# High Speed Rail (West Midlands - Crewe)

## **Environmental Statement**

Volume 5: Map book Ecology - designated sites (EC-01)



ES 3.5.1.5

# High Speed Rail (West Midlands - Crewe) Environmental Statement

Volume 5: Map book Ecology - designated sites (EC-01)





High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

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A report prepared for High Speed Two (HS2) Limited:



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## recycle

Printed in Great Britain on paper containing at least 75% recycled fibre.

### Contents

Mapping explanatory notes

Data dictionary and definitions

Map series name	EC-01 - Designated Site
Map series description	This map series shows statutory and non-statutory sites for nature of required for the construction of the Proposed Scheme. They also show
Community Area name	and Wildlife Trusts, and ancient
CA1 Fradley to Colton	$\checkmark$
CA2 Colwich to Yarlet	$\checkmark$
CA <sub>3</sub> Stone and Sywnnerton	$\checkmark$
CA4 Whitmore Heath to Madeley	$\checkmark$
CA5 South Cheshire	$\checkmark$

Sites

re conservation located in the vicinity of the land how the location of Nature Reserves of the RSPB nt woodland.

### Mapping explanatory notes

#### Structure of the HS2 Phase 2a Environmental Statement

This map book is part of the suite of documents that make up the Environmental Statement (ES) for Phase 2a of the proposed High Speed Two (HS2) rail network between the West Midlands and Crewe (the Proposed Scheme).

The ES documentation comprises the following:

- Non-technical summary. This provides: a summary in non-technical language of the Proposed Scheme and the reasonable alternatives studied; the likely significant effects of the Proposed Scheme; the means to avoid, prevent or reduce the likely significant environmental effects; and an outline of the monitoring measures to manage the effects of construction and the effectiveness of mitigation post construction, as well as appropriate operational phase monitoring.
- Glossary of terms and list of abbreviations. This contains terms and abbreviations, including units of measurement used throughout the ES documentation. •
- Volume 1: Introduction and methodology. This provides: a description of HS2, the EIA process and the approach to consultation and engagement; details of the permanent features of the Proposed Scheme and general construction techniques; a summary of the scope and methodology for the environmental topics; an outline of the general approach to mitigation; an outline of the approach to monitoring, including measures to manage the effects of construction, the effectiveness of mitigation post construction, as well as the approach to operational phase monitoring; and a summary of the reasonable alternatives studied (including local alternatives studied prior to the November 2015 route announcement). Local alternatives studied post November 2015 are discussed in the relevant Volume 2 community area reports.
- Volume 2: Community area reports and map books. These cover the following community areas: 1 Fradley to Colton; 2 Colwich to Yarlet; 3 Stone and Swynnerton; 4 Whitmore Heath to Madeley; and 5 South Cheshire. The reports provide the following for each area: an overview of the area; a description of the construction and operation of the Proposed Scheme within the area; a summary of the local alternatives studied since November 2015; a description of the environmental baseline; a description of the likely significant environmental effects of the Proposed Scheme; the proposed means to avoid, prevent or reduce the likely significant environmental effects; and the proposals for monitoring, including measures during and post construction, and during the operational phase. The maps relevant to each community area are provided in separate Volume 2 map books. These maps should be read in conjunction with the relevant community area report. These maps include the location of the key environmental features (Map Series CT-10), key construction features (Map Series CT-05) and key operation features (Map Series CT-06) of the Proposed Scheme. There are also specific maps showing viewpoint and photomontage locations (Map Series LV, to be read in conjunction with Section 11, Landscape and visual of the Volume 2: community area reports) and noise contours (Map Series SV, to be read in conjunction with Section 13, Sound, noise and vibration of the Volume 2: community area reports).
- Volume 3: Route-wide effects. This describes the likely significant environmental effects that are likely to occur at a geographical scale greater than the community areas described in Volume 2. •
- Volume 4: Off-route effects. This provides an assessment of the likely significant environmental effects of the Proposed Scheme at locations beyond the Phase 2a route corridor and its associated local environment. The maps relevant to the assessment of off-route effects are provided in a separate map book.
- Volume 5: Appendices and map books. This contains supporting technical information and associated map books to be read in conjunction with the other volumes of the ES.

#### **Copyright statements**

Copyright statements are presented in the Data dictionary and definitions section at the front of the map book, due to limited space to include this on the individual maps themselves.

#### **Ordnance Survey data**

All maps produced as part of the ES contain Ordnance Survey (OS) data. HS2 Ltd use the most up to date mapping available, where possible, supplied by the OS and as such, we cannot be held responsible for any inaccuracies within this data.

As part of our licence conditions, all digital maps carry a watermark.

#### Chainage

Most of the maps presented as part of the ES have a chainage value shown next to the alignment. Chainage is presented on the maps in black font, in the form of XX+YYY. E.g. 192+000 or 239+500.

Chainage (known as reference chainage) is referenced from Euston Station, which is 0+000, and the value presented is in metres. E.g. 192+000 refers to the point, 192,000m, or 192km, from Euston Station. Chainage values increase in intervals dependent on the map scale. For maps at 1:50,000 scale chainage is shown at 5km intervals. For maps at 1:25,000 scale chainage is shown at 2km intervals. For maps at 1:20,000, 1:10,000, 1:5,000 and 1:2,500 scales, chainage is shown at 1km intervals.

Chainage has been included on the maps as a useful tool for comparing different map sets showing the different environmental themes or engineering plans, due to map sets having different scales and therefore showing differing amounts of alignment on the map.

#### Map orientation

The majority of the maps presented in these map books are presented with the railway alignment running horizontally across the page. The direction of travel to London would be following the alignment to the right hand side of the page, and Crewe to the left.

The exception to this, are map series LV-02, LV-03, LV-04, LV-07 and LV-08, which present the alignment running from bottom to top of the page. This is to allow more of the modelled outputs to be shown at the appropriate map scale. In this instance, the direction of travel to London would be to the bottom of the page, and Crewe to the top. Map series TR-08 is orientated north.

#### Map books

In total there are 22 map books which make up the ES, spread across volumes 2, 4 and 5. A list of the titles is provided below for reference.

Name	Name
Volume 2: Map book – CA1: Fradley to Colton	Volume 5: Map book – Land Quality (LQ-01)
Volume 2: Map book – CA2: Colwich to Yarlet	Volume 5: Map book – CA1: Fradley to Colton - Landscape and visual (LV-oo, LV
Volume 2: Map book – CA3: Stone and Swynnerton	Volume 5: Map book – CA2: Colwich to Yarlet - Landscape and visual (LV-oo, LV
Volume 2: Map book – CA4: Whitmore Heath to Madeley	Volume 5: Map book – CA3: Stone and Swynnerton - Landscape and visual (LV-c
Volume 2: Map book – CA5: South Cheshire	Volume 5: Map book – CA4: Whitmore Heath to Madeley - Landscape and visual
Volume 4: Map book – Off-route effects	Volume 5: Map book – CA5: South Cheshire - Landscape and visual (LV-oo, LV-o
Volume 5: Map book – Agriculture, forestry and soils (AG-01, AG-02 & AG-04)	Volume 5: Map book – Planning Data/Committed Development (CT-13)
Volume 5: Map book — Air quality (AQ-01)	Volume 5: Map book – Socio-Economics (SE-01)
Volume 5: Map book – Community (CM-01)	Volume 5: Map book – Sound, Noise and Vibration (SV-01, SV-02, SV-03 & SV-0.
Volume 5: Map book – Cultural Heritage (CH-01, CH-02, CH-03)	Volume 5: Map book – Traffic and Transport (TR-03, TR-04 & TR-08)
Volume 5: Map book – Ecology - designated sites (EC-01)	Volume 5: Map book – Water Resources and Flood Risk (WR-01, WR-02, WR-03,

V-02, LV-07, LV-08, LV-17)
V-02, LV-07, LV-08, LV-17)
00, LV-02, LV-07, LV-08, LV-17)
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02, LV-07, LV-08, LV-17)
54)
, WR-05, WR-06)

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High Speed Rail (West Midlands-Crewe) Environmental Statement **Data dictionary and definitions** 



## Data dictionary and definitions

Legend features	Definition	Source	Copyrig
Ancient woodland	Ancient Woodland is land that has had continuous woodland cover since at least 1600AD. Natural England maintain an inventory of ancient woodlands. On the basis of the heritage review undertaken by HS2 Ltd, Natural England has confirmed that a number of woodlands of potential	Natural England	© Natur Survey o 2017
	relevance to the assessment will be added to the AWI. These have additionally been mapped.	High Speed Two (HS2) Ltd	© Crow Ordnan Publicat
Biodiversity Alert Site (BAS)	<ul> <li>Local wildlife sites in Staffordshire are Biodiversity Alert Sites (BAS) and Sites of Biological Importance (SBI). BAS are local wildlife sites and are of lower intrinsic quality or have suffered damage or disturbance. Nevertheless, they collectively form a significant part of Staffordshire's nature conservation resource, and, in some cases, a valuable reserve series for some of the SBI.</li> <li>The BAS information is reproduced from, or based upon information supplied by Staffordshire Ecological Record (SER) and reproduced with the permission of the SER Partnership. Individual records within the data are copyright their original recorders and provided under licence</li> </ul>	Staffordshire Ecological Record	© Staff
	via SER. - All data supplied by SER is to the best of SER's knowledge correct at the time of production. However, the precision or accuracy of SER data is usually based upon the original information supplied by the recorder and although SER strives to ensure all records are checked and validated, SER cannot be held responsible for any errors or omissions - The presence of a marked boundary within SER information does not infer any right of public access.		
Community area boundary	The Environmental Statement has been split into 5 sections called Community Areas.	High Speed Two (HS2) Ltd	© Crow Ordnan Publicat
County boundary	County boundaries from Ordnance Survey boundary mapping.	Ordnance Survey	© Crow Ordnan Publicat
Depot, station, headhouse or portal building	Extends to cover operational footprint of each depot and station and the footprint of each tunnel vent shaft and headhouse at surface level. Excludes any ancillary buildings associated with these structures.	High Speed Two (HS2) Ltd	
District/Borough boundary	Ordnance Survey local authority boundary mapping.	Ordnance Survey	© Crow Ordnan Publicat
Land potentially required during construction	Boundary defining the maximum possible extent of construction works required to build HS2 as far as the current level of design allows. This only covers surface works and includes all tunnel portals, vent shafts and headhouses, but does not apply to wholly tunnelled sections or to air rights. It also encompasses associated highway, access, drainage and utility works.	High Speed Two (HS2) Ltd	
Local Nature Reserve (LNR)	A Local Nature Reserve (LNR) is a statutory designation made under Section 21 of the National Parks and Access to the Countryside Act	Natural England	© Natu Survey

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Legend features	Definition	Source	Copyrig
	1949 by principal local authorities. Data supplied has the status of Declared. The boundaries are interpreted from material gathered from the local authorities and does not currently cover all LNRs. This national dataset is indicative not definitive. Definitive information can only be provided by individual local authorities and you should refer directly to their information for all purposes that require the most up to date and complete dataset.		2017
Local Wildlife Site (LWS)	Local Wildlife Sites (LWS) are identified and selected for their local nature conservation value. They protect threatened species and habitats acting as buffers, stepping stones and corridors between nationally-designated wildlife sites. They are local non-statutory nature conservation sites. They were formerly referred to as County Wildlife Sites.	Staffordshire Ecological Record Cheshire East Council	© Staffo © Chesł
Nature reserve	Designated and non-designated nature reserves managed by local authorities, The Wildlife Trusts and private landowners.	Royal Society for the Protection of Birds	Data rep Crown c 1000217
Ramsar Site – Wetland of International Importance	A Ramsar Site is the land listed as a Wetland of International Importance under the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (the Ramsar Convention) 1971. Data supplied has the status of "Listed".	Natural England	© Natur Survey o 2017
Route in tunnel Route on surface	Represents the proposed route of HS2, split into route on surface and tunnelled sections.	High Speed Two (HS2) Ltd	
Site of Biological Importance (SBI)	<ul> <li>Local wildlife sites in Staffordshire are called Sites of Biological Importance (SBI) and Biodiversity Alert Sites (BAS). SBI are generally the best remaining examples within Staffordshire of habitats which rate highly on the basis of such factors as naturalness, diversity or rarity of species or communities. These sites are frequently the remnants of larger areas of semi-natural vegetation, which may not be either sufficiently extensive or undisturbed to warrant SSSI status but are important examples of characteristic or notable vegetation types or habitat complexes (sometimes with associated dependent plant or animal species). As such, they contribute the most significant element in the county's nature conservation resources.</li> <li>The SBI information is reproduced from, or based upon information supplied by Staffordshire Ecological Record (SER) and reproduced with the permission of the SER Partnership. Individual records within the data are copyright their original recorders and provided under licence via SER.</li> <li>All data supplied by SER is to the best of SER's knowledge correct at the time of production. However, the precision or accuracy of SER data is usually based upon the original information supplied by the recorder and although SER strives to ensure all records are checked and validated, SER cannot be held responsible for any errors or omissions - The presence of a marked boundary within SER information does not infer any right of public access.</li> </ul>	Staffordshire Ecological Record Cheshire East Council	© Staffo © Chesł
Site of Special Scientific Interest (SSSI)	A Site of Special Scientific Interest (SSSI) is the land notified as an SSSI under the Wildlife and Countryside Act (1981), as amended.	Natural England	© Natur Survey ( 2017

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Legend features	Definition	Source	Copyrig
Special Area of Conservation (SAC)	A Special Area of Conservation (SAC) is the land designated under Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora.	Natural England	© Natur
Water body	Any mass of water having definite hydrological, physical, chemical and biological characteristics.	Ordnance Survey	© Crown Ordnand Publicat
Watercourse	Any channel through which water flows, can be natural or manmade. They are split into two categories (main rivers or ordinary watercourses) in England and Wales for regulation purposes.	Environment Agency	© Enviro right 20:

