528 40193
	Baldwins Gate, junction Camphill and Manor Road	SJ 78518 40226, 78512 40207, 78495 40215
	Baldwins Gate, Heath Road, Whitmore Heath	SJ 79769 40834 to SJ 79762 40796
	Butterton cross-roads, junction A53 and Butterton Lane	SJ 82696 43225, 82682 43233, 82660 43205

Figure 6.26 Cheshire railings in Chorlton parish

Box 6.15 Opportunities: Cheshire railings

- Seek protection for railings by nominating them for inclusion in the list of Locally listed buildings.
- With support from the Conservation officer for NuL and SCC parish councils can seek
- cooperation from landowners to clear vegetation and maintain the railings on a regular basis.
- Local listing would provide opportunities to secure funding towards restoration and maintenance of these heritage features.

6.11.8 Historic landscape

The historic landscape is formed by land use over time. In a rural setting such as the NA the greatest influence on the historic landscape is the economic use of land for agriculture, forestry and mineral extraction. This is followed by social uses for settlement, transport and other social functions such as education, religion and leisure.

6.11.8.1 Economic uses

Historic Landscape Character maps supplied by SCC Historic Environment Record (Maps 22a, 22b, 22c) illustrate how the NA's land has been enclosed for agriculture both during the

period of 18th- and 19th-century enclosures and in earlier times. SCC's Planning for Landscape Change SPG, which defines areas of landscape maintenance, enhancement and restoration in the NA, is predicated on the shape and features of the rural landscape as it has been formed by land use across the centuries.

Traces of mineral extraction are a very minor feature in the NA's historic landscape. The largest relics of this land use are the former sand quarry in Acton and abandoned sand and gravel pits now overgrown by woodland on Whitmore Heath. Other sand and stone quarries have been filled in. Traces of old marl pits appear as ponds or as pock-marks in the land.

6.11.8.2 Settlement

The settlements, structures and other heritage assets reviewed in sections 6.8 to 6.11 make a significant contribution to the NA's historic landscape. Some of these settlements and structures are protected by statutory designations such as conservation area, scheduled monument and listed building.

The SCC Historic Environment Record and historic farmsteads survey record and identify other features and structures in the NA's historic landscape. While this documentation does not afford statutory protection it is a source of important information that should be consulted and taken into account when making decisions on planning applications.

Significant buildings and other structures that give character to the NA and its landscapes and townscapes and that do not have statutory protection can be given recognition through local listing (see above, section 6.11.1 and Boxes 6.11, 6.13, 6.14, 6.15).

The contribution that the NA's built environment makes to the historic landscape and townscape needs to be given due weight in decisions on planning applications, both for new development and for extensions and replacement buildings.

6.11.8.3 Parkland

Parkland is one of the social uses of land that accompanies settlement. The majority of the NA's historic parklands are protected by containment within conservation areas at Maer, Butterton and Whitmore.

The historic deer park at Madeley Great Park currently has no protection. Since the Second World War it has been encroached on by residential development, most notably at the

southernmost end in Baldwins Gate. Training delivered by Historic England has alerted the Steering Group to the need for this area to be recognised as a significant and sensitive element in the NA's historic landscape and to be protected by planning policy.

Research by L.M. Cantor and J.S. Moore[6] shows that the earliest known record of Madeley Great Park is in 1272, although it may have originated earlier in the 13th century, after the disafforestation of north-west Staffordshire c. 1204. The park covered an area of approximately 830 acres in what is now the north-western part of Whitmore parish (land transferred from Madeley parish at local government reorganisation in 1974). Cantor and Moore have published a map of Madeley Great Park based on a study of written records, landscape features and a perambulation of the probable boundaries (Map 23). The land was disparked in the early 19th century, Cantor and Moore suggest by 1808. The SCC Historic Landscape Character map for Whitmore parish (Map 22c) marks the area as 18th/19th-century planned agricultural enclosure; the 1831 Ordnance Survey drawing by Henry Stevens shows the farmstead buildings of Baldwins Gate farm, Merry Tree farm and Madeley Park farm within the former park and Radwood farm and Radwood Hall farm on its western boundary (Map 24).

Residential development has taken place within the former deer park since 1947. Along Manor Road there is scattered development, both in open areas and on the edge of Whitehouse Wood, and the whole of Madeley Park Wood is developed at relatively low densities. In all there are 150 dwellings in this area. At the southernmost end of the deer park the Sandyfields and Gateway estates of Baldwins Gate, totalling 74 dwellings at densities of 8 and 17 per hectare, respectively, were built on 5ha of land between 1947 and 1962. In 2015 planning permission for a development of 109 dwellings at a density of 26 per hectare was granted on 5.6ha of land contiguous with and north-west of these two estates. This development is currently under construction.

The eastern boundary of the former park, demarcated by Snape Hall Road south and Whitmore PRoW No. 6, is to become a 5-metre wide construction and service vehicle road for the planned HS2 phase 2a railway (see section 7.3).

[6] The following is based on L.M. Cantor and J.S. Moore, The medieval parks of the earls of Stafford at Madeley, North Staffordshire Journal of Field Studies, 1963, vo. 3, pp. 37–58.

6.11.8.4 Highways

The transport network described in section 1.3 is another element of major significance in the NA's historic landscape and rural character. It is the skeleton that gives shape to the NA, creating vital communication links between settlements, farmsteads and isolated dwellings.

With generally only minor changes, the 'A' roads follow the historic routes of centuries-old roads that were turnpiked in the late 18th century. The most important exception to this is the rerouting of the Newcastle–Market Drayton turnpike through Whitmore parish after the opening of Whitmore Station. The NA's minor roads, single-track lanes and footpaths (now designated as PRoWs) connect inhabited areas to these major routes and likewise remain unaltered in routing and character.

The hierarchy of routes is an important element in the NA's social, economic and geographical history and development and in the area's rural character. The smaller routes also play a significant role in the natural environment of the NA (see below, section 6.14.2).

The character of several of these historic routes will be irreversibly changed by the proposed HS2 phase 2a: (1) by the planned rerouting of roads (e.g. Bent Lane); (2) by widening to accommodate construction traffic (e.g. Snape Hall Road south, to be widened to 5 metres); (3) by inevitable damage from construction traffic (e.g. Snape Hall Road north-east). The locally important north-eastern leg of Snape Hall Road is planned to be permanently closed to all users.

6.12 Quality of environment

Despite the presence of the WCML and strategic routes, the NA has many tranquil areas and there are places where a feeling of remoteness can be experienced (Figure 6.27). Even the PRoWs bordering the WCML are peaceful places where tranquillity is disturbed only briefly by the passing trains and skylarks are often heard and seen. The intrusion of sound from the railway and A51/A53 depends on the wind direction, but the topography and the presence of woodland mean that there are many areas where the sound does not reach.

The AECOM HCA report reviews the key characteristics of the NA, including:

> Strong rural area dominated by pastoral farming with a quiet and remote character, which generally results in a high degree of tranquillity. (HCA, p. 18)

The TCA report notes that

> The agricultural narrative is common across the Neighbourhood Area, with settlements often enclosed by open farmland. Despite the presence of the WCML and the A51/ A53, the overall impression across the neighbourhood area is one of tranquillity. (TCA, p. 43)

The report also notes that the absence of street lighting in the cluster hamlets contributes to their remote atmosphere (TCA, p. 62).

The increasing amount of traffic on both the primary routes and minor roads and lanes has a very negative effect on the quality of the environment both in the settlements and in the undeveloped areas. AECOM's TCA report notes that the tranquillity of the NA's lanes is being undermined by an increase in traffic (TCA, p. 49).

Figure 6.27 The NA has many tranquil areas and there are places where a feeling of remoteness can be experienced. Cattle grazing near Moat Wood ancient woodland

6.13 Local Green Space and green infrastructure

The NA is dominated by 'green space' in the form of privately owned agricultural land and commercial and private woodland. The government's Generalised Land Use Database (January 2005) records 89% of land use in the NA as being for green space (see section 4.1). Very little of this green space is physically accessible to the public, as follows.

- There is limited public access onto agricultural land and woodland via the PRoW network.

- The local churchyards at Butterton, Chapel Chorlton, Maer and Whitmore are freely accessible.
- Chapel Chorlton has a village green, in the ownership of the parish council.
- Whitmore parish has a playing field with children's playground, outdoor gym and picnic tables located next to the village hall on the outskirts of Baldwins Gate, maintained and managed by Whitmore Parish Council on behalf of the Whitmore Playing Field Trust.
- Baldwins Gate has two formal open spaces at Jubilee Gardens (owned by Whitmore Parish Council) and Chapel Green (leased from NuL Borough Council). There is seating in Jubilee Gardens; Chapel Green has a seat and a bus shelter.
- Lakeside estate in Baldwins Gate has an area of private open space with a footpath that provides a link between the highway network in the settlement and a PRoW in the Open Countryside. The footpath is not a PRoW and access is closed on 1 day per year.
- The Dorothy Clive Garden at Willoughbridge is open to the public on payment of an entrance fee.

6.13.1 Local Green Space audit and designations

Local Green Space performs an important role in the promotion and protection of green infrastructure. A green space audit of the NA was carried out in June 2017. The audit was followed by a Local Consultation of residents, landowners and other stakeholders in August 2017. Local Green Space designations were then drawn up on the basis of the audit and consultation.

Figure 6.28 Chapel Green, Baldwins Gate and Whitmore village hall playing field with children's playground and picnic tables

For further details on Local Green Space and Local Green Space designations refer to section 2.2 and Appendix 1 in volume 1.

Box 6.16 Residents' survey

The rural location and lifestyle and easy access to the countryside are an important aspect of the NA for over 97% of residents (Question 1). The open space areas that are most valued are the local lanes, PRoWs and bridleways (90%) (Question 6). Sixty-one per cent of respondents rated the playing field at Whitmore village hall as important, and this was followed by Whitmore Heath (59%). These two very close results very likely reflect the views of residents living in the vicinity of the two areas, in Baldwins Gate. Access to Maer Hills for walking is important to 90% of residents, and provision for outdoor sport and leisure to 80% (Question 7). In terms of acceptable land uses (Question 11), 90% supported open space and 86% supported nature reserves and trails. Leisure and sport uses such as childrens' play sites, picnic sites, team sport facilities received a medium level of support at 67% to 56%.

6.13.2 Green infrastructure and wildlife corridors

The NA's green infrastructure is provided by its hedgerows, roadside verges, natural and manmade watercourses, ponds, trees and woodland, and domestic orchards, together with less-intensively farmed areas of pasture and grassland. Farms that operate Environmental Stewardship schemes make an important contribution to the NA's green infrastructure by maintaining wide field margins and habitats such as wetlands and wildflower meadows and cutting hedgerows on a three-yearly rather than annual cycle.

6.13.2.1 Wildlife corridors

The following characteristic features in the NA's landscape and green infrastructure perform important functions as wildlife corridors:

- narrow, sunken lanes with steep, well-vegetated or wooded banks (Figure 6.29)
- stream corridors and manmade watercourses
- both high and regularly cut hedgerows on field margins and at the side of roads and footpaths
- broad roadside verges bounded by hedgerows and wooded areas.

These wildlife corridors create a network of routes for wildlife to move around the area and also create important links between the many wooded areas.

The WCML, A51 and A53, and the busy 'C' class roads that criss-cross the area fragment this network and create restraints on the movement of mammals and other terrestrial wildlife.

Figure 6.29 Sunken lane in Coombesdale provides a corridor for wildlife

6.13.2.2 Areas of habitat distinctiveness

The Staffordshire Ecological Record has prepared a Habitat Distinctiveness map of the NA (Map 25).This is a choropleth map in which the shading denotes areas of different biodiversity value. Important areas of extensive habitat distinctiveness are as follows.

- In Maer, Chorlton and Whitmore parishes an unbroken area of habitat of very high value to medium value distinctiveness creates a broad wildlife corridor extending from Maer Hills, to south of Baldwins Gate, to land under HLS on the eastern side of the WCML.
- In Whitmore parish, connected areas of very high value to medium value distinctiveness extend north, east and west of Cudmore fishery, southwards through the grounds of Whitmore Hall and Whitmore village and into a long corridor along the Meece Brook to Hatton Mill LWS in the south of Chorlton parish.

- In Maer parish, a long corridor of very high value to medium value distinctiveness extends from Dorrington Bogs in the west to Maer Pool and the Thickets, Haddon Plantation and Well Dale in the east.

Note: unshaded areas on the Habit Distinctiveness map are areas that have not been covered by Phase 1 habitat surveys by either the Steering Group or Staffordshire Wildlife Trust.

6.13.2.3 Phase 1 habitat survey

A Phase 1 habitat survey of land in the environs of Baldwins Gate was carried out by members of the Steering Group. The Staffordshire Ecological Record prepared a habitat map centred on Baldwins Gate showing both this area and the wider area for which it holds records (Map 26). The map provides fuller detail on the habitat distinctiveness areas identified in Map 25, including watercourses, trees and hedgerows that provide wildlife corridors, and species-rich hedgerows, woodland and semi-improved and specialised grasslands that contribute to the area's overall high degree of biodiversity.

6.14 Key routes and spaces

6.14.1 Key routes

The lane network and PRoWs are important routes for 'active travel' in the NA:

- connecting settlements
- providing access to community facilities, and services such as bus stops and letterboxes
- for residents who work in the NA or in neighbouring parishes, providing routes to workplaces
- providing well-used leisure routes for both the local and wider community.

Box 6.17 Issue: fragmentation of pedestrian network

In historical times the turnpike roads (now A51 and A53) that cut across the NA were integral to the network of key routes. The volume and speed of 21st-century traffic on these roads and on certain 'C' class roads has fragmented the local pedestrian network by making parts of certain routes unsafe and/or unpleasant to use. These roads are for the most part unlit and have no footways.

Opportunities

- Roadside verges offer a degree of safety for pedestrians, providing safe walking places and a refuge from passing traffic. With the adjacent hedgerows they also serve as wildlife corridors. Their designation as Local Green Space will safeguard them and help to join up the NA's fragmented network of lanes and PRoWs.
- Designation of 'quiet lanes' with a 20mph speed limit would improve the safety and tranquillity of some of the NA's lanes that are important pedestrian routes.
- In places where hedgerows grow adjacent to the kerb and there is no verge, parish councils could use their powers of designating PRoWs to establish routes along the inside of hedgerows. On the A51 from Maer War Memorial to Blackbrook, from Weymouth to Willoughbridge cross-roads, and from Willoughbridge cross-roads to the county boundary such PRoWs would be beneficial.

6.14.2 Key spaces

Key publicly accessible spaces include:

- open spaces in Baldwins Gate
  - playing field and children's playground
  - private open space at Lakeside estate
  - Jubilee Gardens
  - Chapel Green
- Chapel Chorlton village green
- Maer Hills, accessible by two PRoWs
- green space at The Croft, Blackbrook
- local churchyards
- roadside verges and vegetation, and grass triangles at lane intersections.

6.14.3 Other key spaces

Other spaces that are not publicly accessible are none the less important to both the local and the wider community because of their visual amenity and proximity to key routes and spaces. These include:

- farmland and woodland adjacent to key routes
- open space (e.g. farmland, woodland) adjacent to settlements
- green gaps and separation spaces between developed areas.

6.15 Environmental issues

Natural England identifies the following issues in its profile of NCA 61.

> The presence of large conurbations and the dense network of roads mean that development pressures are likely to continue. Road improvements risk the urbanisation of rural villages. … [A]s the population increases, the demand for food will increase. Development will also increase water demand which, together with the effects of climate change, potentially threatens the internationally important peat wetland habitats of the NCA in terms of water availability and water quality, compounding the effects of climate change. These pressures have the potential to further fragment habitats and change settlement patterns and the vernacular …
>
> (Natural England, NCA profile 61, p. 4)

These issues are present now in the NA.

- NuL borough's inability until 31 March 2018 to demonstrate a 5-year supply of housing land has put pressure on the NA by the uncontrolled expansion of development into the Open Countryside.
- Residential development in rural areas and small towns beyond the NA is continually increasing the volume of commuter traffic on roads through the NA.
- Expansion of business in the North Staffordshire conurbation and surrounding towns is increasing the volume of commercial and HGV traffic transiting through the NA.
- Road improvements in the NA have intensified the urban appearance of Baldwins Gate and will continue to do so. Road improvements outside settlements, such as the roundabout at the A53/A5182 junction, introduce incongruous elements, including street lighting, into the Open Countryside.
- During the second half of the 20th century development has encroached onto and destroyed important peatland areas of the NA and this is a continuing threat.
- The densities, building styles and layouts of new developments in Baldwins Gate are inappropriate to the rural character of the NA.
- Unsympathetic building extensions and redevelopment in all settlements are creating over-development and undermining rural character.

7 High Speed 2 (HS2)

Content of this chapter:

7.1 Introduction

The planned HS2 railway is a national strategic infrastructure project. HS2 Phase 2a, West Midlands to Crewe, will cut through the NA from south-east to north-west. The railway will run on embankments and viaducts through the Meece valley in the south-east and the so-called Lea valley in the north-west. Between the two viaducts it will run in cuttings to the south and north of a tunnel under the settlement of Whitmore Heath. Tunnel portal buildings and associated infrastructure will be constructed at either end of the tunnel.