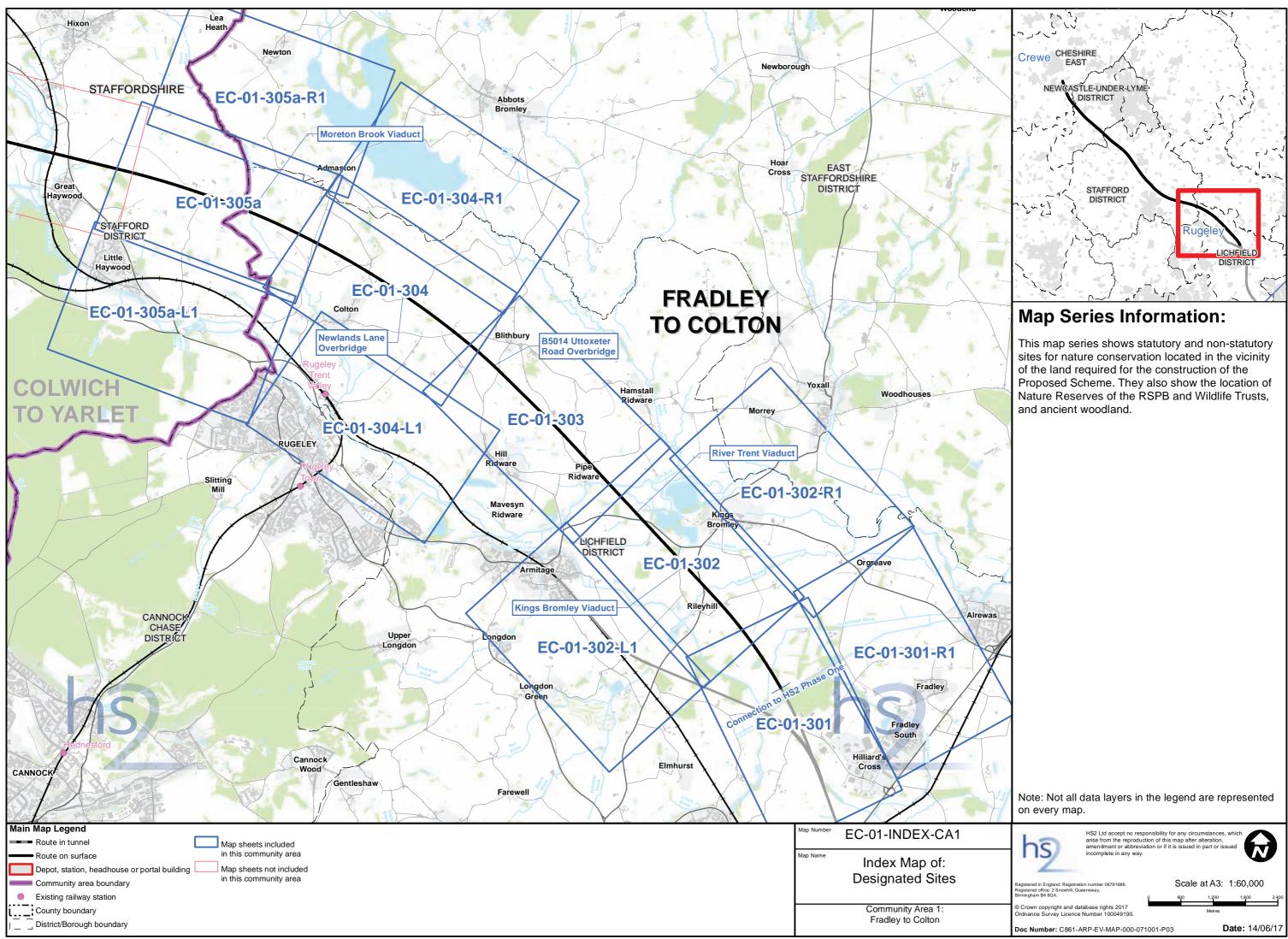
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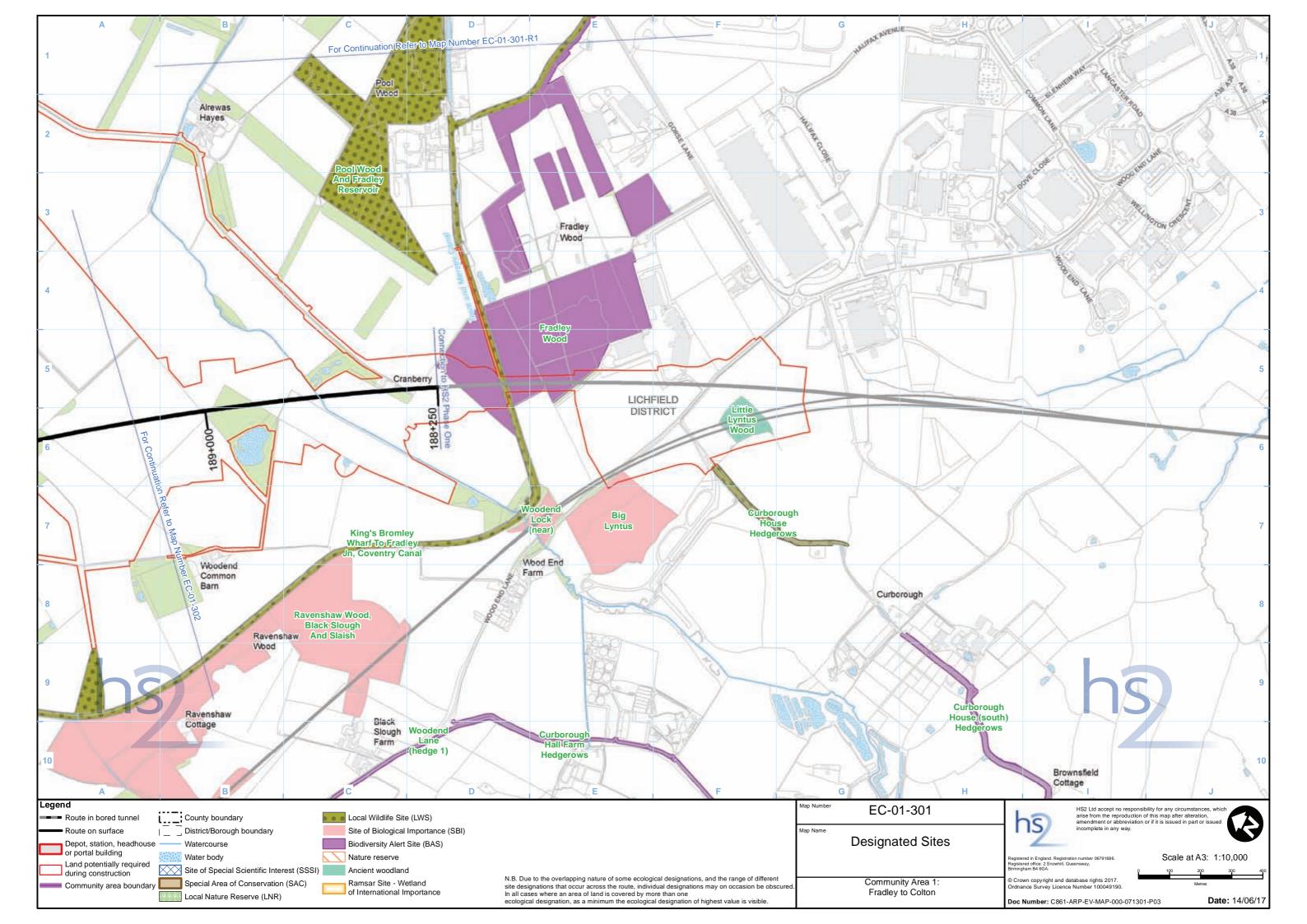
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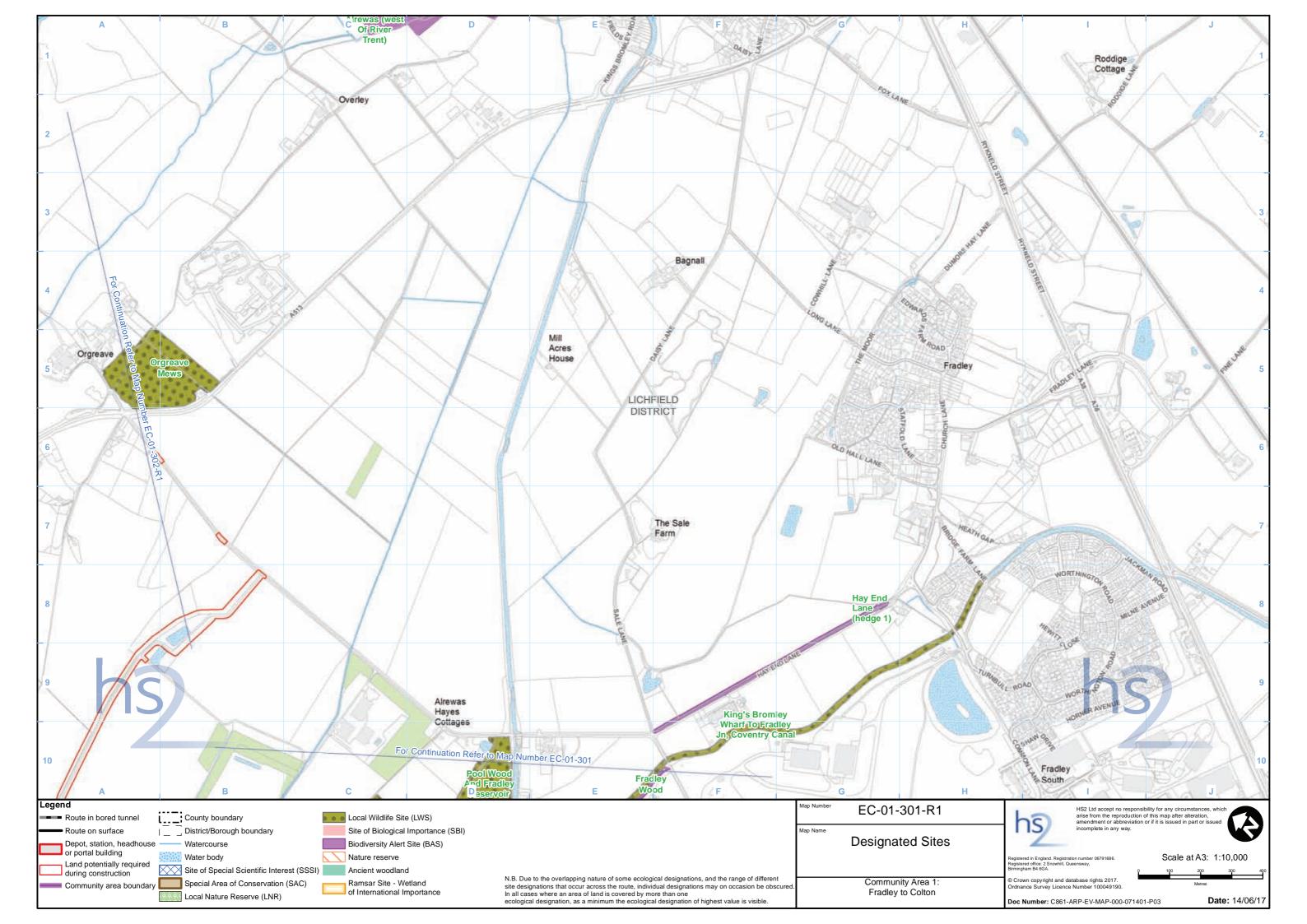
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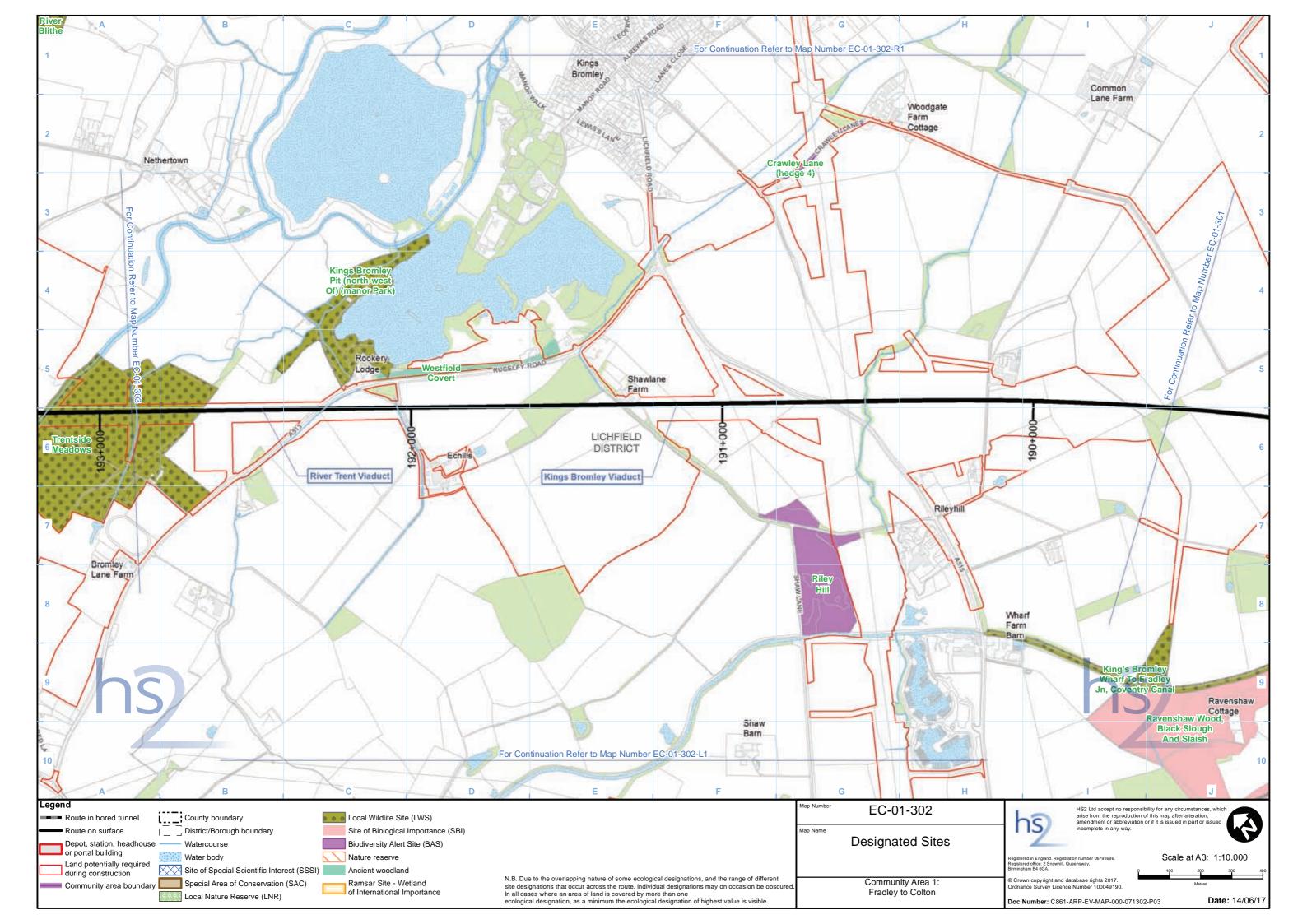
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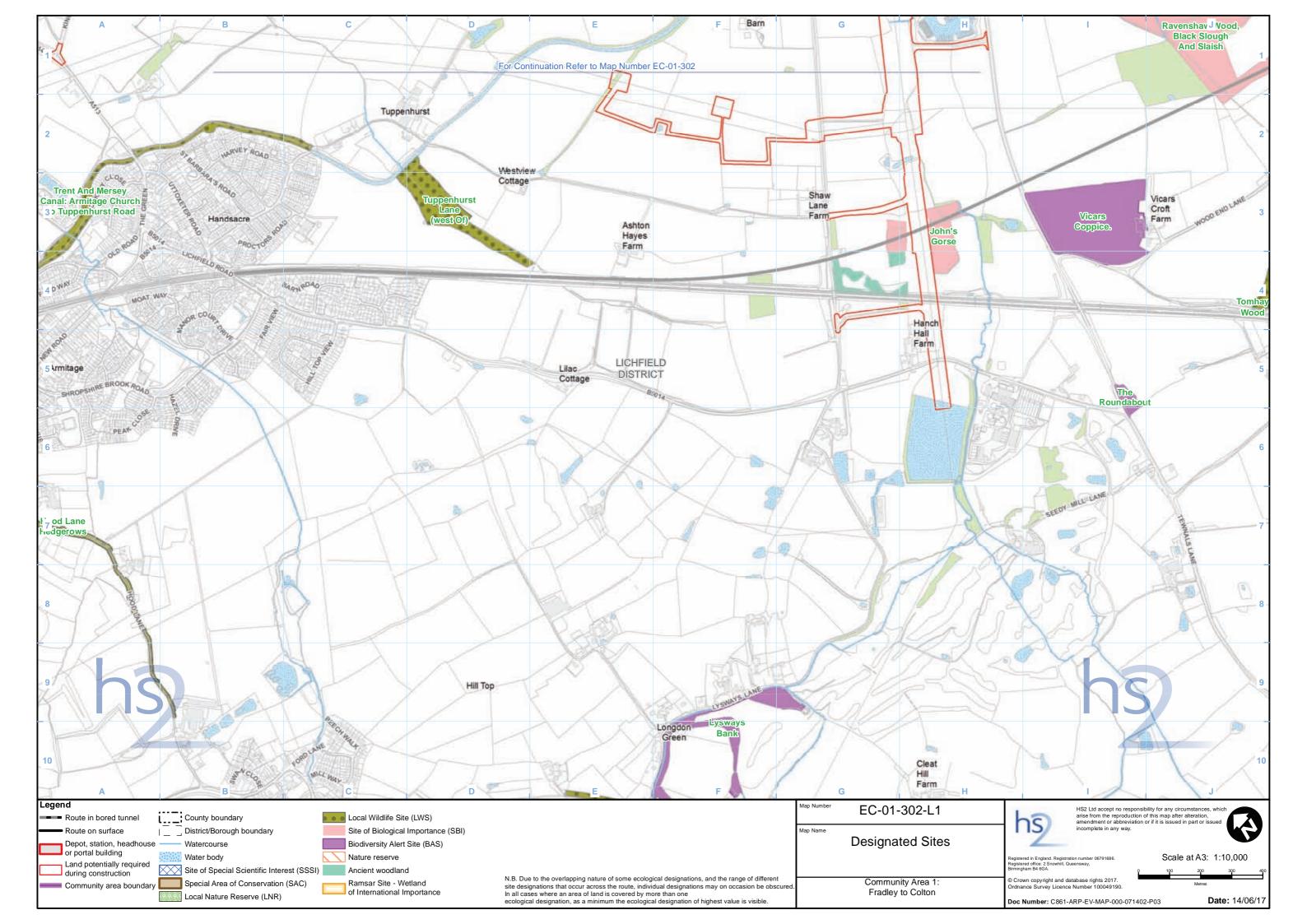