Hub stations are planned at Crewe and Stafford (19.3km and 25.8km distant, respectively).

The hybrid Bill for HS2 Phase 2a – the High Speed Rail (West Midlands to Crewe) Bill – was deposited in Parliament on 17 July 2017. Construction is scheduled to take place from 2020. The railway would be completed and operational by 2027.[7]

Residents of the NA have engaged in formal consultations on the planned project. In September–October 2016 they were invited to respond to the Draft Environmental Impact Statement consultation; in August–September 2017 they were invited to respond to the Environmental Statement consultation that is part of the hybrid Bill process. In connection with both consultations residents were invited to consultation events held by HS2 Ltd at Whitmore village hall, where they were able to inspect plans and meet HS2 representatives to discuss matters of concern. Detailed reports and map books assessing a wide range of impacts during and post construction were available at both events for residents to take away.

[7] House of Commons, High Speed Rail (West Midlands–Crewe) Bill, Explanatory notes (17 July 2017), para. 6.

Community groups and NA residents are also engaged in petitioning Parliament regarding business and personal impacts arising from the construction and operational phases of the railway. Whitmore Parish Council is also engaged in petitioning on community and environmental impacts, as is NuLBC.

7.2 Impacts

The planned railway is the single greatest issue facing the NA during the Neighbourhood Plan period. Both the construction project and the operation of the railway will have profound and irreversible impacts on the NA, its population, economy and environment. The construction and pre-operational phases (2020–2027) and the associated major disruption to the community and the environment will last for one third of the Neighbourhood Plan period. During the final 6 years of the Plan period the NA, its community, economy and environment will be in recovery from the lengthy period of disruption and adjusting to the radically changed landscape and environment.

The exact impacts of the construction phase are impossible to forecast or quantify but certain factors are already known (Maps 27a–b. If the project goes ahead as planned this phase can be expected to impact negatively on the achievement of the vision and aims of the Plan. The end result of the construction phase will be to have changed certain aspects of lifestyles in the NA and to have permanently altered the environment and landscape of a broad swathe of land cutting south-east to north-west across the NA (Maps 28a–b). The implanting of major new infrastructure such as viaducts, embankments and tunnel portals, the raising of existing highways by as much as 7 metres, involving the loss of established roadside vegetation including mature trees, and the construction of overbridges will introduce major incongruous elements into the landscape and impact negatively on the NA's rural character.

For a NA with an ageing population and a high proportion of long-term residents, the project will mean that major disruption and blight will affect a significant proportion of the population during the final or closing years of their lives. Younger age groups will also be affected. In particular, children and teenagers living in certain parts of the NA during the construction phase will grow up in an abnormal environment and will be unable to

experience and enjoy the rurality of their settlements in ways that have become habitual for several generations of local residents.

The following sections consider in more detail some of the expected impacts of the planned project on the local highway network, society, economy and environment.

7.3 Transport network and accessibility

The planned route of HS2 Phase 2a cuts south-east to north-west through Whitmore parish, running east of the WCML and crossing the WCML in the north-west shortly before leaving the NA and passing into Madeley parish.

7.3.1 Accessibility to key services

Construction works will sever all east–west routes through the NA. There are no alternative routes to the A53, A51 and A525 for travel across and out of the NA and these roads will be seriously affected concurrently. Two important minor roads that feed into and link these routes will also be seriously affected at the same time. Residents thus face the prospect of near-entrapment within a web of major construction activity the NA.

In this respect the travel times to all key services reviewed in the SCC Rural Accessibility Appraisal for NuL (September 2015) cannot be relied on.

Commuting times for residents working in the NuL and SoT area or needing to access the M6 via J15 and J16, the eastbound A50 or the railway stations at Stoke-on-Trent, Crewe and Stafford, and for pupils and students attending local primary, secondary and further and higher education establishments, will be badly affected. Travel times to the main GP surgery in Madeley will also be affected, as will be travel times for social care providers. This could exacerbate the difficulties already experienced by some residents in obtaining social care services. There will be major safety implications in terms of emergency hospital admissions to the nearest A&E facility at the Royal Stoke University Hospital.

Travel times will also be affected by the presence of heavily laden construction lorries on the highway network. HS2 Ltd suggests that construction-related traffic will be using the NA's highway network between 0700hrs and 2300hrs daily.[8]

[8] HS2 Ltd, High Speed Rail (West Midlands–Crewe) Environmental Statement, Vol. 2: Community area report CA4, para. 13.4.22.

The impacts on public transport cannot be forecast although it is reasonable to assume that disruption on the NA's highway network will affect the reliability of the one timetabled service that operates in the NA. The current service is subsidised by SCC and its continuing existence and future timetabling depend on the provider and SCC.

7.3.2 A53

The A53 transects the NA from east to west and is connected via the A5128 to the M6 motorway at J15 Hanchurch. It is a commuting route into the North Staffordshire conurbation from the rural south-west of NuL borough and settlements in the neighbouring county of Shropshire; and a transit route through the NA for commercial, HGV and other traffic. Average weekday traffic counts are 6,980 eastbound and 6,730 westbound; goods vehicles account for 7% of traffic.

The A53 is slated to be a major HS2 construction traffic route and will itself be subject to major construction works between Whitmore village and Baldwins Gate, including diversion over a temporary route, overbridge construction, raising of the carriageway by 7 metres and embankment works. A temporary roundabout will be constructed west of Whitmore village to facilitate vehicle access to the construction site.

HS2 Ltd has forecast 'substantial increases in traffic flows (i.e. more than 30% for HGV or all vehicles in some locations', including on the A53 between Blackbrook and the A5182 (Community area report CA4, para. 14.4.22). Additional daily vehicle movements are expected to be between 500 and 900, to include a high proportion of HGVs.

These works and traffic movements will have major implications for all users of the A53 over the period 2020–2027 and for residents living on or near the route.

Box 7.1 Opportunity: highway safety in Baldwins Gate

In view of the forecast significant impact of construction traffic on highway conditions in Baldwins Gate there is an opportunity for Whitmore Parish Council to approach SCC Highways and seek its support for the implementation of highway safety improvements on the A53 in Baldwins Gate, to be funded by HS2 Ltd.

7.3.3 A51

The A51 transects the NA from east to west. It is a commuting route from the NA and settlements beyond the NA to workplaces in Stone and Stafford, and a transit route for commercial, HGV and other traffic. It carries a significant level of farm traffic throughout the year and is a relief road for M6 traffic during carriageway closures. It carries a generally lower level of traffic than the A53.

HS2 Ltd forecasts a 'major adverse effect as a result in increase of all traffic (more than 30% for HGV or all vehicles) (Community area report CA4, para. 14.4.22).

Construction-related traffic from the A53 will join/leave the A51 at the A51/A53 staggered crossroads at Blackbrook. Under normal circumstances conditions at this crossroads are a major source of concern both to NA residents and to residents of adjoining NAs in Staffordshire and Shropshire. In its response to the September 2017 consultation SCC noted:

> SCC have safety concerns in the following locations:
>
> …
>
> - Staggered junction of A53/A51 at Blackbrook adjacent to Swan with two necks pub – 11 accidents in the last 5 years.
> - SCC expects HS2 Ltd to engage to develop appropriate mitigation.
>
> Staffordshire County Council et al., HS2 Phase 2a (West Midlands – Crewe) Hybrid Bill Environmental Statement, Consultation Response, p. 123

Box 7.2: Opportunity: Blackbrook crossroads

There is an opportunity for the parish councils of this NA and adjoining NAs to approach SCC Highways and propose that junction upgrades at the A51/A53 staggered crossroads are funded by HS2 Ltd.

7.3.4 Bent Lane

Bent Lane links the settlements of Stableford and Whitmore village, provides a link between the A51 and A53 and is an important route for Chapel Chorlton and Stableford residents to access Newcastle via the A53. It is also a transit route to the A51 and Stone and Stafford for residents of neighbouring Keele parish. It will be subject to major construction works and

road realignment, with major implications for users of this route. Completed works will result in a less direct and longer the route between Stableford and Whitmore village.

7.3.5 Madeley Road/Manor Road

This route links the settlement of Madeley Park Wood/Manor Road to the A53 and Baldwins Gate and links the NA to Madeley village, which is a Key Rural Service Centre and the location of the local GP practice's main surgery and the secondary school serving the NA. It is a commuting route for NA residents to Crewe, to M6 J16 Crewe for journeys north and to the WCML station at Crewe. It is also a transit route to the A51 and Stone and Stafford for residents of neighbouring Madeley parish. Manor Road will be subject to major construction works and overbridge building, with major implications for users of this route, including for access to the main GP surgery.