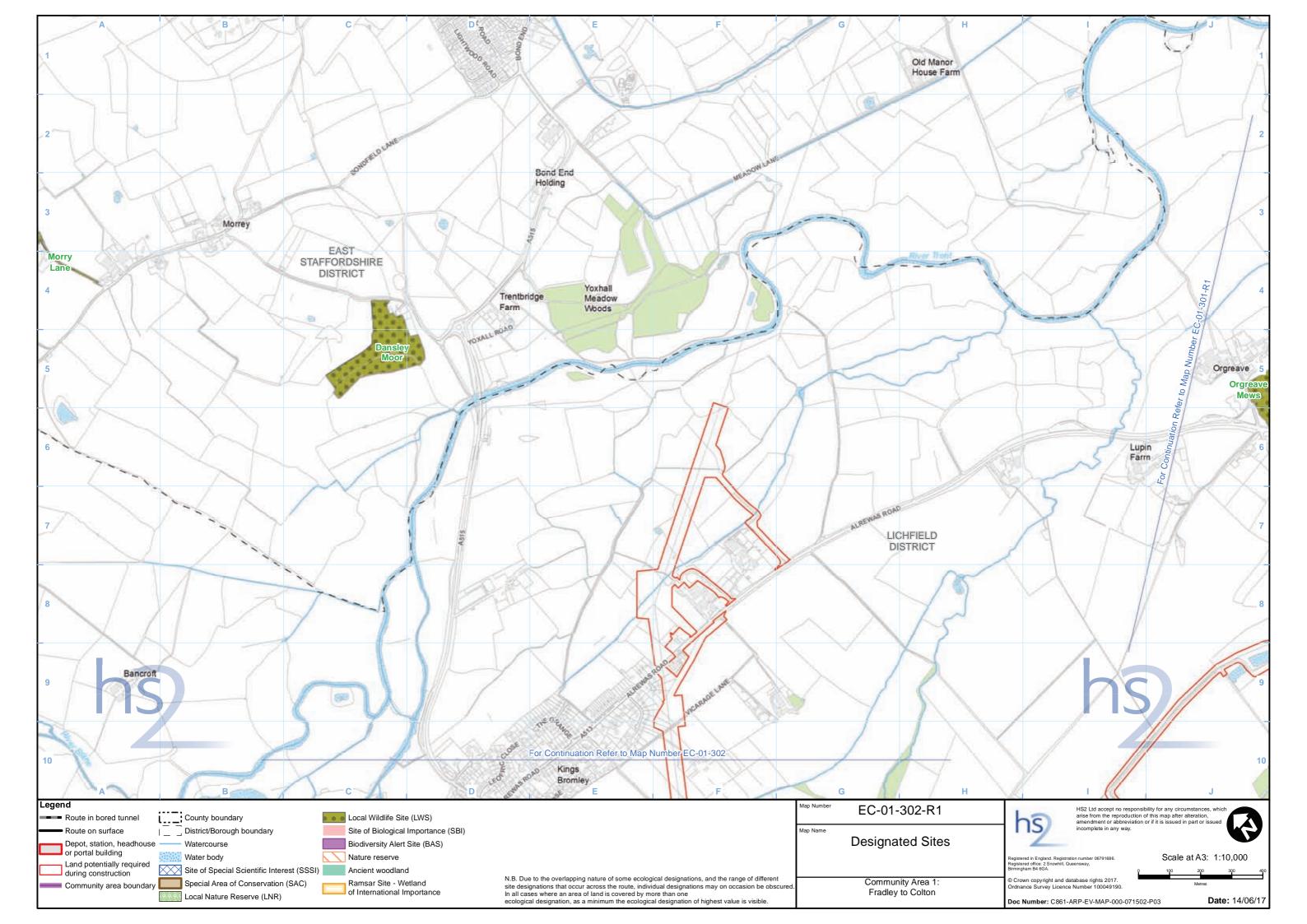


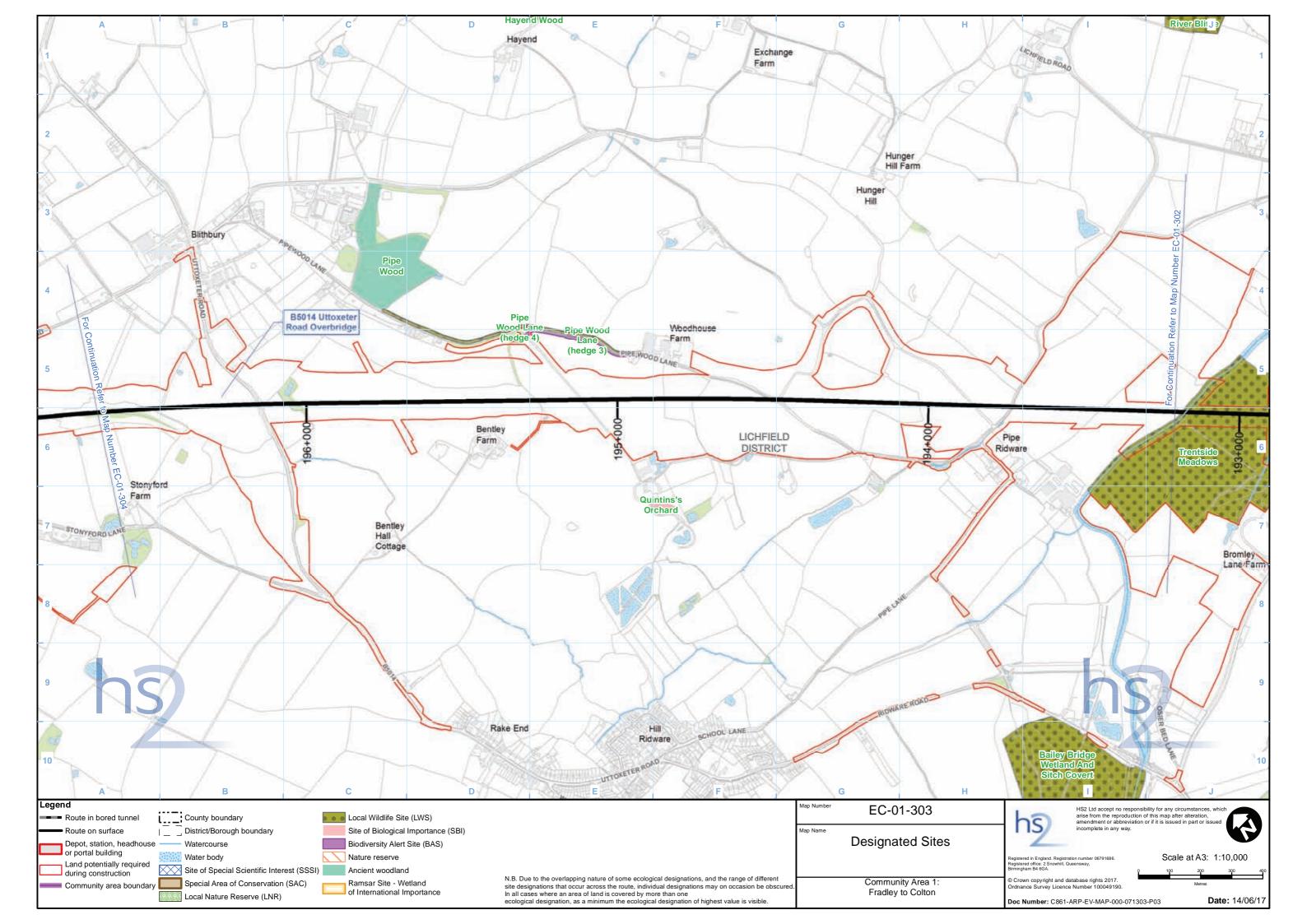


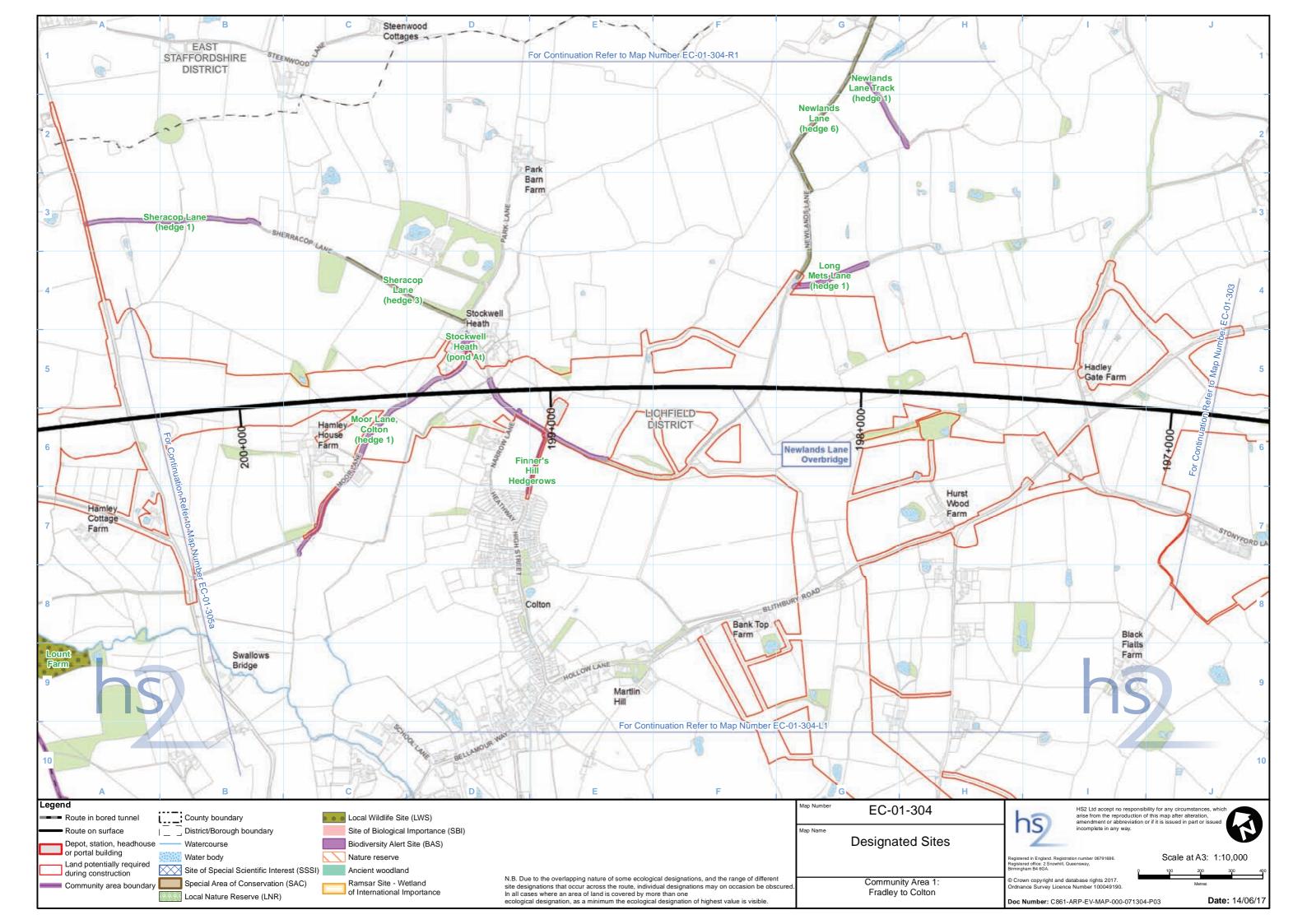


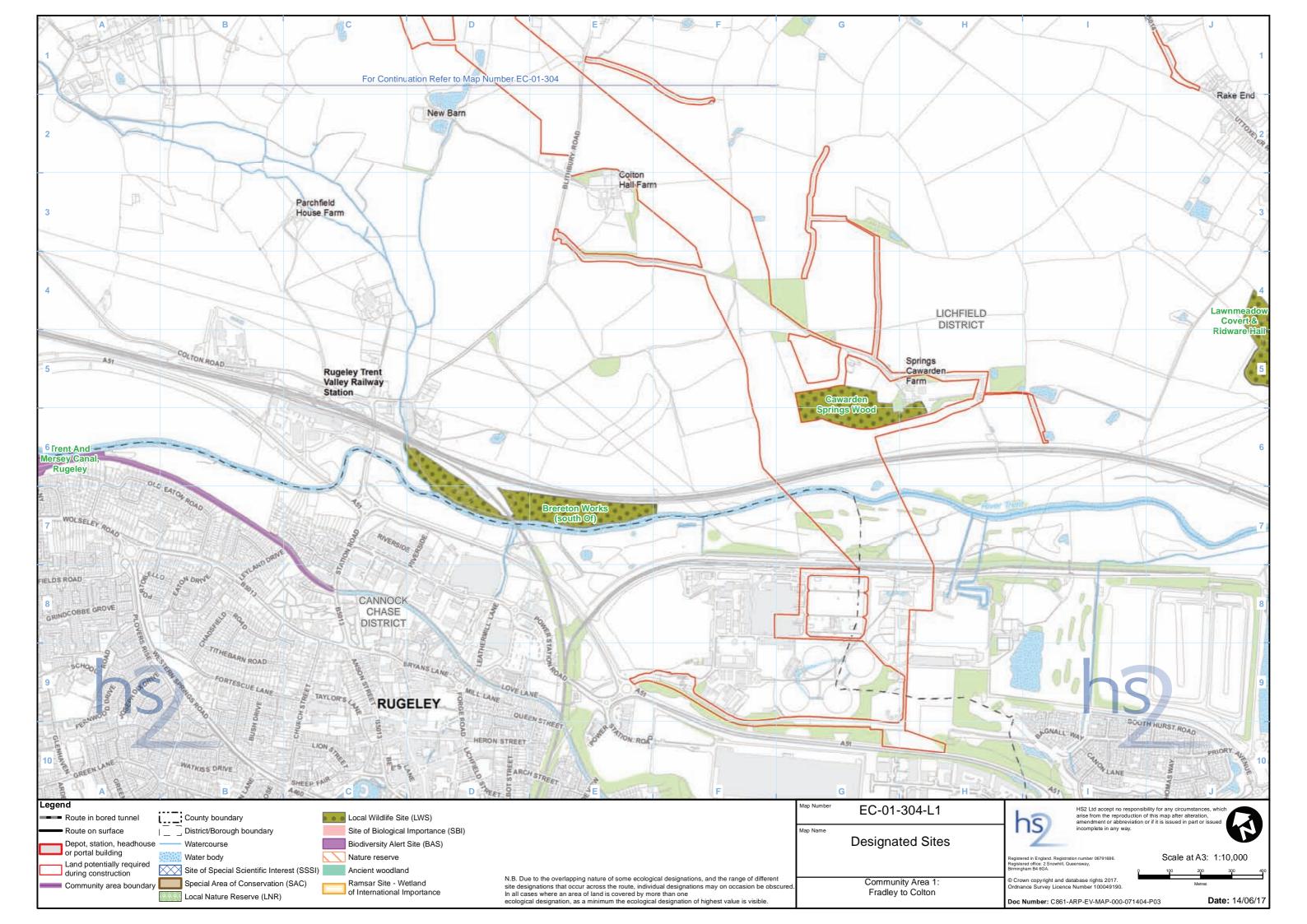


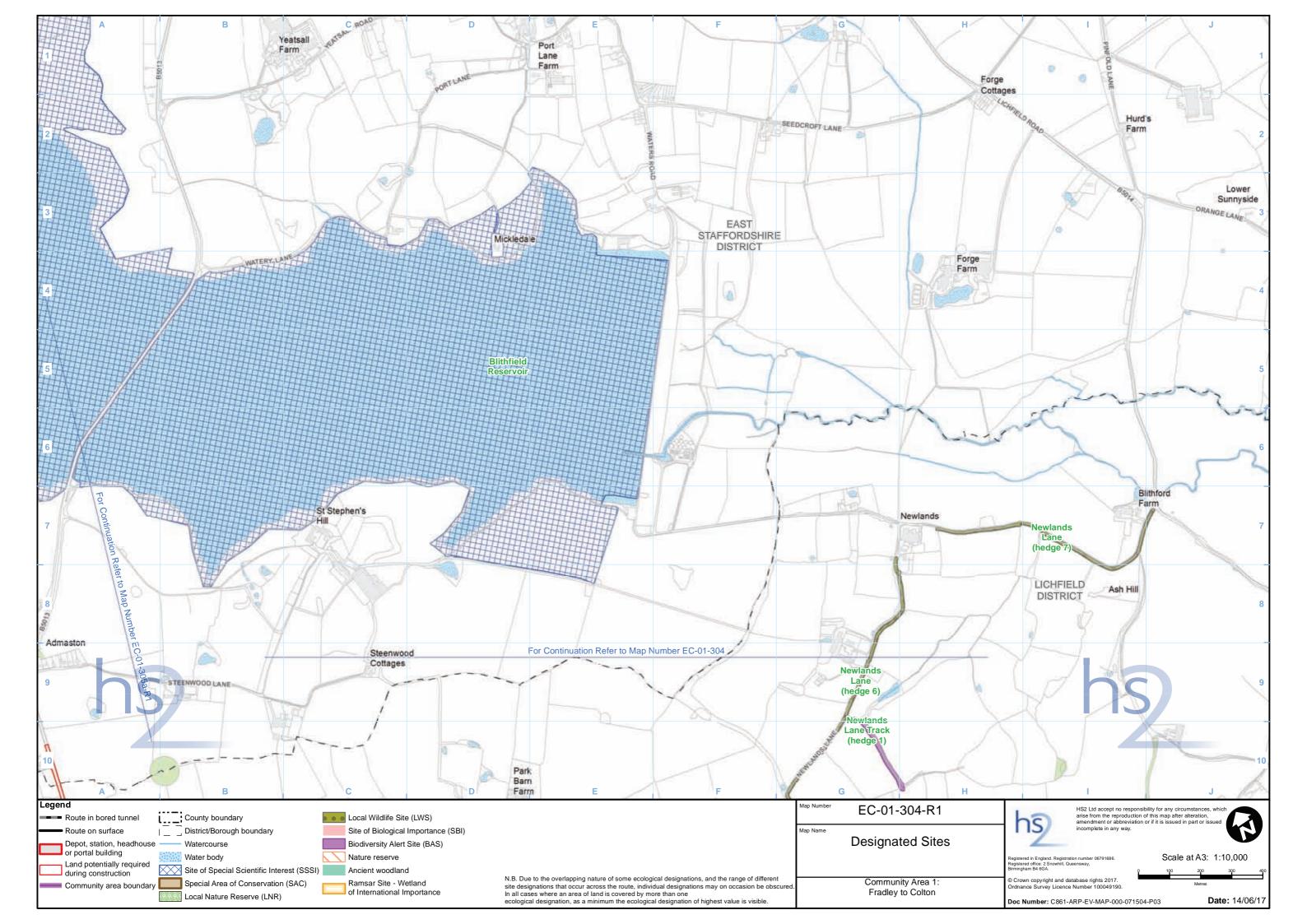