7.3.6 Single-track lanes

Figure 7.1 Snape Hall Road (north): an important local pedestrian route, permanent closure planned by HS2 Ltd

Common Lane and **Snape Hall Road (south)** link Whitmore Heath to the A53. Common Lane provides access to Heath Road. Snape Hall Road and Common Lane will be construction traffic routes. HS2 Ltd intends to widen these two lanes to 5 metres to accommodate its

vehicles. These two lanes are both residential roads and important local pedestrian routes used by residents of Whitmore Heath and Baldwins Gate. Their use by construction traffic will have major adverse effects on householders and on the wider community of the two settlements.

Snape Hall Road (north) connects to the northern end of Heath Road, forming a circular route around Whitmore Heath. The northern tunnel portal building of the Whitmore Heath tunnel will be located at the southern end of this lane. HS2 Ltd plan to permanently close the lane, effectively closing down the important Whitmore Heath pedestrian route. This will have a major adverse impact on the well-being of residents of the settlements of Whitmore Heath, Baldwins Gate and their environs.

7.3.7 PRoWs

Figure 7.2 PRoW Whitmore No. 4: a well-used local footpath, and the A53 parallel to the path at the point where it will raised by 7 metres to cross over HS2

Whitmore No. 4, from Common Lane to Whitmore village, is a well-used link between Baldwins Gate/Whitmore Heath and Whitmore village. This route will be diverted during construction works on the A53 and for the Whitmore Heath south tunnel portal. SCC has commented that:

> It is not clear how long the temporary diversion will be in place for and the proposed route is unnecessarily arduous. Walkers would have to double back before terminating at the A53.
>
> The length of this proposed temporary closure requires clarification and HS2 Ltd. should seek to establish the shortest possible alternative route.
>
> Staffordshire County Council et al., p. 76

The proximity of this route to major construction works and construction compounds will significantly reduce its attractiveness to walkers and effectively close it down as a pedestrian route of choice during the construction phase.

Whitmore No. 5 from Madeley Park Wood links Madeley Park Wood to Baldwins Gate via Whitmore No. 6 and Snape Hall Road. The route will be temporarily rerouted onto a minor diversion for 12 months. A further closure of 6 months will require users to access Baldwins Gate via the existing Whitmore No. 18. This will impact on residents of Madeley Park Wood who use the path to access services in Baldwins Gate.

Whitmore No. 6 is a route from Snape Hall Road to Madeley, connecting to Madeley No. 6 at the parish boundary. There will be temporary minor diversions of this route during construction, and permanent minor diversions after construction. The temporary route will cross a site haul route.

7.4 Community

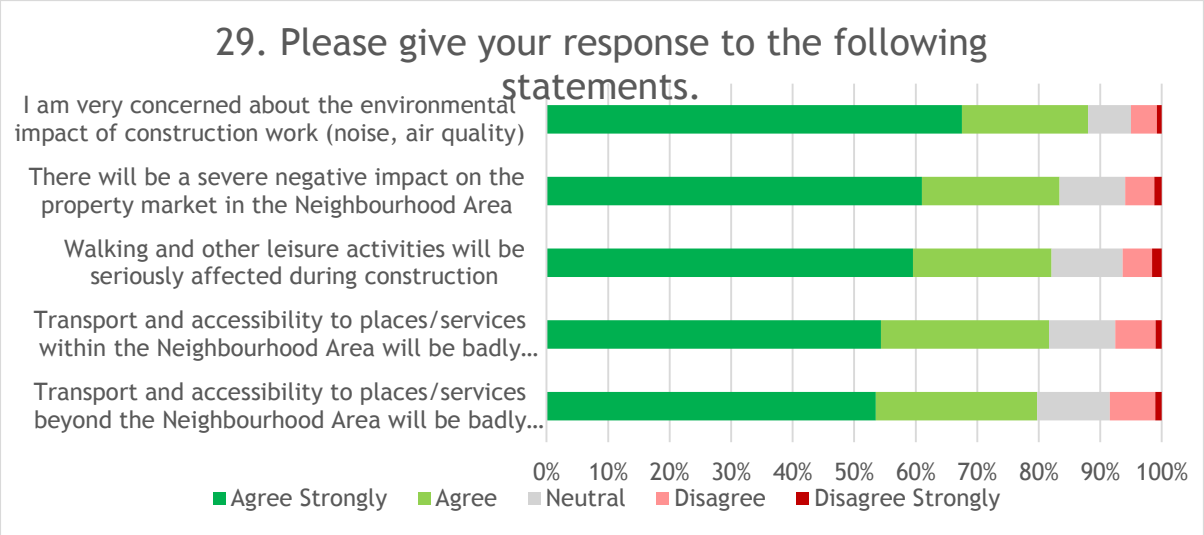
Construction of HS2 Phase 2a will have a major impact on the NA's population during the Plan period. Transport disruption due to major roadworks on the A53 connecting the NA to NuL and SoT and on important minor routes can be expected to cause the population to reorient itself away from NuL and SoT and towards Market Drayton and Nantwich.

The settlement of Whitmore Heath, under which the Whitmore Heath tunnel is planned to run, will become depopulated. HS2 Ltd has already purchased homes on the Heath under the terms of its compensation scheme; in May 2017 at least 17 properties were being marketed preparatory to qualifying for compensation. HS2 Ltd has served blight notices on residents of Snape Hall Road and Common Lane, due to planned use of those roads as a major construction traffic route.

The impact of construction works may cause residents to move away from other settlements in the NA, e.g. Baldwins Gate and Madeley Park Wood. The NA can be expected to be a much less attractive as a place to live during the construction phase; but some HS2 employees and contractors could move into the area for the duration of the project.

Box 7.3 Residents' Survey

Residents expressed high levels of concern about the planned HS2 project in response to a question in the Residents' Survey. Five statements received agreement ranging between 97% and 89%.



Welfare facilities on HS2 construction compounds may include living accommodation for some workers. The degree and nature of the impact on the local community from any influx of temporary population cannot be predicted.

7.5 Economy

A negative impact on the local economy can be expected for the duration of the construction phase. The construction phase is unlikely to bring any economic benefits, and no long-term economic benefits to the NA are expected from the operation of the railway.

The construction phase will have a major negative impact on some agricultural businesses in the NA. This impact will be permanent in terms of land losses. Where requisitioned land is

returned to landowners, medium- to long-term impacts can be expected in terms of recovery from damage to soils.

The construction phase is also likely to have a negative impact on the tourism and leisure sectors, with consequent negative impacts for a variety of businesses in the NA. It can also be expected to inhibit the development of this sector of the local economy.

7.6 Environment

The project will have a major and irreversible impact on the rural environment of the NA. Environmental impacts will be of two sorts: medium-term during the construction phase (Maps 27a-b) and permanent during the operational phase (Maps 28a-b). They will include major landscape change at a localised level and damage/loss to important habitats with consequent impacts on wildlife (Map 29).

Box 7.4 Opportunity: community compensation

In view of the major environmental impacts on the locality and local residents through the loss of important pedestrian routes, the major and permanent alteration of the landscape of the open countryside and the loss of tranquillity, there is an opportunity for the parish councils to press HS2 Ltd to compensate local communities by providing:

- a significant amount of publicly accessible landscaped areas so that what remains of the unaltered open countryside can be accessed, viewed and enjoyed
- new walking routes to compensate for permanently closed routes and to maintain continuing access to routes that would otherwise become inaccessible
- new community recreation and sports areas.

7.6.1 Construction phase

The construction phase will have a major impact on the quality of the environment in the NA's settlements and undeveloped areas. These impacts will affect more than just tranquillity and remoteness and will also have a major visual effect (Maps 27a-b). They will extend well beyond the actual route, due to the presence of construction traffic both on the A53 and A51 and on minor routes during the hours 0700–2300. This traffic will bring a

significant increase in noise, vibration, dust and diesel pollution for residents on all affected routes. Road surfaces will be affected by the increased dust and other pollution levels and this will affect road safety, especially in wet weather.

The construction site and construction compounds will be sources of airborne noise and dust and night-time floodlighting. All of these nuisances will extend well beyond the actual site. The operational railway will also effect a major change in the quality of the environment along the route.

Figure 7.3 Views into Chorlton and Maer parishes from Acton Lane with the WCML in the middle ground. HS2 will cut across the landscape on a viaduct in front of the WCML

7.6.2 Wildlife and habitats

Wildlife and habitats will be disturbed and wildlife corridors will be fragmented.