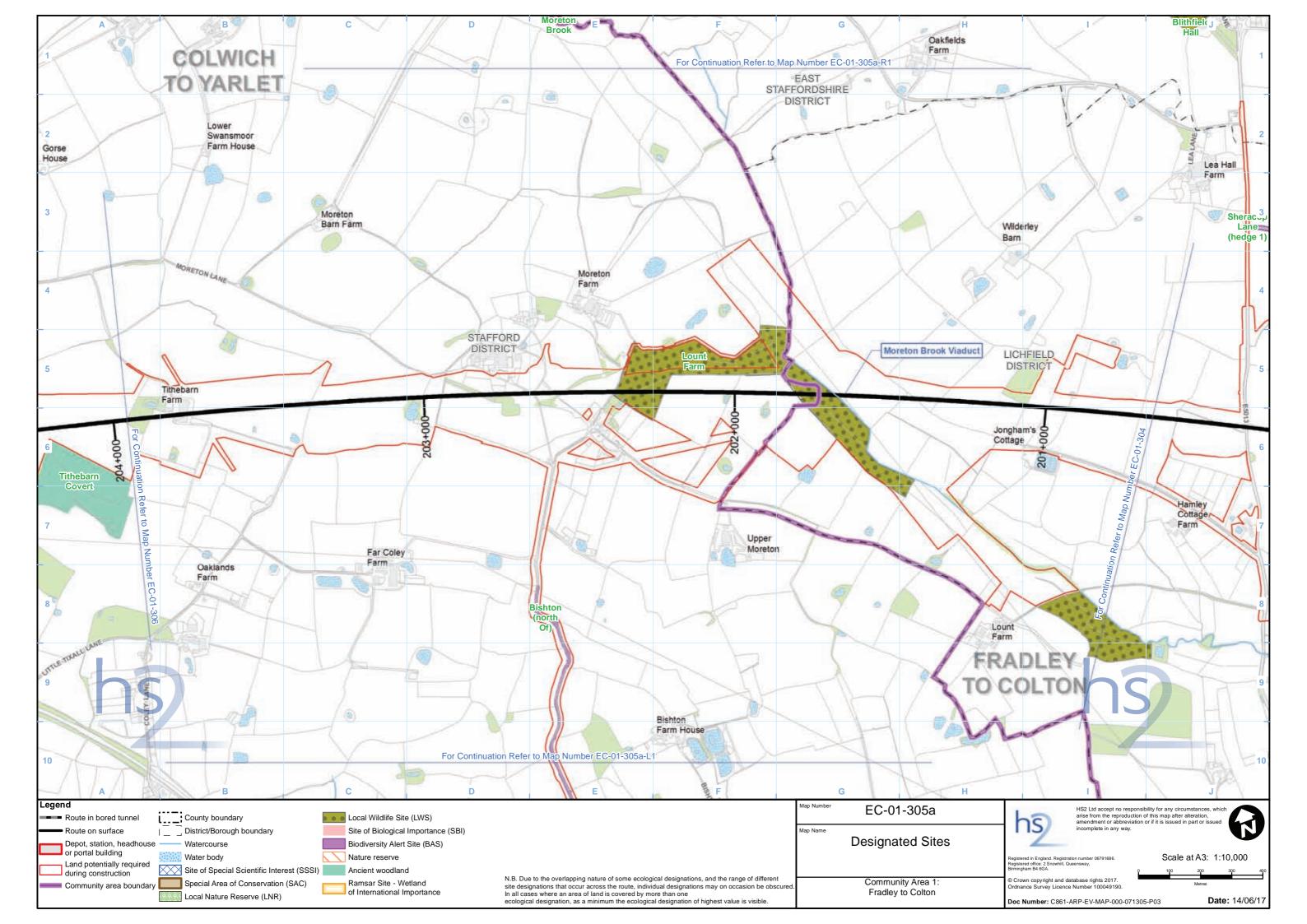


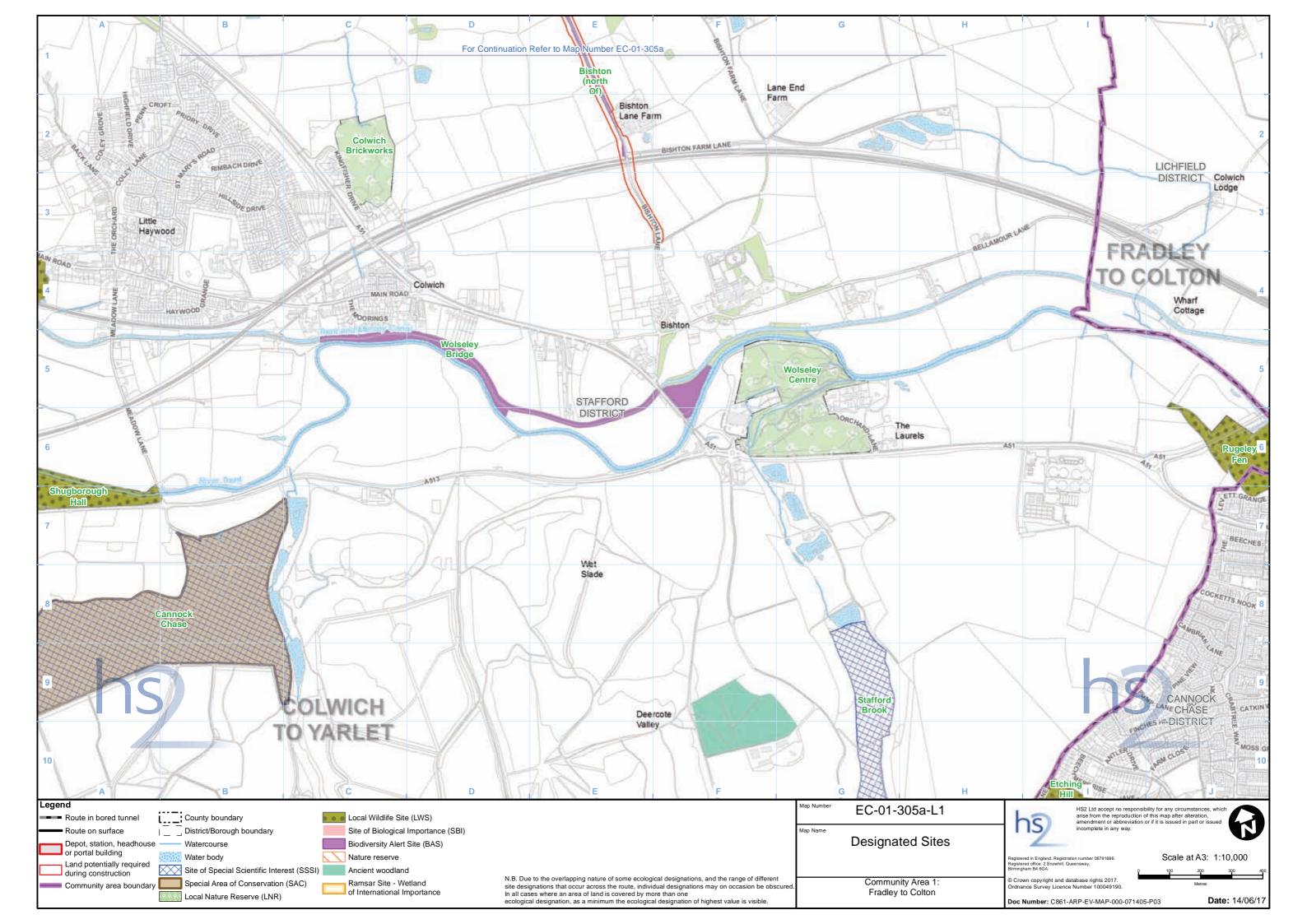


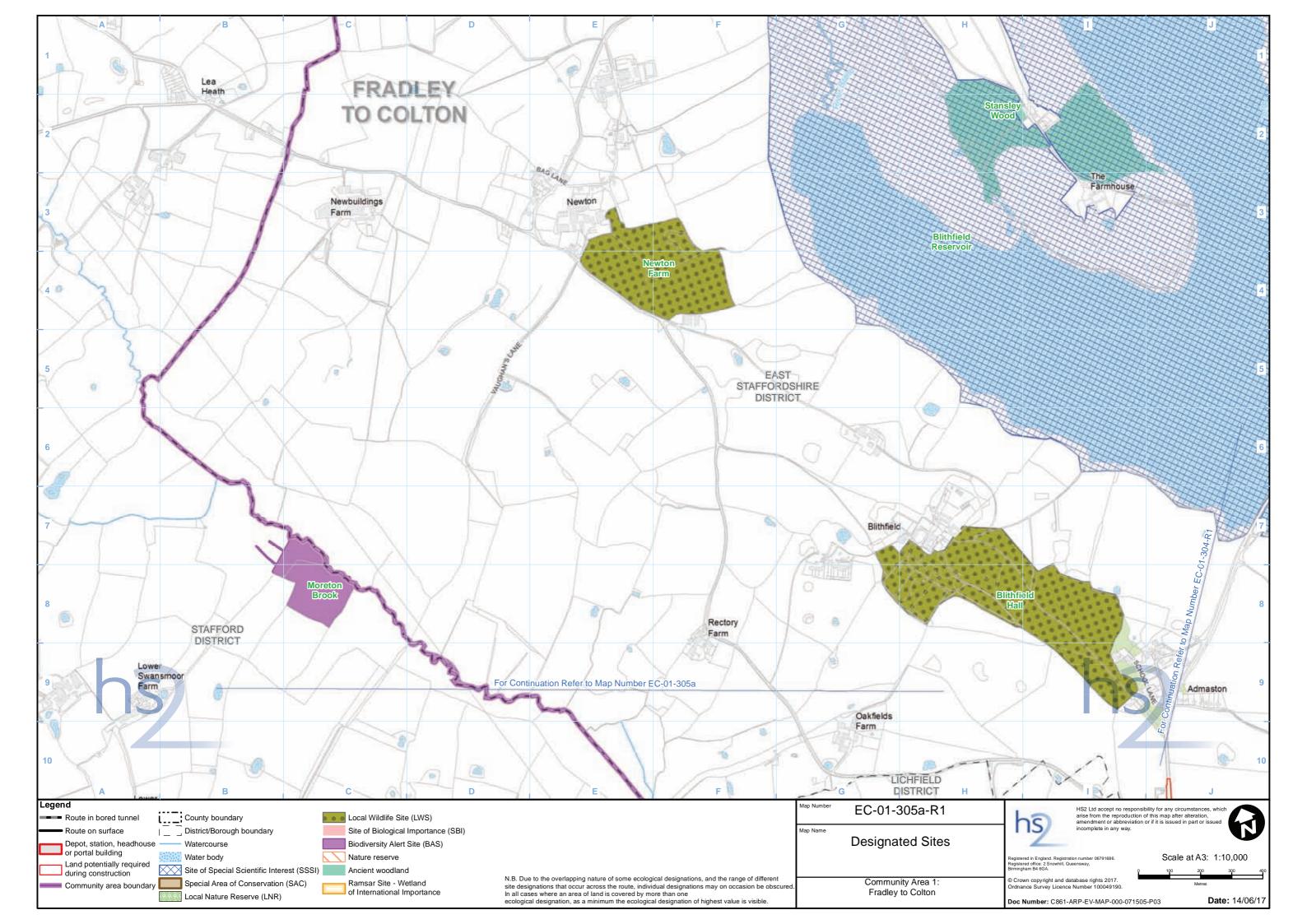






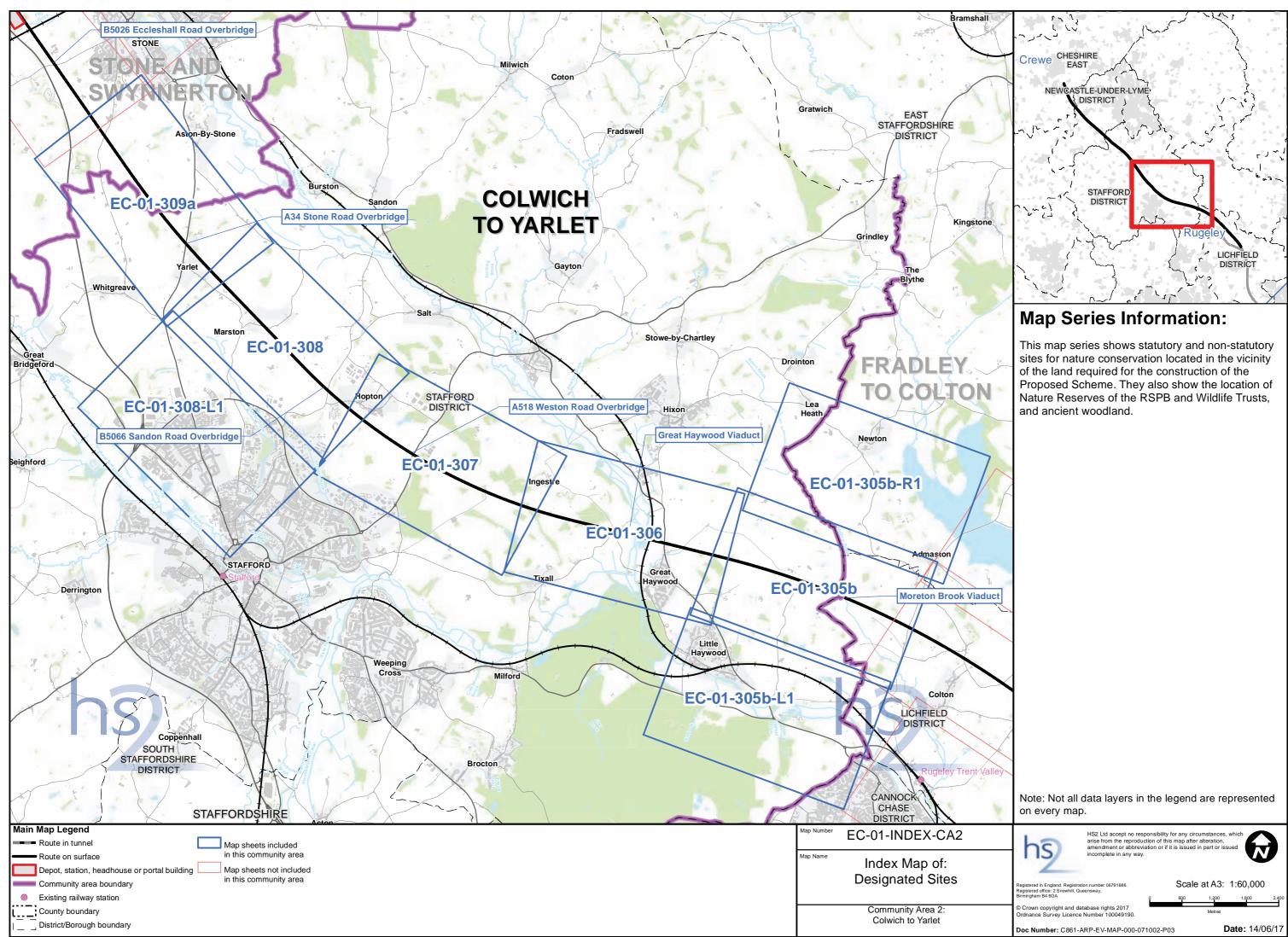


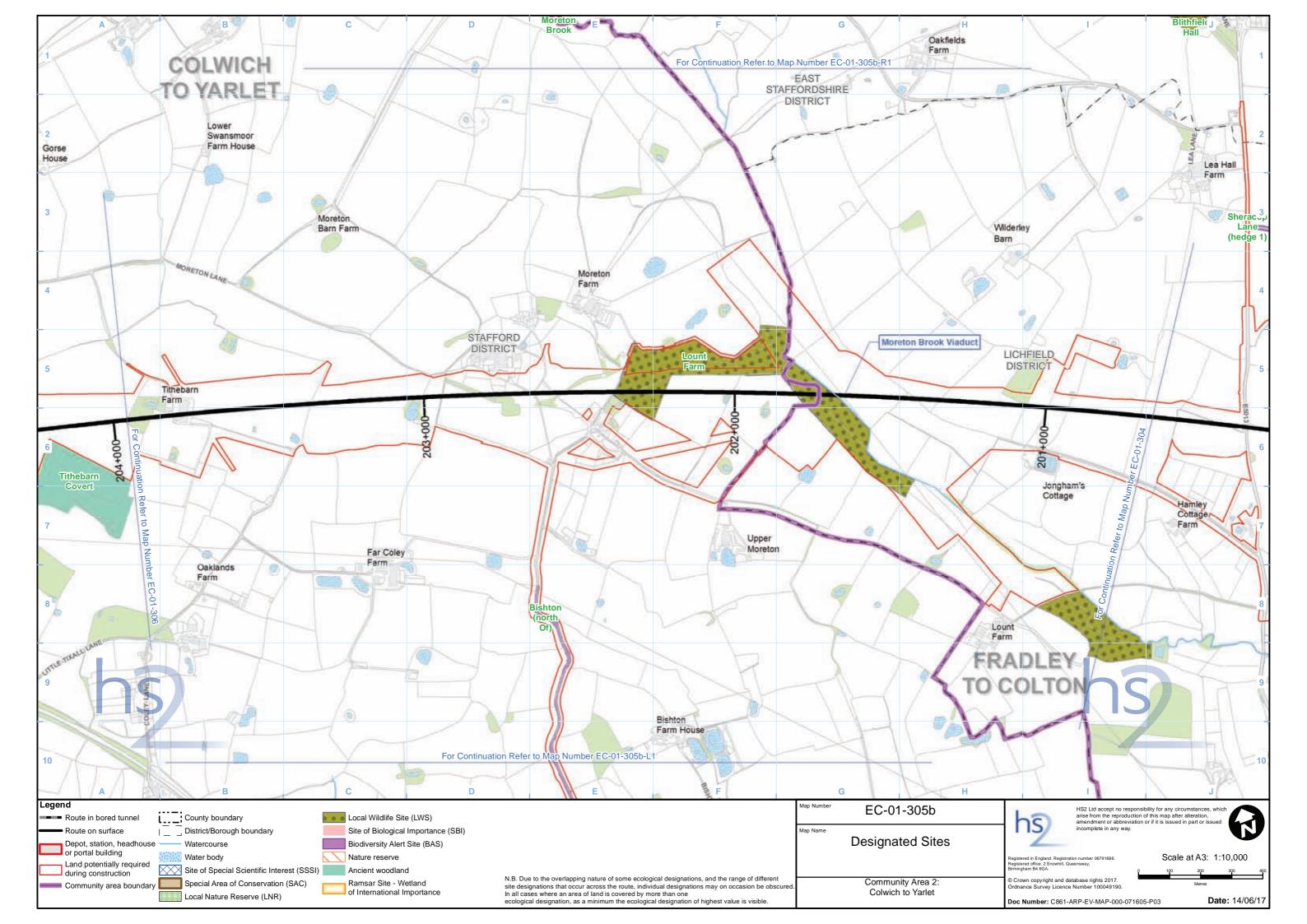


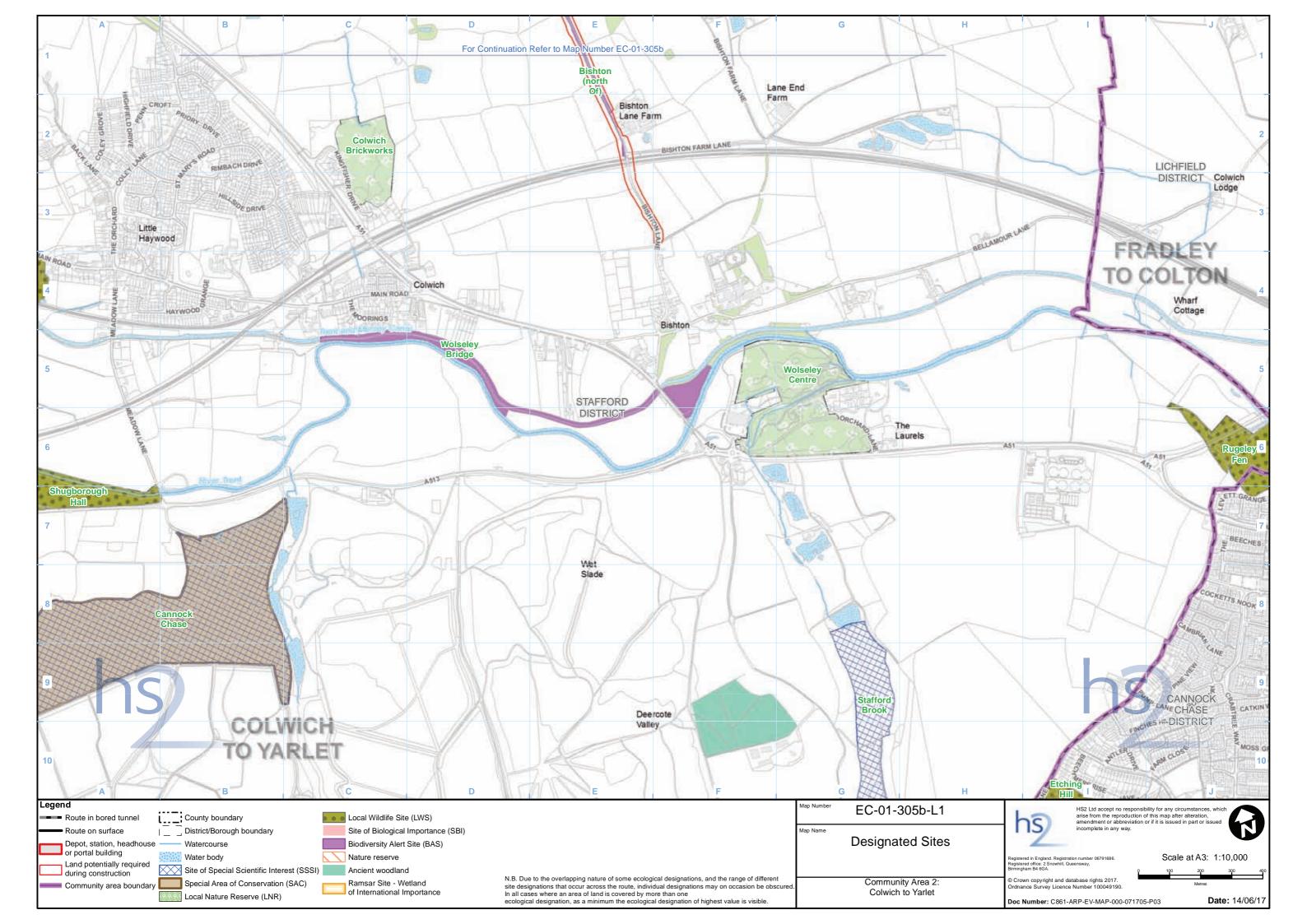


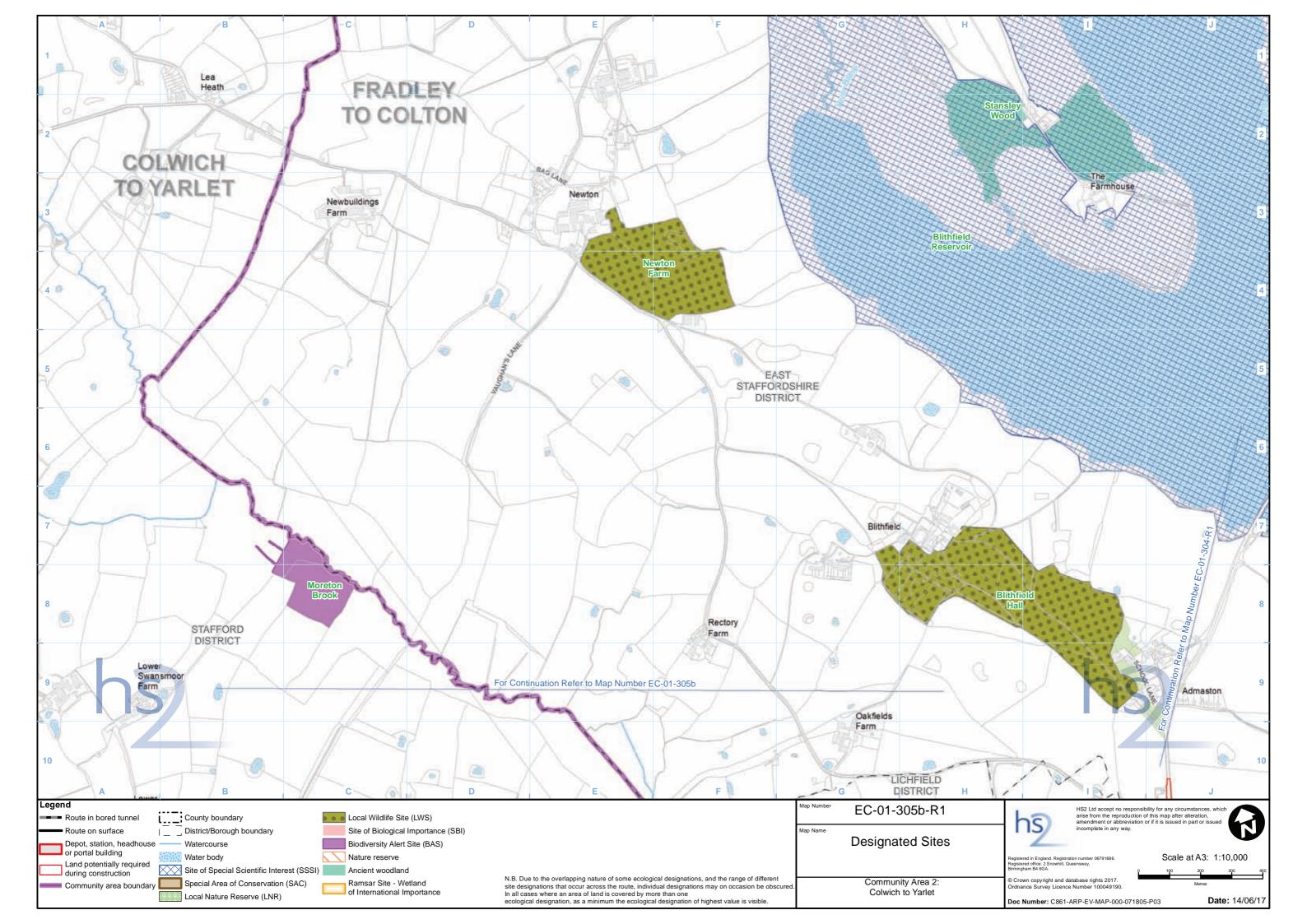
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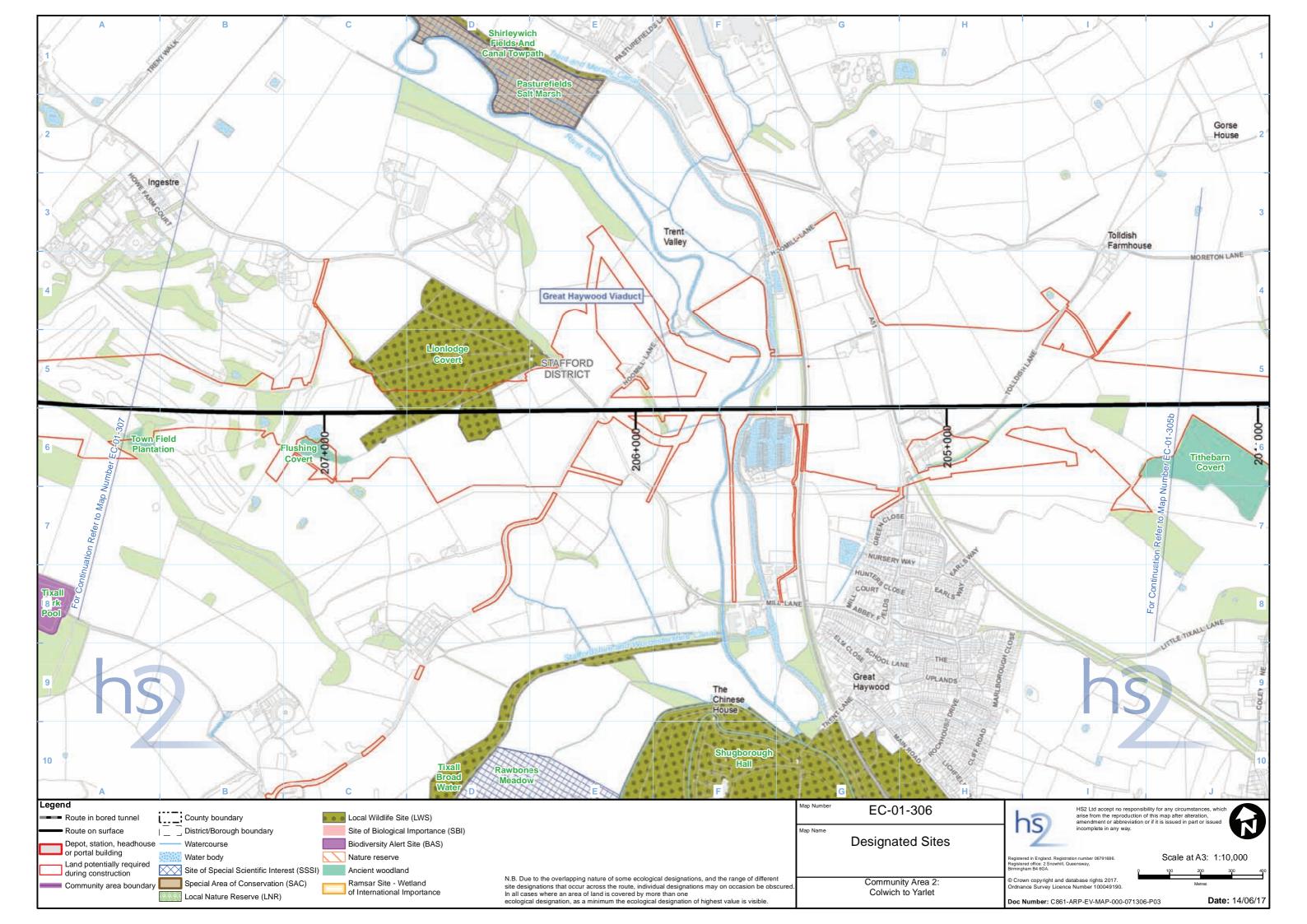