7.6.2.1 Peatland sites

In their joint response to the HS2 Phase 2A Hybrid Bill Environmental Statement Staffordshire County Council and district councils note:

> CT-06-229 The route crosses river valley peat associated with the Meres and Mosses NIA Chorlton Moss Site of Biological Importance (LWS) at E5-F5. As stated in the Working ES response, a slight northwards readjustment of the proposed viaduct, supported by soils mapping to identify the peat area, would maximise the peat area to be retained and allow for specialised wetland habitat creation to contribute to NIA objectives while avoiding the need to realign Meece Brook.
>
> Staffordshire County Council et al., Consultation response, p. 75

7.6.2.2 Ancient woodland and veteran trees

HS2 Ltd has identified 3 areas of ancient woodland that will be adversely affected by construction of the planned HS2 railway (Map 29) . These are:

- Whitmore Wood: 18.9ha, of which 6.4ha will be lost
- Hey Sprink (wood south-west of): 3.2ha, of which 0.2ha will be lost
- Unnamed wood south of Hey Sprink: 0.9ha, of which 0.2ha will be lost.

This means that 29.6% of the total ancient woodland area will be lost. The Woodland Trust reports that the losses at Whitmore Wood alone will be the single largest loss of ancient woodland along the entire HS2 route (https://www.youtube.com/watch?v=XyblMvKrKwk).

HS2 Ltd intends to 'compensate' for these losses by translocating ancient woodland soils and their associated seed banks to 'receptor' sites in the vicinity, where new woodland planting will take place (Maps 29 and 30).[9]

For veteran trees that will be lost see section 6.6.3 and Table 6.3.

7.6.2.3 Medium-term landscape change

Medium-term landscape change will result from the requisition of agricultural for temporary road diversions; construction compounds; the pre-casting and launching yard for River Lea viaduct; material stockpiles and transfer nodes.

[9] HS2 Ltd, High Speed Two, Phase 2a: West Midlands–Crewe ancient woodland strategy (February 2018).

7.6.2.4 Permanent landscape change

Permanent landscape change and detrimental effects will result from the insertion of new infrastructure, the widening of local roads and a PRoW to form a construction traffic route and the creation of a mitigation works and habitat creation. The new landscape along the route of the railway will be sculpted and artificial (Maps 28a-b and Figures 7.4a-f).

- Viaduct 240m x 12m in Meece valley between Stableford and Whitmore village.
- Embankment 260m x 10m in Meece valley.
- A53 overbridge 100m x 7m between Whitmore village and Baldwins Gate.
- Cut and cover tunnel from A53 to Whitmore Heath.
- Widening of Common Lane and Snape Hall Road and PRoW Whitmore No. 6 to 5m.
- Tunnel portal buildings at south and north ends of Whitmore Heath tunnel.
- Cutting 600m x 13m x 45m through Whitmore Wood and destruction of 6.4ha of ancient replanted woodland (amounting to one third of the area).
- Retaining wall 577m x 20m surmounted by 3m fence at Whitmore Wood cutting.
- Viaduct 785m x 21m over River Lea and WCML.
- Embankments in Lea valley, 860m x 16m and 845m x 21m.
- Mitigation works and new habitat creation.

7.7 The Whitmore to Madeley tunnel

> During the design development process since the announcement of the preferred route to Crewe in November 2015, further consideration has been given to the route of the Proposed Scheme between Whitmore Heath and Madeley. The sensitivity of this location, particularly the residential communities in and around Whitmore Heath, Baldwin's Gate and Madeley, potential for traffic and transportation disruptions, landscape character , presence of ancient woodland, and impacts on agricultural land and farm holdings, have been key considerations in the development of these alternatives.
>
> HS2 Ltd, Community area report CA4, para. 2.5.5

Alternatives to the proposed route alignment between Whitmore Heath and Madeley include Option D9-11.3, a long, deep tunnel from Whitmore to Madeley (Bar Hill), with the southern tunnel portal located approximately 265m south-east of the A53.

> 2.5.21 In comparison to Option D9-11.0a (the Proposed Scheme), Option D9-11.3 would avoid the need to demolish properties along this section, reduce loss of

> agricultural land and reduce community isolation effects and transport impacts. There would be a reduction in noise, visual and amenity impacts to residents at Whitmore Heath and Bar Hill during construction. Visual impacts on the local landscape character during construction and operation between Whitmore Heath and Bar Hill would also be significantly reduced. Direct impacts on watercourses, including unnamed watercourses at Snape Hall Road and Whitmore Wood and a tributary of the River Lea, would be avoided.
>
> 2.5.22 Whitmore Wood and Barhill Wood would be avoided and therefore there would be no loss or fragmentation of ancient woodland and no operational disturbance upon these habitats. Similarly, effects on all cultural heritage assets within this area would be reduced, however, given the proximity of a tunnel vent shaft to Hey House it is likely that there would still be effects on the setting of this Grade II listed building.
>
> 2.5.23 With this option there would be an increase in excavated material associated with the longer tunnel which would correspond with an increase in construction traffic. The risk to groundwater resources and intrusion into the groundwater SPZ at Whitmore would be increased due to longer tunnelling works.
>
> 2.5.24 Construction of Option D9-11.3 would be significantly less complex than Option D9-11.0a. Highways works would be significantly reduced and operational disruption to the WCML would be avoided. However, due to the increase in length of the bored tunnel, this option would be significantly more expensive to construct and the costs of maintenance during operation would be higher.
>
> HS2 Ltd, Community area report CA4, paras 2.5.21–24

HS2 Ltd was instructed by the Secretary of State to assess this option. Option D9-11.3 was supported by NA residents during the consultation on the Environmental Statement (ES). It was also supported by SCC and district councils in their joint response to the ES.

> 2.5.6 The options considered here are noted. It is the view of the authorities that, given the significant infrastructure requirements between the Whitmore and Bar Hill tunnels, and the impact on the Highways Network resulting from construction, consideration should be given to the possibility of joining and lowering the tunnels to pass beneath the West Coast Mainline.
>
> The authorities understand that, following a proposal by Sir Bill Cash MP in November 2016, the Secretary of State instructed HS2 Ltd. in early summer to assess this option, and are therefore disappointed that several months later, this work has not yet been completed.
>
> This option should be fully and properly assessed through an open and transparent process, including the completion of ground investigation works as a matter of urgency, with full details available to appropriate local stakeholders.
>
> Staffordshire County Council et al., Consultation response, p. 42

HS2 Ltd published a report on the Whitmore Heath to Madeley tunnel on 15 March 2018. Whitmore Parish Council gave oral evidence to the House of Commons High Speed Rail (West Midlands–Crewe) Bill Select Committee on 24 April 2018. The Select Committee's First Special Report of Session 2017–2019 was published on 24 May 2018. The Select Committee rejected the proposal for the Whitmore to Madeley tunnel and accepted 'HS2's proposed adaptation to the original scheme, lowering the viaduct [over the River Lea] and extending the southern tunnel' to the south of the A53. Extending the southern (Whitmore Heath) tunnel would enable the tunnel portal and the tunnel to be constructed at a sufficiently lower level to eliminate the need for the A53 overbridge.

There will be a second phase of petitioning on the High Speed Rail (West Midlands–Crewe) Bill in the House of Lords. The final details of the route and design of the railway line will not be known until the Bill passes its third reading in both Houses of Parliament.

Figures 7.4a-f Stills from annotated fly-over of the HS2 Phase2a route, Crewe to West Midlands (direction north–south)
Source: https://www.gov.uk/government/collections/high-speed-rail-west-midlands-to-crewe-bill

Figure 7.4a River Lea viaduct at NA northern border; Madeley Park Wood settlement on the right and WCML passing under HS2

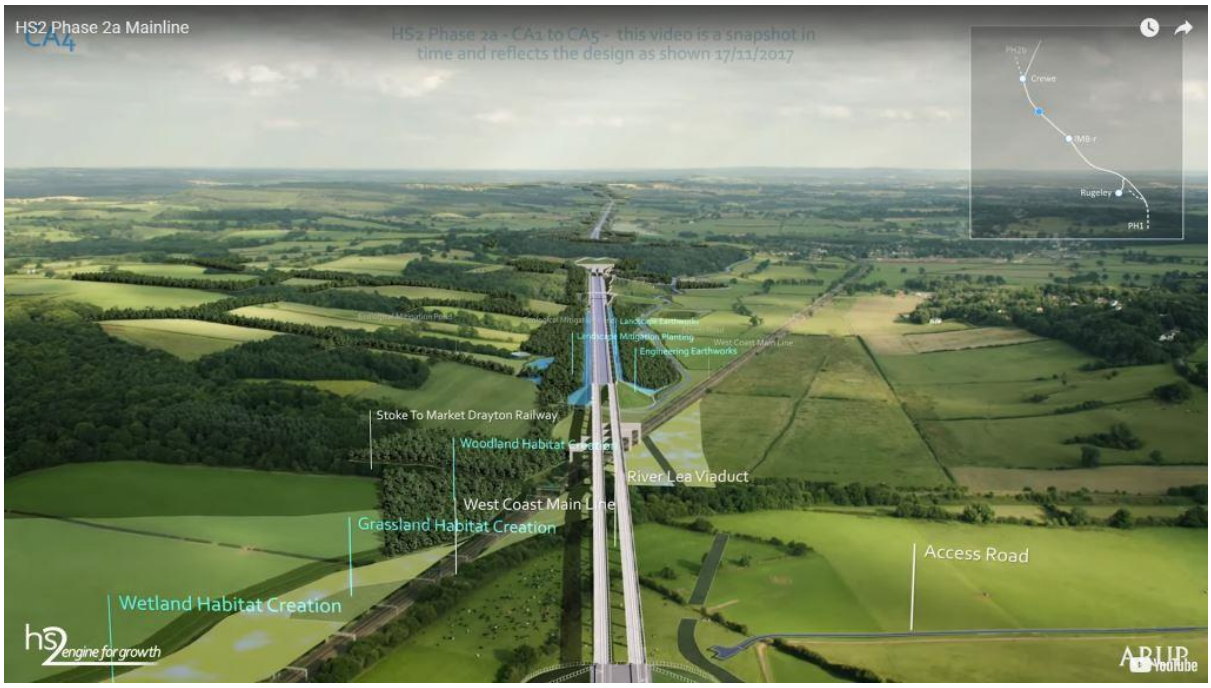


Figure 7.4b Between River Lea viaduct and Whitmore Heath tunnel; HS2 on high embankment with WCML and Madeley Park Wood settlement on the right. Whitmore PRoW No. 6 widened to 5-metre metalled road.

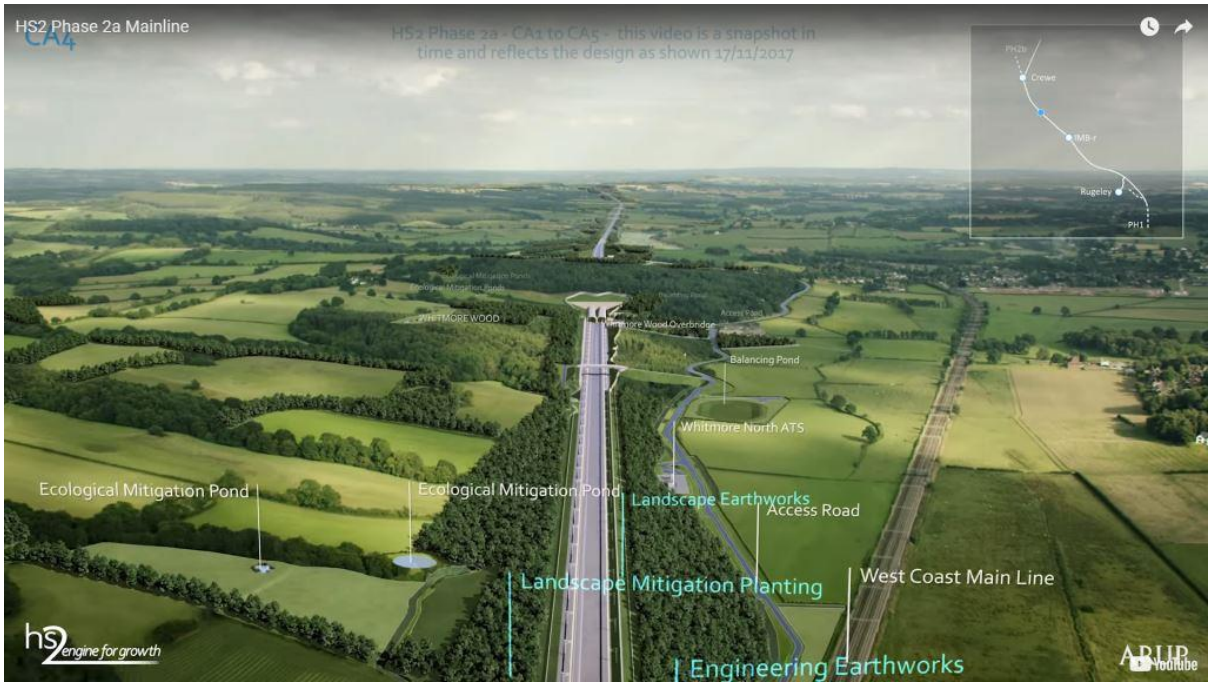


Figure 7.4c Approaching Whitmore Heath tunnel north portal; HS2 in cutting through Whitmore Wood with high retaining wall on left. Whitmore PRoW No. 6 and Snape Hall Road south widened to 5-metre metalled road; public access to Snape Hall Road north-east cut off by tunnel portal structure. Settlement of Baldwins Gate/Whitmore on the right.

Figure 7.4d View over Whitmore Heath to tunnel south portal approach and A53 overbridge; Common Lane and Snape Hall Road south widened to 5 metres.

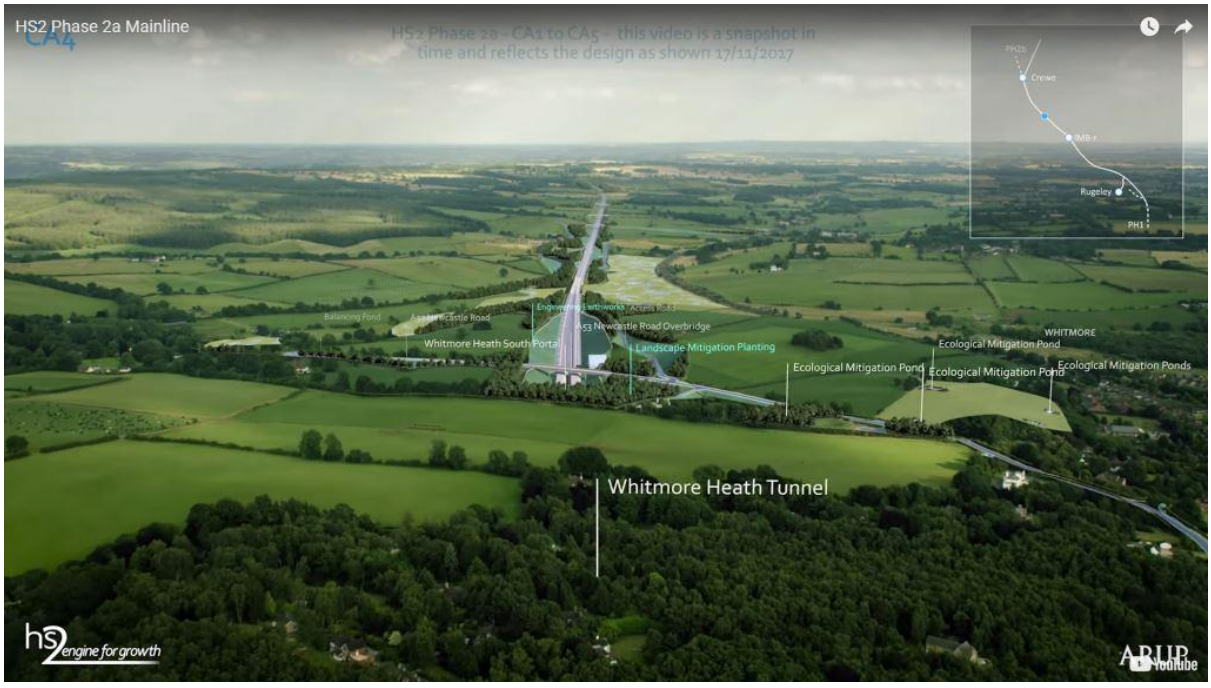


Figure 7.4e A53 overbridge, Whitmore south cutting and approach to Whitmore Heath tunnel south portal.