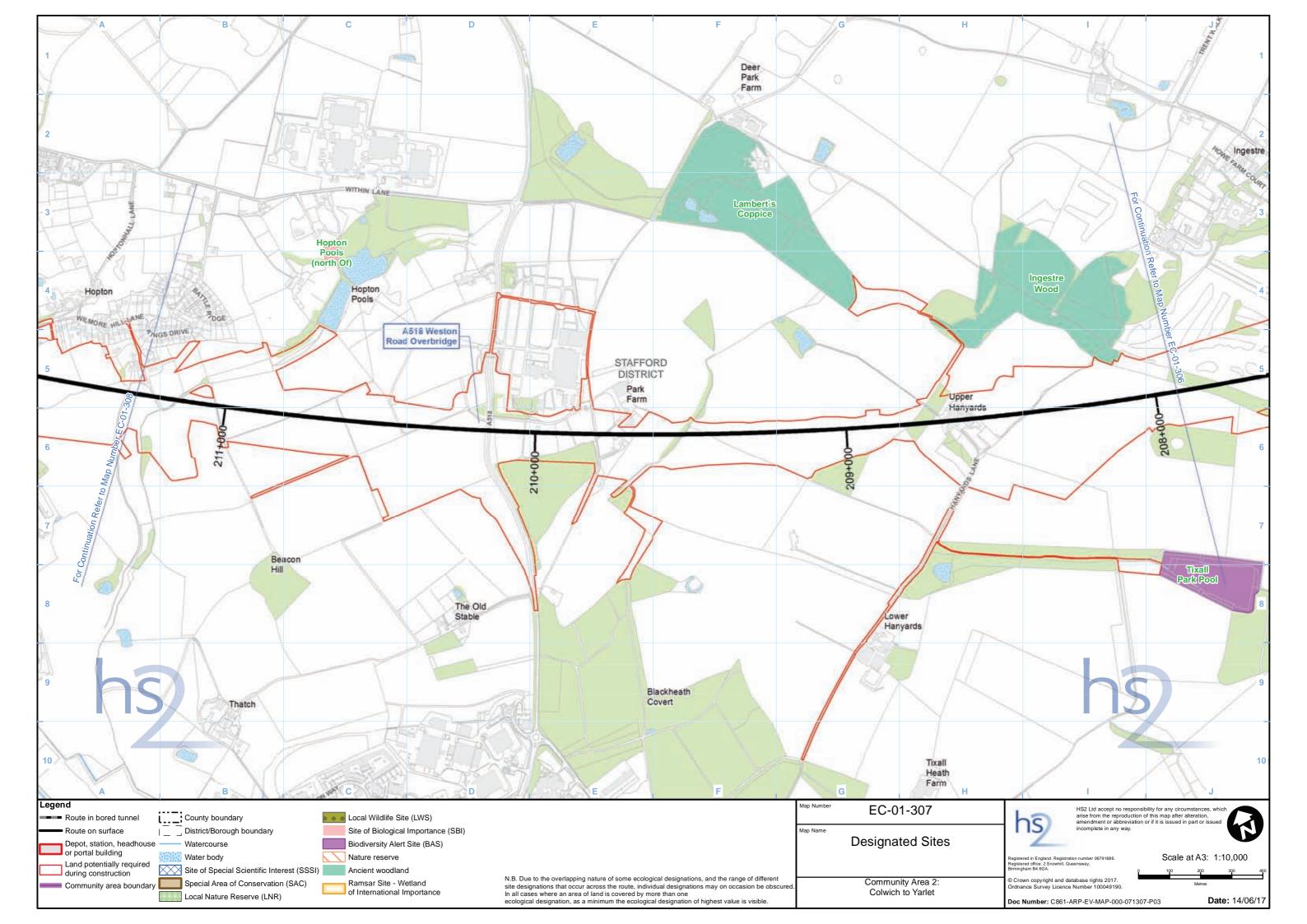


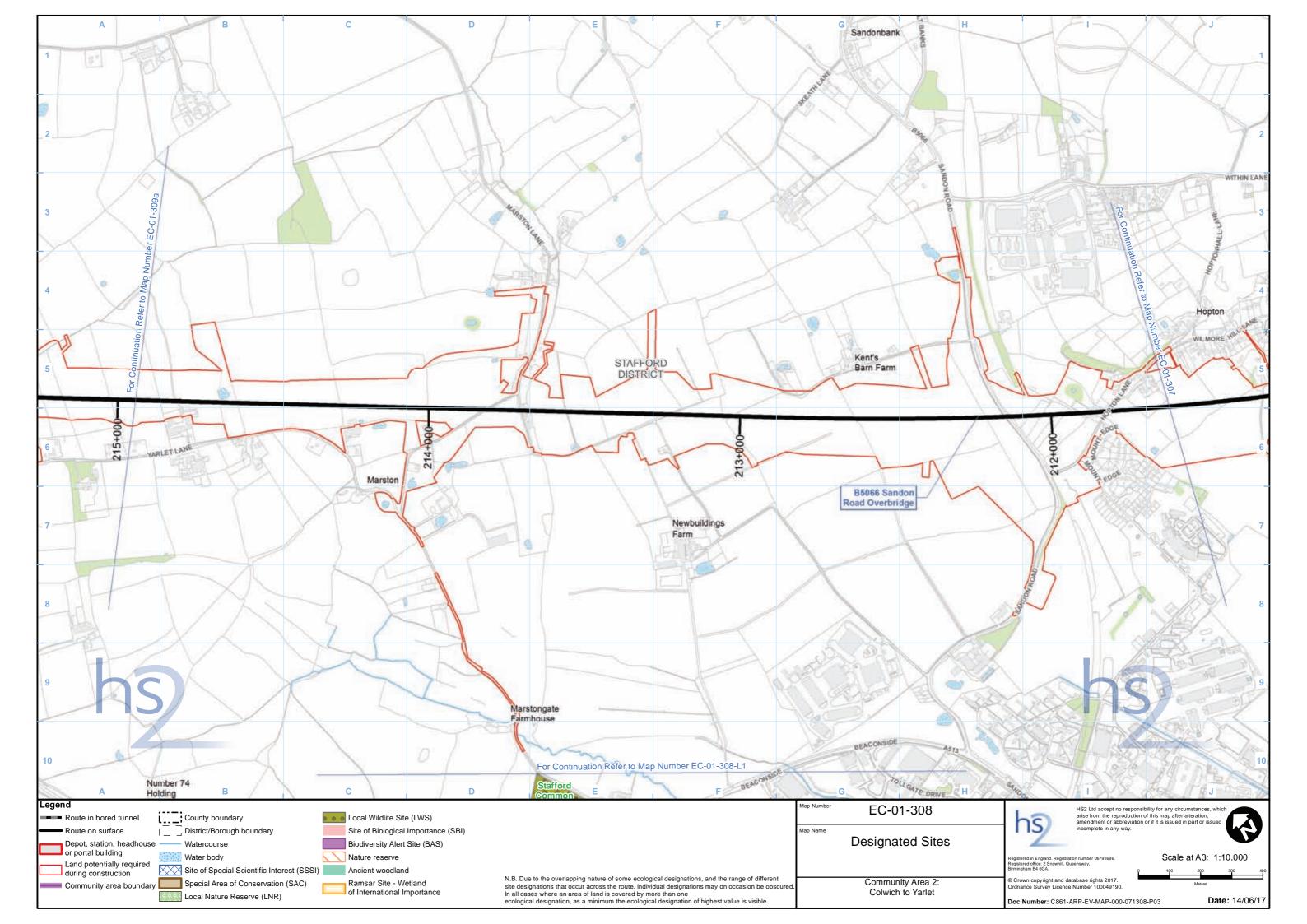


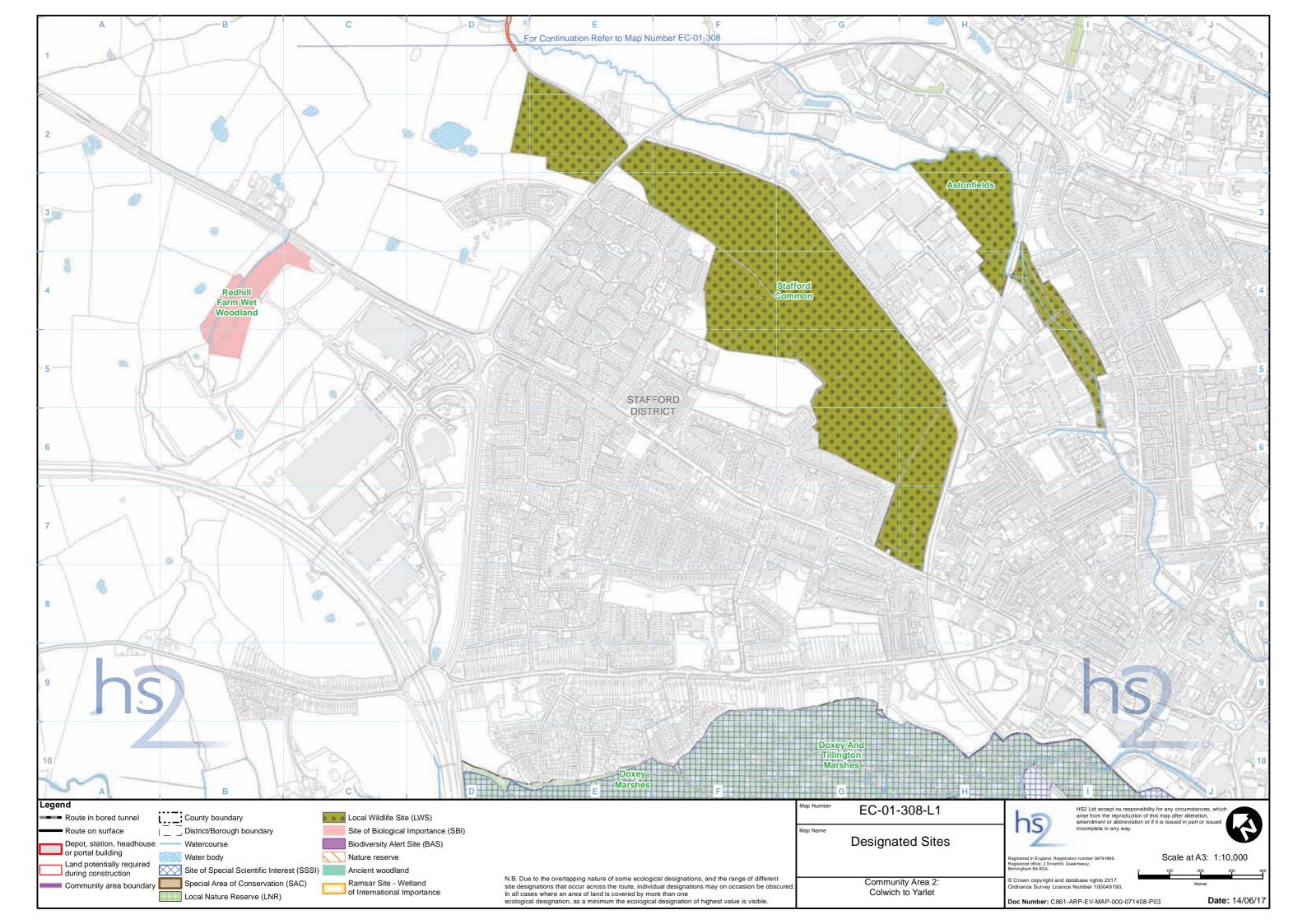


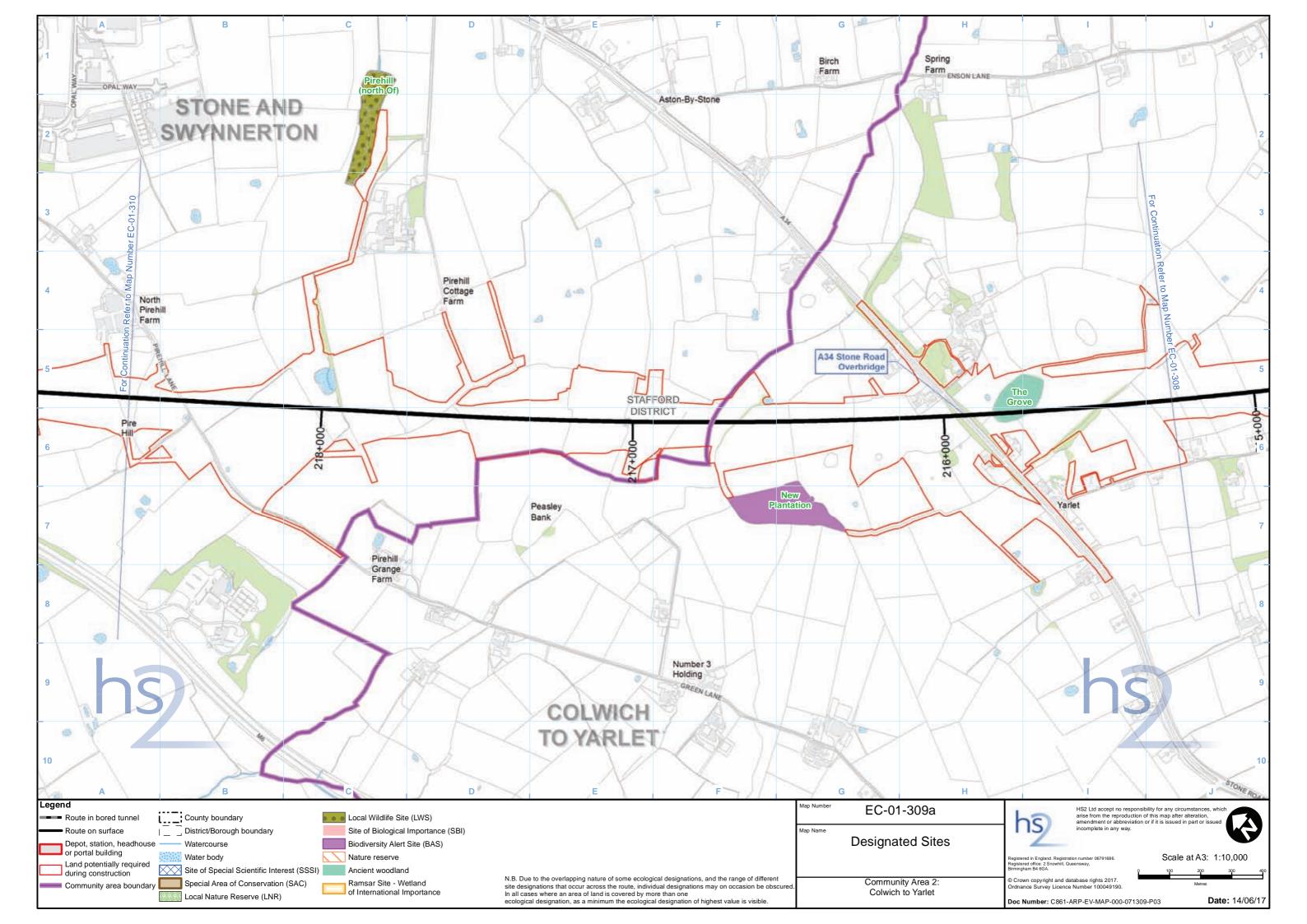






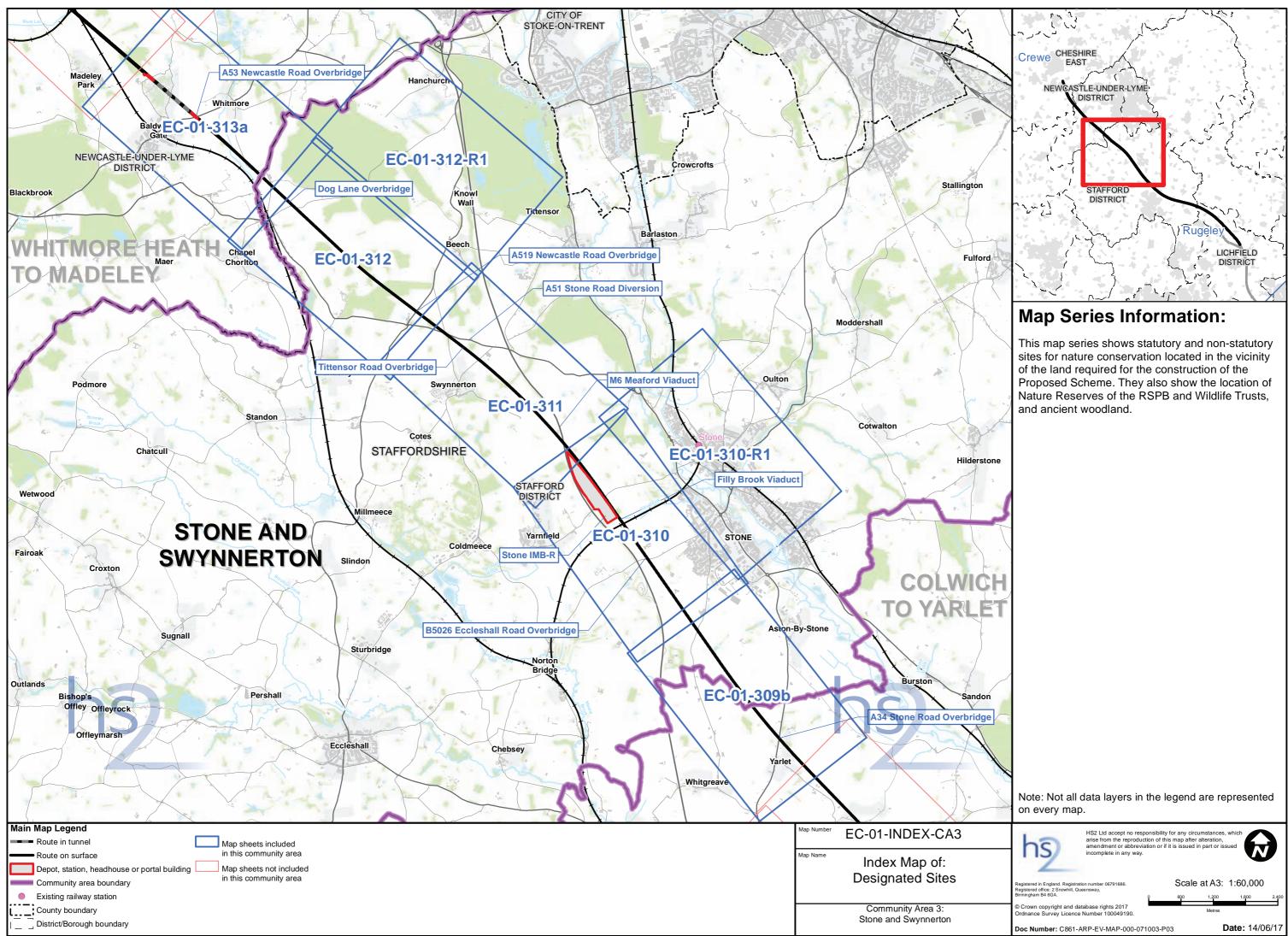