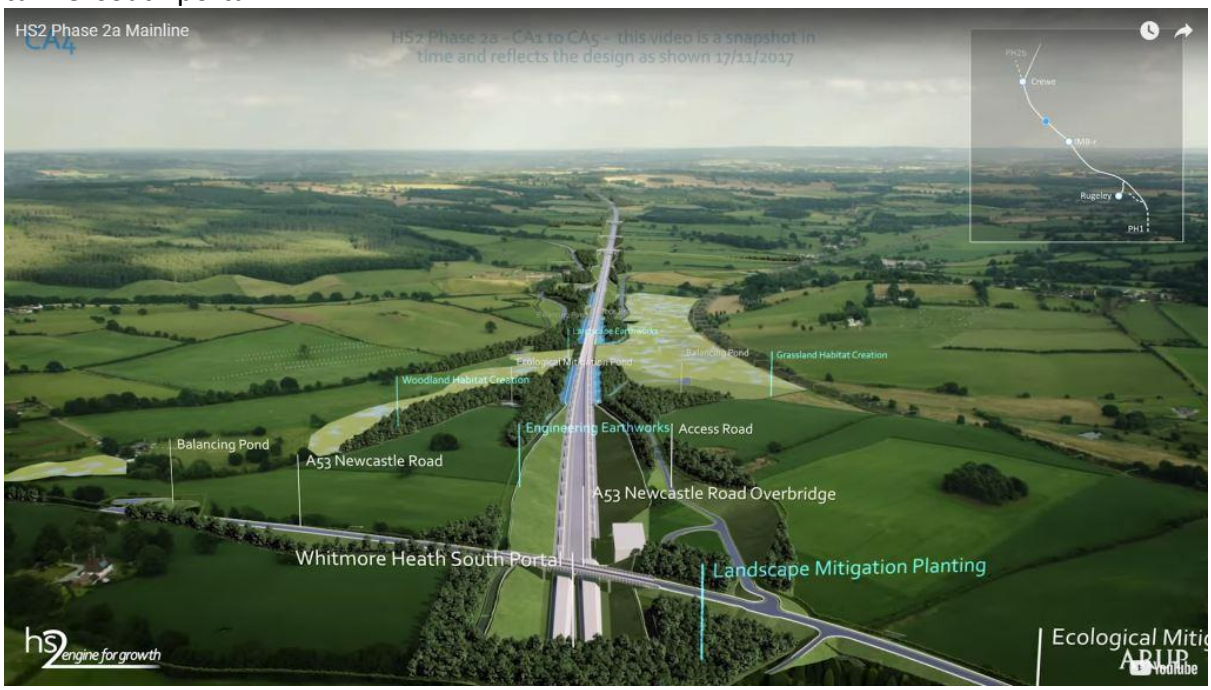


Figure 7.4f Approach to Whitmore Heath tunnel south portal: Meece Brook viaduct and embankment in Meece valley; Bent Lane on the left, WCML and isolated settlements of Hill Chorlton cluster hamlet on the right.

References and evidence

Note: The online evidence base can be accessed at: www.cmaw-neighbourhoodplan.org.uk/the-plan-3/evidence-base/

ACRE, Rural community profile for Chapel and Hill Chorlton (Parish), Action with Communities in Rural England (ACRE) Rural evidence project (November 2013)

ACRE, Rural community profile for Maer (Parish), Action with Communities in Rural England (ACRE) Rural evidence project (November 2013)

ACRE, Rural community profile for Whitmore (Parish), Action with Communities in Rural England (ACRE) Rural evidence project (November 2013)

AECOM, Chapel and Hill Chorlton, Maer and Aston, Whitmore, Heritage and Character Assessment (October 2016)

AECOM, Housing Needs Assessment, Chapel and Hill Chorlton, Maer and Aston, Whitmore Parishes Neighbourhood Plan Group (June 2016)

AECOM, Townscape Character Appraisal, parishes of Chapel & Hill Chorlton, Maer & Aston and Whitmore (December 2017)

Arriva West Midlands, Service 64/164 Shrewsbury to Hanley, route map, https://www.arrivabus.co.uk/midlands/services/164---market-drayton-to-hanley-/?direction=outbound

Arriva West Midlands, Service 64/164 Shrewsbury to Hanley, timetable (January 2018), https://www.arrivabus.co.uk/GetTimetable/?guid=f2b29056-0724-4891-a45b-5203f8fa3255&id=30600&date=170902-180111

BBC News, Man dies in police pursuit crash in Newcastle-under-Lyme (25 July 2016), http://www.bbc.co.uk/news/uk-england-stoke-staffordshire-36881671

Cantor, L.M. and Moore, J.S., The medieval parks of the earls of Stafford at Madeley, North Staffordshire Journal of Field Studies (1963), vol. 3, pp. 37–58

Chaloner, W.H., The social and economic development of Crewe, 1780–1923 (Manchester University Press, 1950)

Department for Communities and Local Government, National Planning Policy Framework (2012)

Department for Environment, Food and Rural Affairs, A green future: our 25 year plan to improve the environment (2018)

Forestry Commission and Natural England, Ancient woodland and veteran trees: protecting them from development (updated 27 November 2017), https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences

Gallimore, L., Whitmore water supply (Crewe works and town) (Crewe Library local studies collection, 2003)

High Speed Rail (West Midlands–Crewe) Bill Select Committee (Commons), Submittted Petitions, http://committeebusiness.parliament.uk/committee-business/1/high-speed-rail

House of Commons, High Speed Rail (West Midlands–Crewe) Bill, Explanatory notes (17 July 2017), https://publications.parliament.uk/pa/bills/cbill/2017-2019/0006/en/18006en.pdf

House of Commons, High Speed Rail (West Midlands–Crewe) Bill Select Committee, First Special Report of Session 2017–2019, HC 1085 (24 May 2018), https://publications.parliament.uk/pa/cm201719/cmselect/cmhs2/1085/1085.pdf

House of Commons, High Speed Rail (West Midlands–Crewe) Bill Select Committee, Minutes of oral evidence (24 April 2018, morning) https://www.parliament.uk/documents/1031841%20Hansard%20HSRBC%2024.04.18%20%5bMorning%5d.pdf

HS2 Ltd, High Speed Rail (West Midlands–Crewe), Background information and data, Traffic and transport, Transport assessment baseline survey report (BID-TR-001-000) (July 2017), https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/627491/E63_BID-TR-001-000_WEB.pdf

HS2 Ltd, High Speed Rail (West Midlands–Crewe), Environmental statement, Volume 2: Community area report, CA4: Whitmore Heath to Madeley (July 2017), https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/627567/E16_CA4_Whitmore_Heath_to_Madeley_WEB.pdf

HS2 Ltd, High Speed Rail (West Midlands–Crewe), Environmental statement, Volume 5: Technical appendices, Traffic and transport, Transport assessment (TR-001-000) Part 1 (July 2017),

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/627113/E62-A_TR-001-000_Part_1_WEB.pdf

HS2 Ltd, High Speed Two, Phase 2a: West Midlands–Crewe ancient woodland strategy (February 2018), https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/682444/hs2_phase_2a_ancient_woodland_strategy.pdf

HS2 Ltd, HS2 Phase 2a: West Midlands to Crewe, EI-354 Veteran trees technical note, C861-ARP-EV-REP-000-006418

HS2 Ltd, HS2 Phase 2a environmental reports and maps: Whitmore Heath to Madeley (July 2017), https://www.gov.uk/government/publications/hs2-phase-2a-environmental-reports-and-maps-whitmore-heath-to-madeley

HS2 Ltd, Whitmore to Madeley tunnel report (15 March 2018), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/690888/Whitmore_Heath_to_Madeley_Tunnel_Report_-_15_March_2018.pdf

Institute of Lighting Professionals, Guidance Notes for the Reduction of Obtrusive Light GN01:2011, https://www.theilp.org.uk/documents/obtrusive-light/

Jones, M., Landscape-scale conservation in the Meres and Mosses, British Wildlife (June 2015), pp. 337–344

Jones, M., Visualising landscape-scale conservation: methodology for mapping extant meres and mosses in the relevant national character area(s), nd

Life and Times of the Villages, Chapel and Hill Chorlton [2012]

Local Government Boundary Commission for England, Final recommendations on the new electoral arrangements for Newcastle-under-Lyme Borough Council (June 2017)

Ministry of Housing, Communities and Local Government, National Planning Policy Framework (2018)

Natural England, Designated sites view, Maer Pool SSSI, citation, https://necmsi.esdm.co.uk/PDFsForWeb/Citation/1000283.pdf

Natural England, England's peatlands: carbon storage and greenhouse gases, NE257, http://publications.naturalengland.org.uk/publication/30021 (2010)

Natural England, National Character Area profile 61, Shropshire, Cheshire and Staffordshire Plain (April 2014)

Natural England, Natural Area 27, West Midlands Meres and Mosses (February 1998)

Natural England, Staffordshire Wildlife Trust and SCC, Staffordshire Biodiversity Action Plan, http://www.sbap.org.uk/index.php