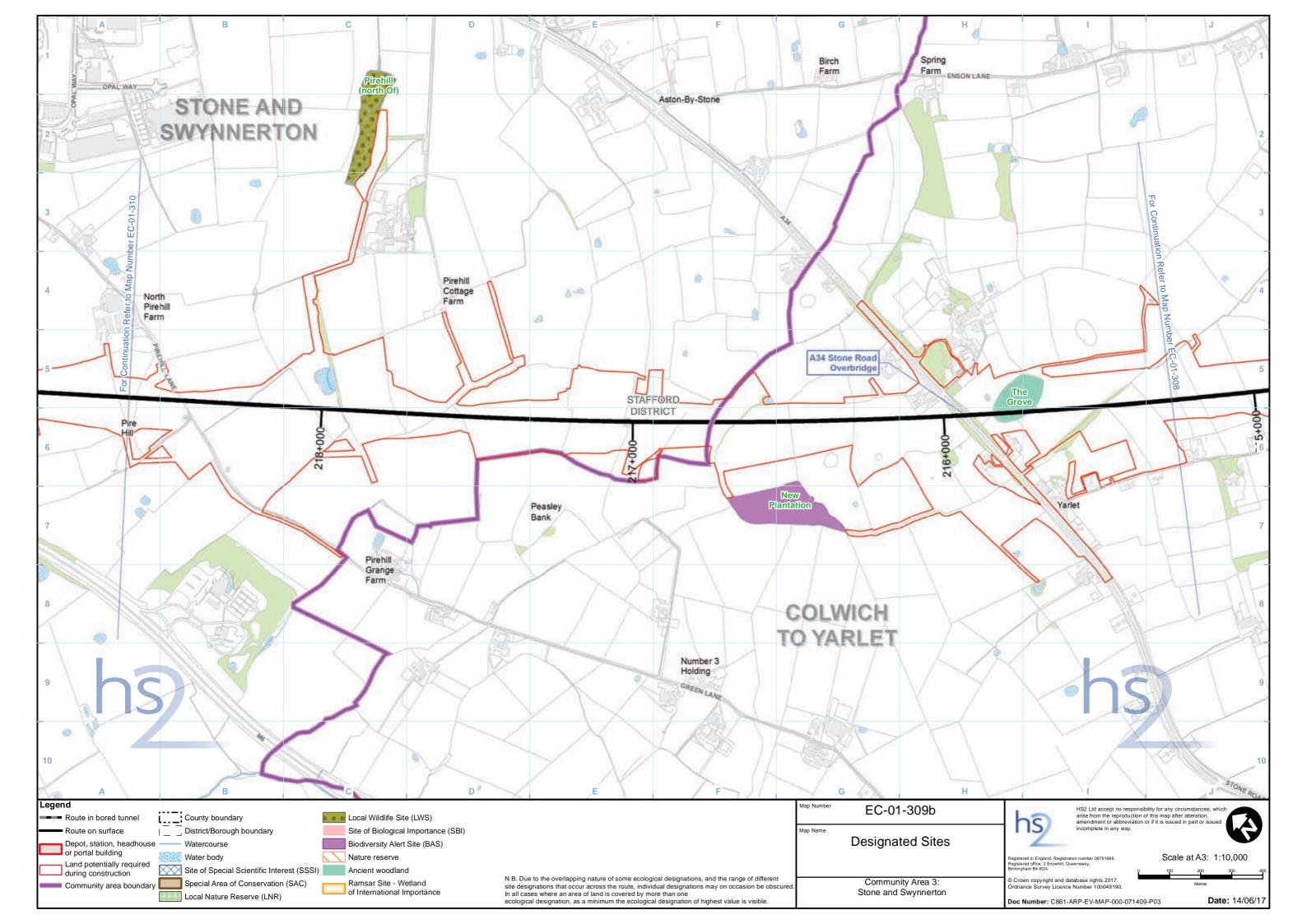


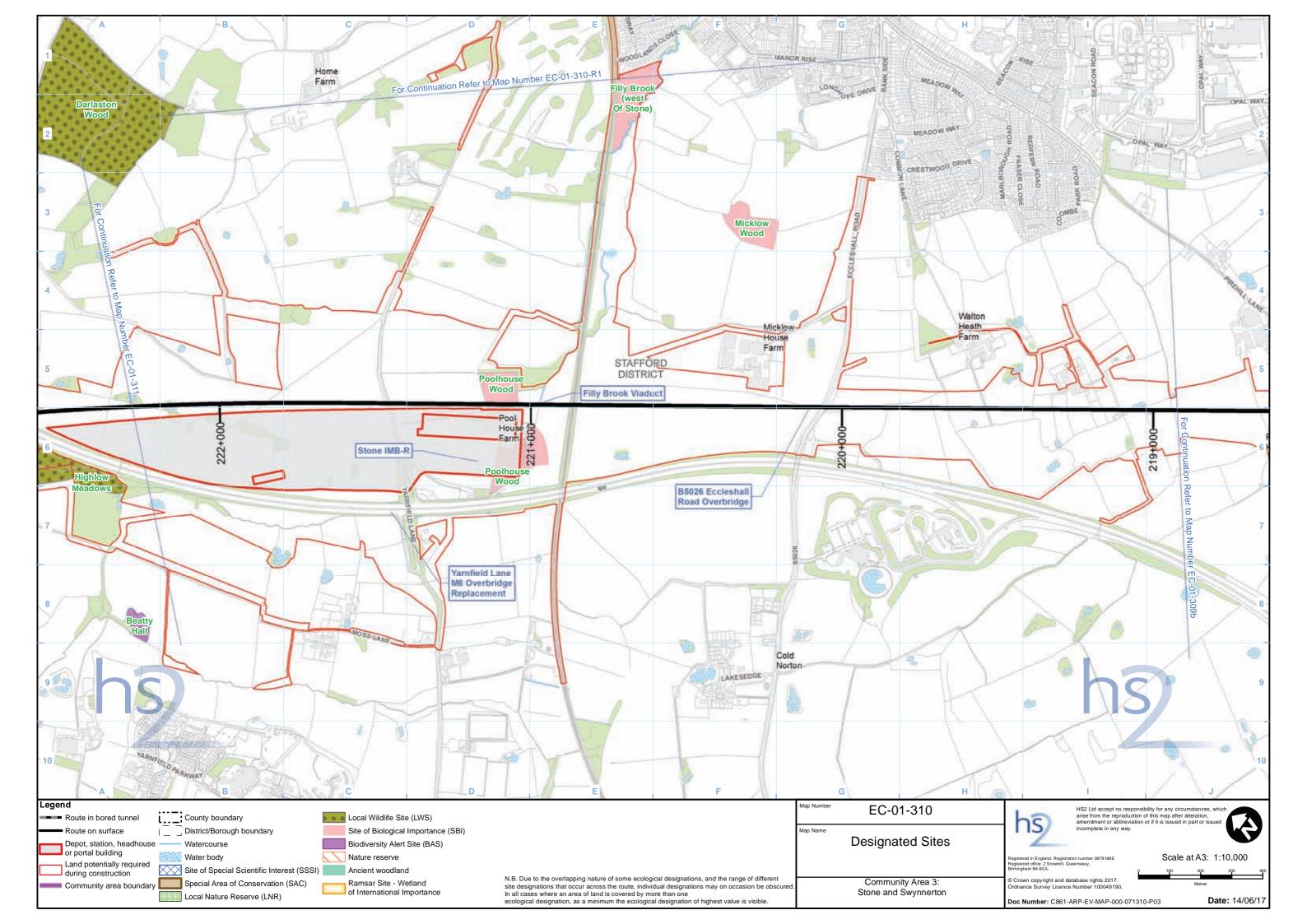


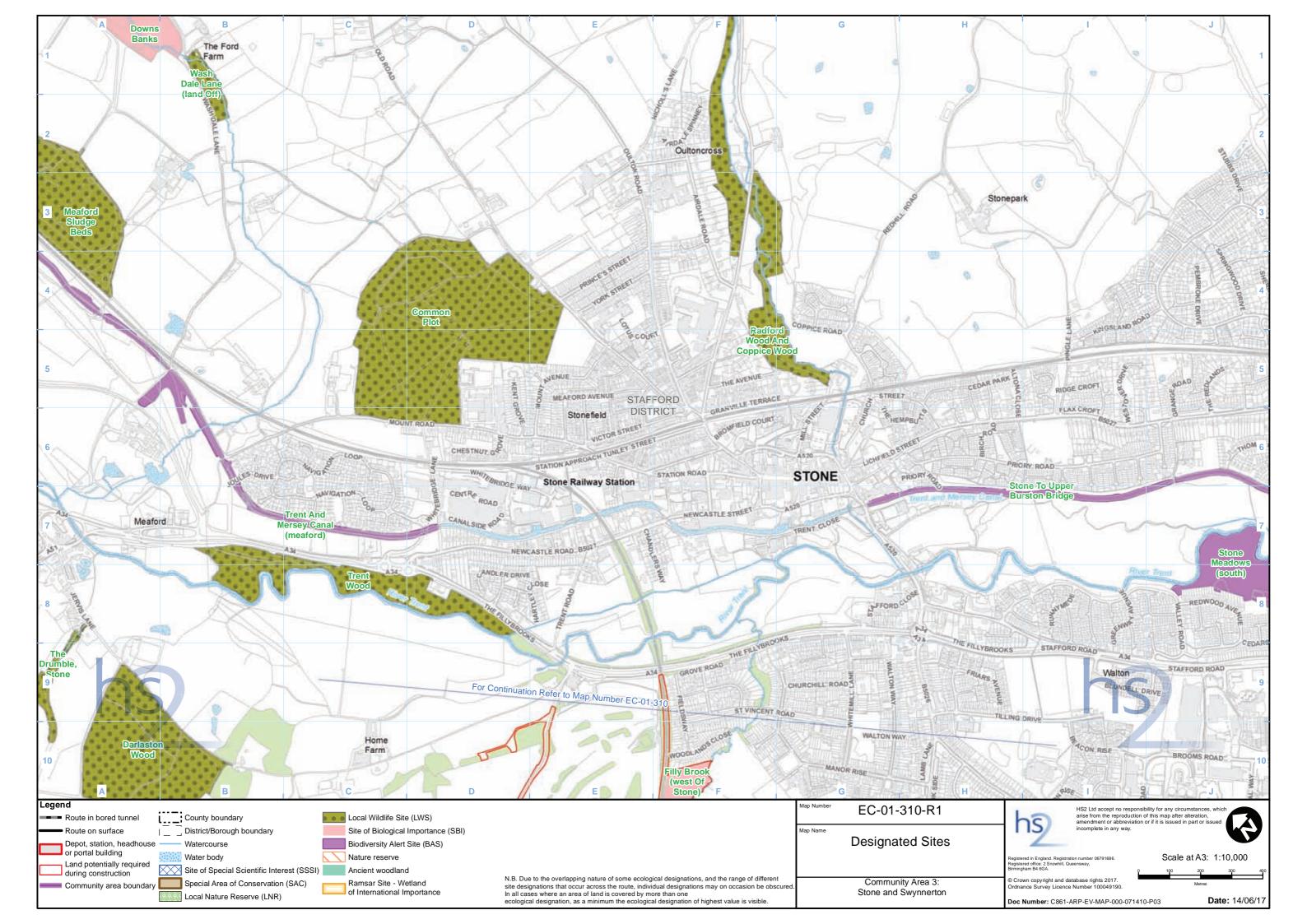
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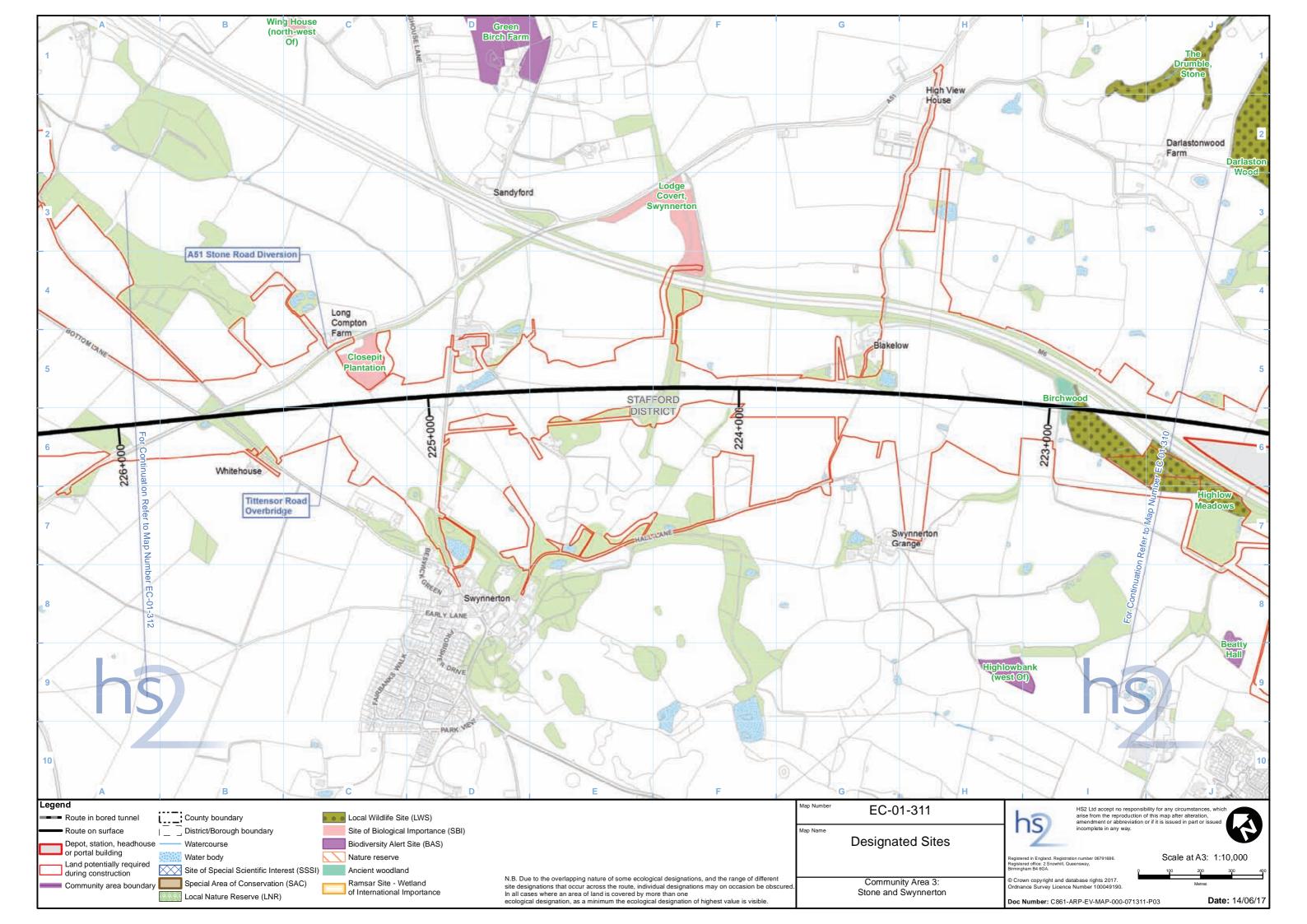