North East Dartmoor Care, www.nedcare.org

NuL Borough Council, Butterton Conservation Area Appraisal and Management Plan (August 2007)

NuL Borough Council, Delegation for neighbourhood planning, Report to Cabinet (8 November 2017), https://moderngov.newcastle-staffs.gov.uk/documents/s24582/Nov%20Cabinet%20Report%20Delegation%20for%20Neighbourhood%20Planning%20Final%20Final.pdf

NuL Borough Council, Five Year Housing Land Supply Statement 2018–2023, https://moderngov.newcastle-staffs.gov.uk/documents/s27140/2017-18%205%20Year%20Land%20Supply%20Statement%20final%20v3.13.pdf

NuL Borough Council, Planning application 12/00829/FUL, St Margaret's chapel, Blackbrook

NuL Borough Council, Planning application 16/01101/FUL, Land off Meadow Way, Baldwins Gate

NuL Borough Council, Strategic Housing Land Availability Assessment (SHLAA) Report 2017 (amended at 21 July 2017)

NuL Borough Council, SHLAA Report, Appendix A part 1 – SHLAA site schedule (deliverable and developable supply) (July 2017), https://www.newcastle-staffs.gov.uk/sites/default/files/IMCE/Planning/Planning_Policy/SOJLP/Appendix%20A%20part%201%20-%20SHLAA%20Site%20Schedule%20%28Del%26DevSupply%29.pdf

NuL Borough Council, SHLAA Report, Appendix A part 2 – SHLAA site schedule (excluded – not deliverable and developable supply) (July 2017), https://www.newcastle-staffs.gov.uk/all-services/planning/planning-policy/joint-local-plan/joint-local-plan-supporting-evidence

NuL Borough Council, SHLAA Report, Appendix C – Green Belt sites (excluded) (July 2017), https://www.newcastle-staffs.gov.uk/all-services/planning/planning-policy/joint-local-plan/joint-local-plan-supporting-evidence

NuL Borough Council and SoT City Council, Newcastle-under-Lyme and Stoke-on-Trent Core Spatial Strategy 2006–2026 (adopted 2009)

NuL Borough Council Directorate of Strategic Planning, 1991 Census: Population and housing for the wards and parishes of the borough (April 1994)

Open Signal, Mobile network coverage maps, https://opensignal.com

Planning Inspectorate, Appeal Decision APP/P3420/W/16/3163358 (24 January 2017)

SCC, Chapel & Hill Chorlton parish – Landscape character types map (June 2017)

SCC, Chapel & Hill Chorlton parish – Landscape policy objectives map (June 2017)

SCC, Chapel & Hill Chorlton, Maer & Aston and Whitmore parishes – Landscape character types map (June 2017)

SCC, Chapel & Hill Chorlton, Maer & Aston and Whitmore parishes – Landscape policy objectives map (June 2017)

SCC, County Plan (1951)

SCC, Maer & Aston parish – Landscape character types map (June 2017)

SCC, Maer & Aston parish – Landscape policy objectives map (June 2017)

SCC, Map of Border Car operating area, https://www.staffordshire.gov.uk/transport/publictransport/buses/Plan-your-journey/Call-and-Book-Services/Border-Car/Border-Car-Operating-Area.pdf

SCC, Newcastle-under-Lyme Borough Council Local plan, Rural accessibility appraisal (September 2015)

SCC, Whitmore parish – Landscape character types map (June 2017)

SCC, Whitmore parish – Landscape policy objectives map (June 2017)

SCC and District Councils, HS2 Phase 2a (West Midlands–Crewe) Hybrid Bill Environmental Statement consultation response (September 2017)

SCC and English Heritage, Farmsteads in Newcastle-under-Lyme borough, Staffordshire farmsteads guidance (n.d.), https://www.staffordshire.gov.uk/environment/eLand/planners-

developers/HistoricEnvironment/Projects/Farmsteads-Guidance-Newcastle-Under-Lyme-Borough-LPA-Summary-Jan15.pdf

SCC and English Heritage, Staffordshire farmsteads assessment framework (n.d. [2015]), https://www.staffordshire.gov.uk/environment/eLand/planners-developers/HistoricEnvironment/Projects/Farmsteads-Guidance-Staffs-Farmsteads-Assessment-Framework-Feb-15.pdf

SCC and English Heritage, Staffordshire farmsteads character statement (n.d.), https://www.staffordshire.gov.uk/environment/eLand/planners-developers/HistoricEnvironment/Projects/Farmsteads-Guidance-Staffordshire-Farmsteads-Character-Statement-Jan-15.pdf

SCC County Planning & Development Department, Conservation area 31, Maer (November 1970)

SCC County Planning & Development Department, Conservation area 37, Whitmore (November 1970)

SCC Development Services Department, Planning for landscape change, Supplementary Planning Guidance (2000), https://www.staffordshire.gov.uk/environment/eLand/planners-developers/landscape/NaturalEnvironmentLandscapeCharacterTypes.aspx

SCC Historic Environment Record, Chapel and Hill Chorlton parish (Map) (22 September 2016)

SCC Historic Environment Record, Chapel and Hill Chorlton parish historic farmsteads (22 September 2016)

SCC Historic Environment Record, Chapel and Hill Chorlton, Monument full report, parish (17 March 2017)

SCC Historic Environment Record, Conservation areas in Whitmore parish, Designation full report (9 May 2017)

SCC Historic Environment Record, Locally listed buildings in Whitmore parish, Designation full report (8 May 2017)

SCC Historic Environment Record, Maer Hall registered park or garden, Designation full report (9 May 2017)

SCC Historic Environment Record, Maer parish (Map) (11 May 2017)

SCC Historic Environment Record, Maer parish historic farmsteads (9 May 2017)

SCC Historic Environment Record, Maer parish, Monument full report, (11 May 2017)

SCC Historic Environment Record, Scheduled monuments in Maer parish, Designation full report (9 May 2017)

SCC Historic Environment Record, Whitmore parish (Map) (9 May 2017)

SCC Historic Environment Record, Whitmore parish historic farmsteads (9 May 2017)

SCC Historic Environment Record, Whitmore parish, Monument full report, (9 May 2017)

SCC Planning Committee, Waste county matter, Report on Acton composting facility (5 November 2015), http://moderngov.staffordshire.gov.uk/documents/s74711/Report%20-%205.11.15%20-%20Acton%20-N.15%2003%20230%20W.pdf

SchoolGuide.co.uk, Baldwins Gate CoeE(VC) primary school, https://www.schoolguide.co.uk/schools/baldwins-gate-cofe-vc-primary-school-newcastle

Shropshire Star, Muller to expand Shropshire factories as part of £100m investment (19 September 2017), https://www.shropshirestar.com/news/business/2017/09/19/muller-to-expand-shropshire-factories-as-part-of-100m-investment/

SoT City Council and NuL Borough Council, Stoke-on-Trent and Newcastle-under-Lyme Joint Local Plan: issues consultation document (February 2016), https://www.newcastle-staffs.gov.uk/sites/default/files/IMCE/Planning/Planning_Policy/Joint%20Local%20Plan%20Issues%20Consultation%20Document_0.pdf

SoT City Council and NuL Borough Council, Stoke-on-Trent and Newcastle-under-Lyme Joint Local Plan: strategic options consultation (July 2017), https://www.newcastle-staffs.gov.uk/sites/default/files/IMCE/Planning/Planning_Policy/SOJLP/Strategic_Options_Consultation_Document_July%202017.pdf

SoT City Council and NuL Borough Council, Strategic Housing Market Assessment (July 2015), https://www.newcastle-staffs.gov.uk/sites/default/files/IMCE/Planning/Planning_Policy/Joint_Strategic_Housing_Market_Assessment.pdf

Staffordshire Wildlife Trust, Newcastle under Lyme biodiversity opportunity mapping (March 2014)

Superfast Staffordshire, NGA map (September 2017), http://www.superfaststaffordshire.co.uk/where-and-when/where-and-when/#.WiRevHlpFzk

Travis Baker, Revised transport assessment, Appendix B, NuL Borough Council Planning application 16/01101/FUL (3 April 2017), http://publicdocs.newcastle-staffs.gov.uk/AnitePublicDocs/00235107.pdf

UK Government, Generalised Land Use database (January 2005)

VisionofBritain.org.uk, A vision of Britain through time, historical census data

Whitmore Parish Council and Baldwins Gate Action Group, Highway safety and access, Evidence for appeal dismissal APP/P3420/A/14/2218530 [2015]

Yates, E.M. and Moseley, F., Glacial lakes and spillways in the vicinity of Madeley, North Staffordshire, Quarterly Journal of the Geological Society (1957), vol. 113, pp. 409–428