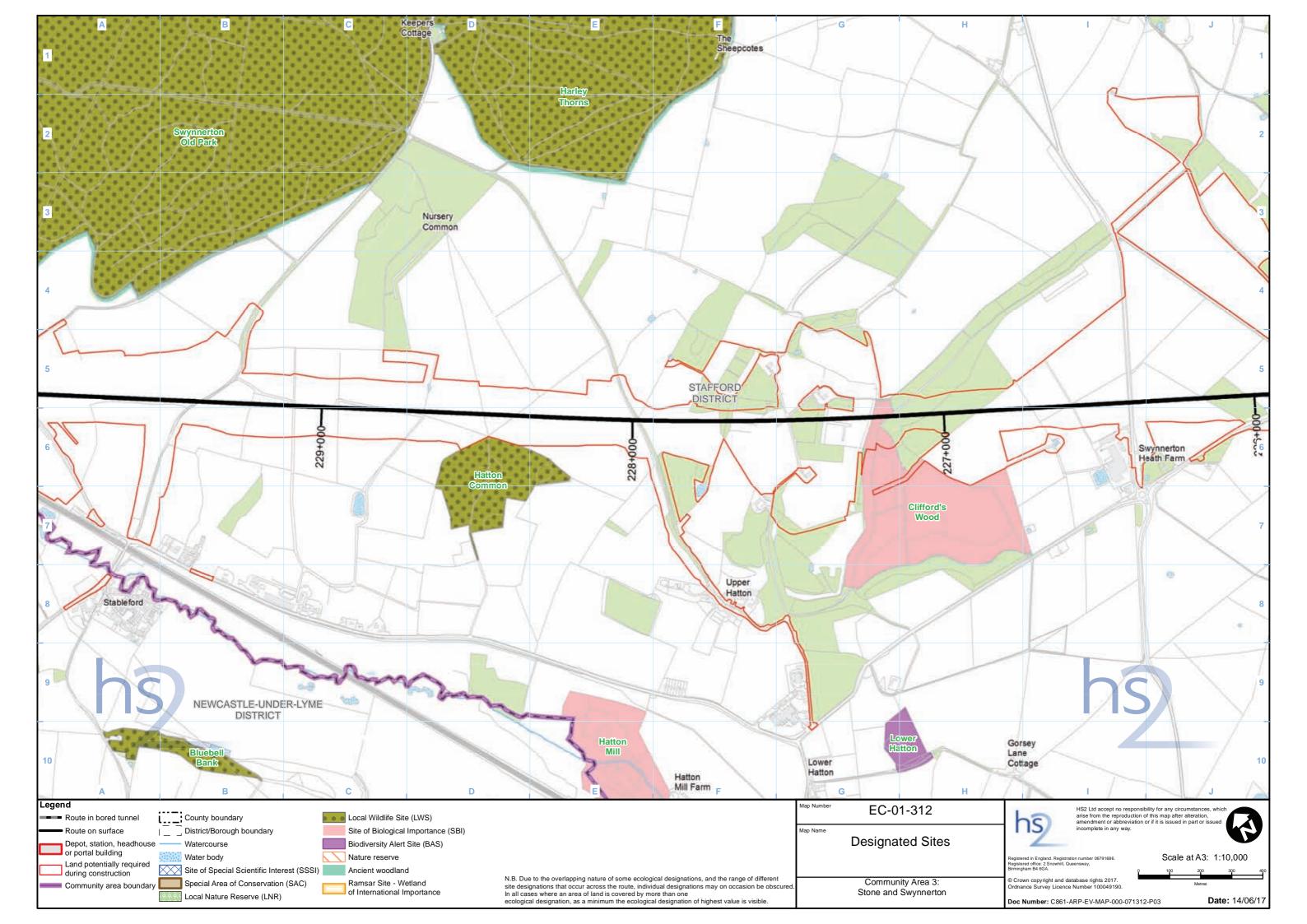


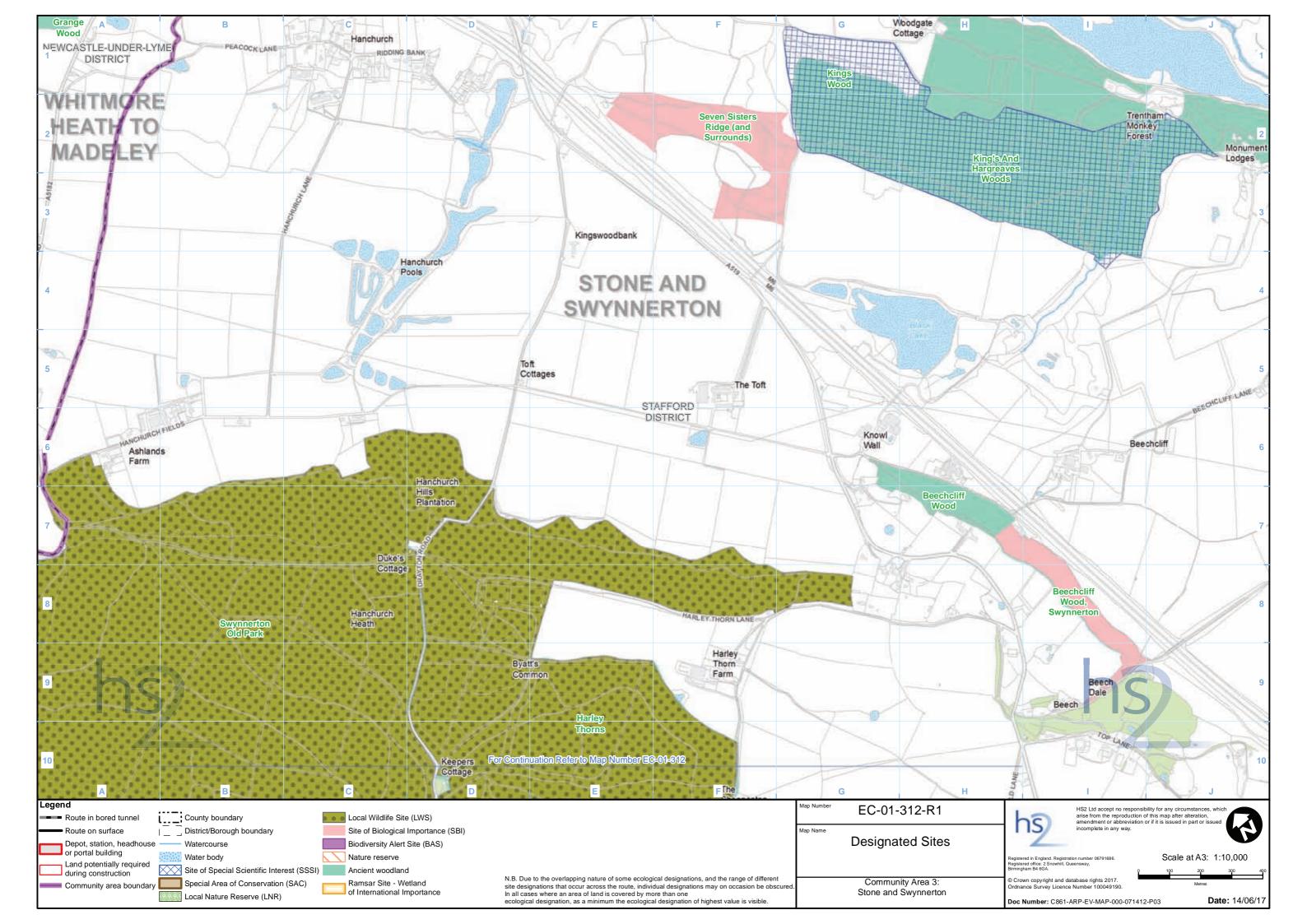


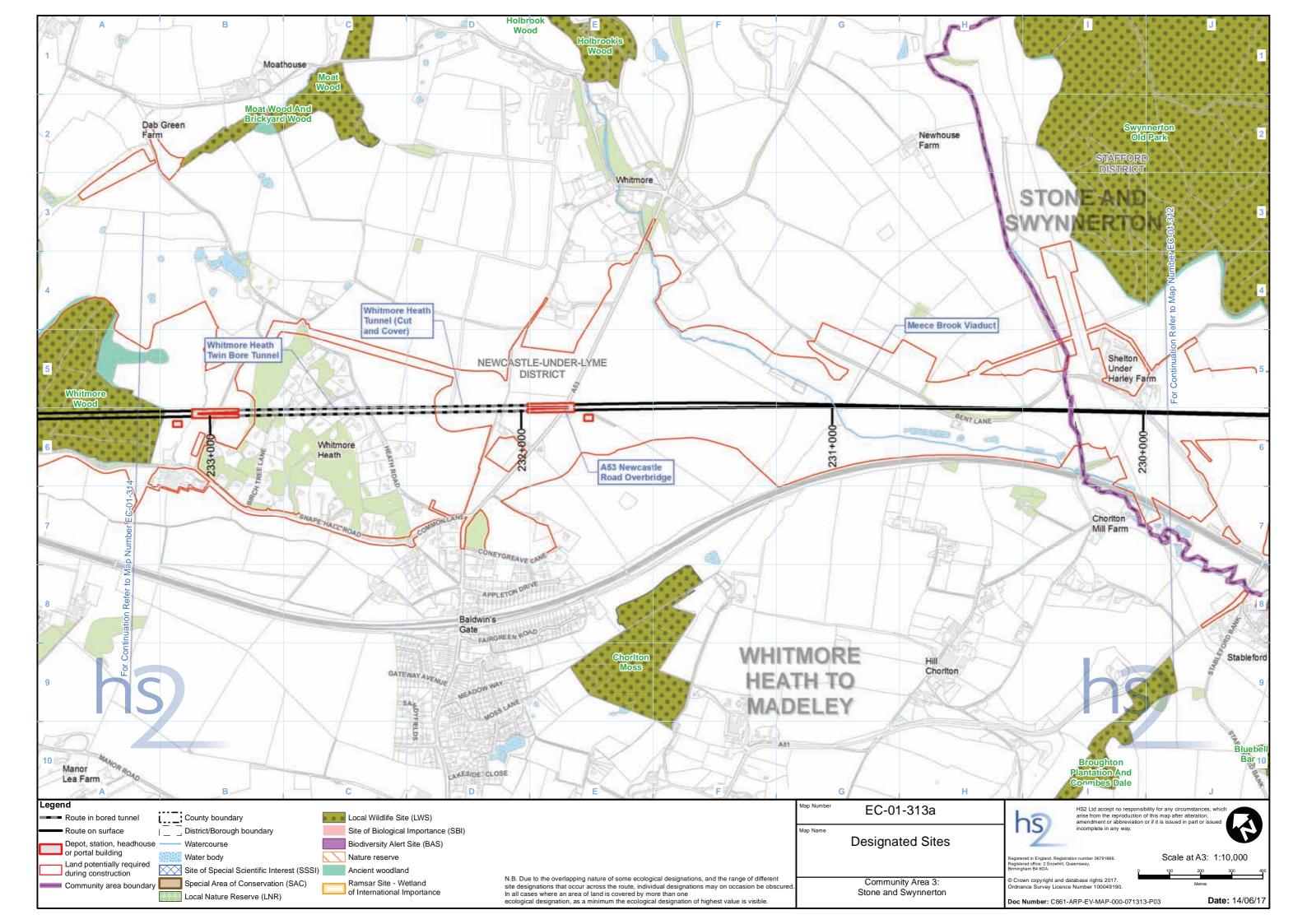








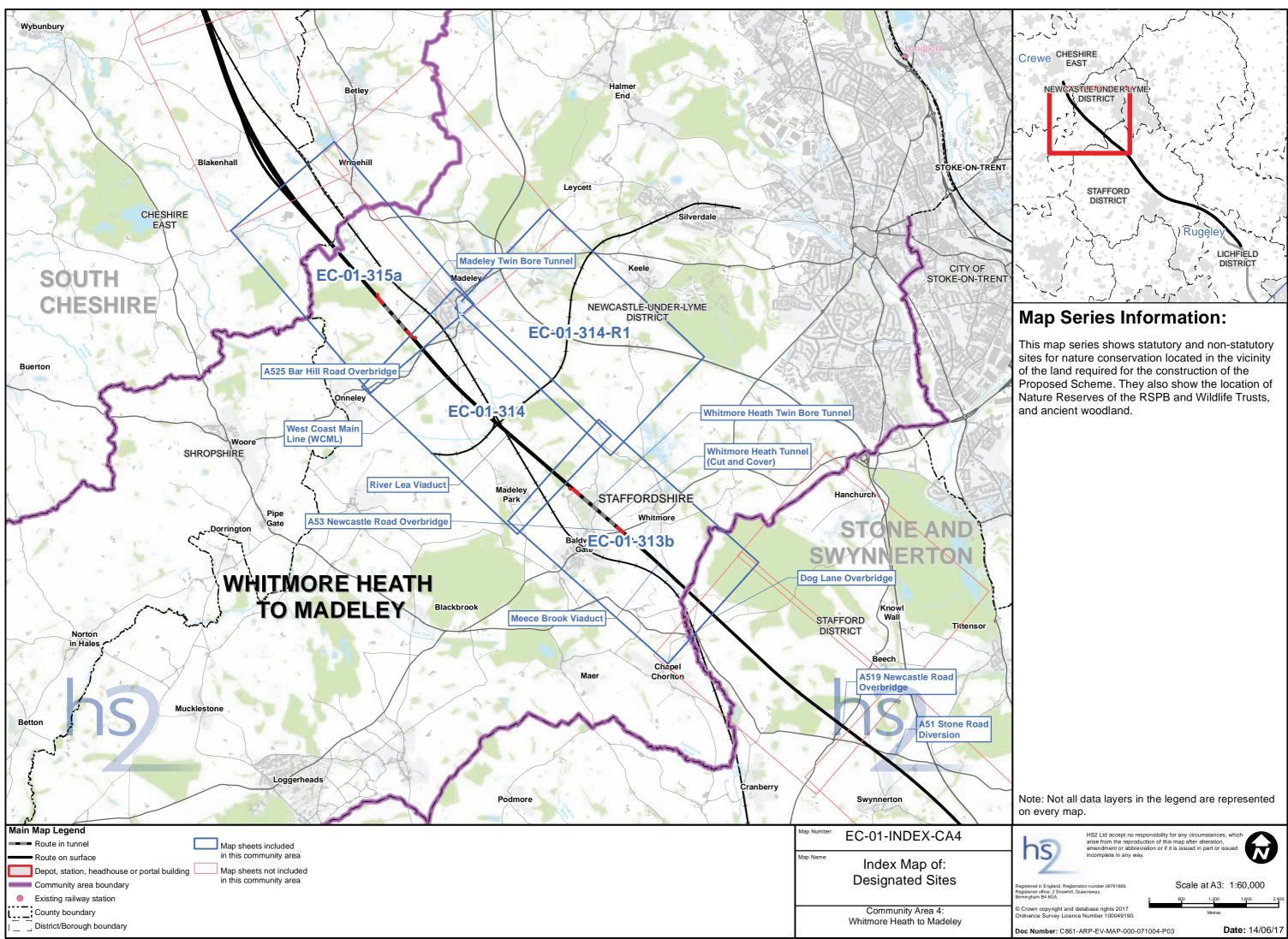


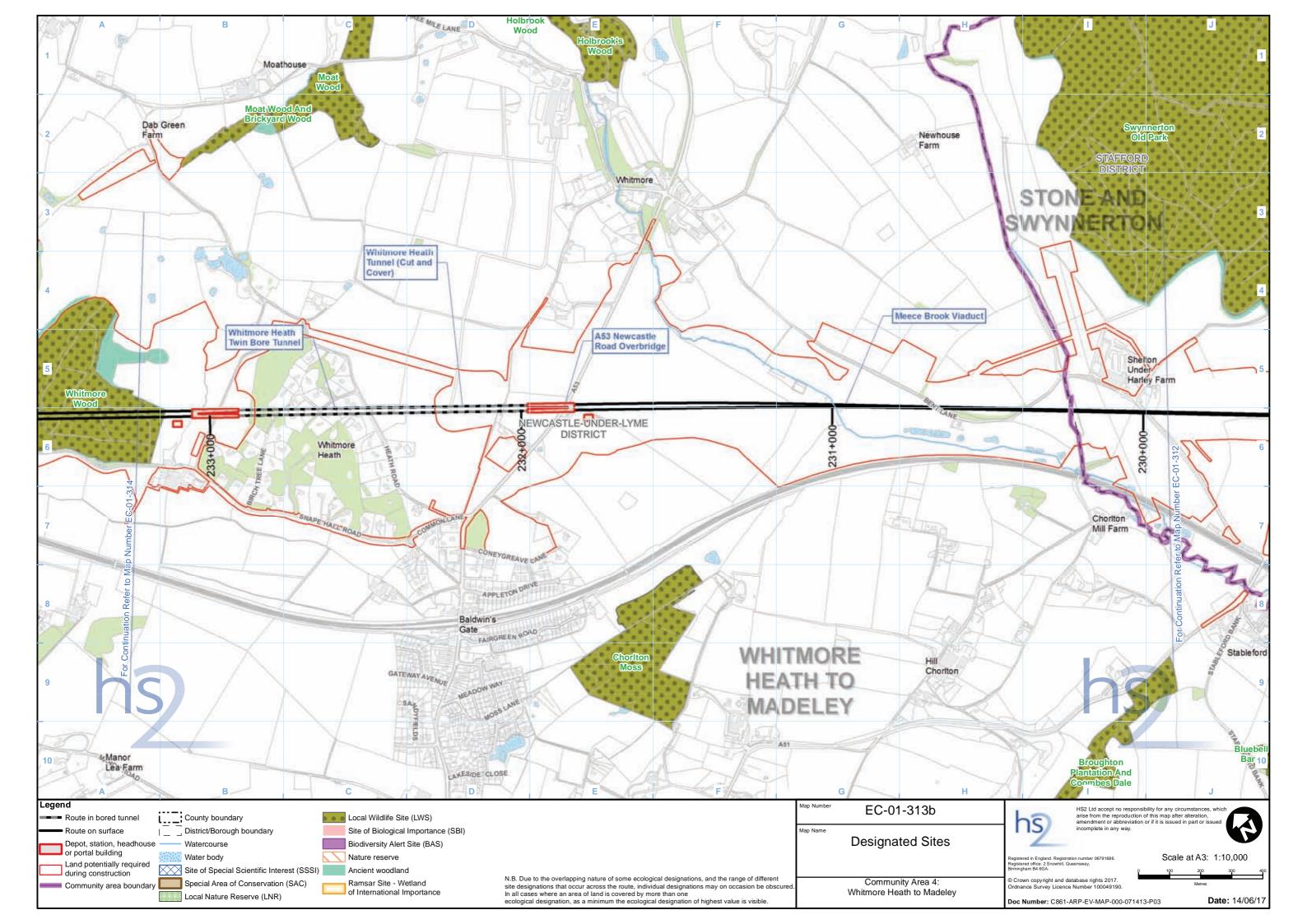


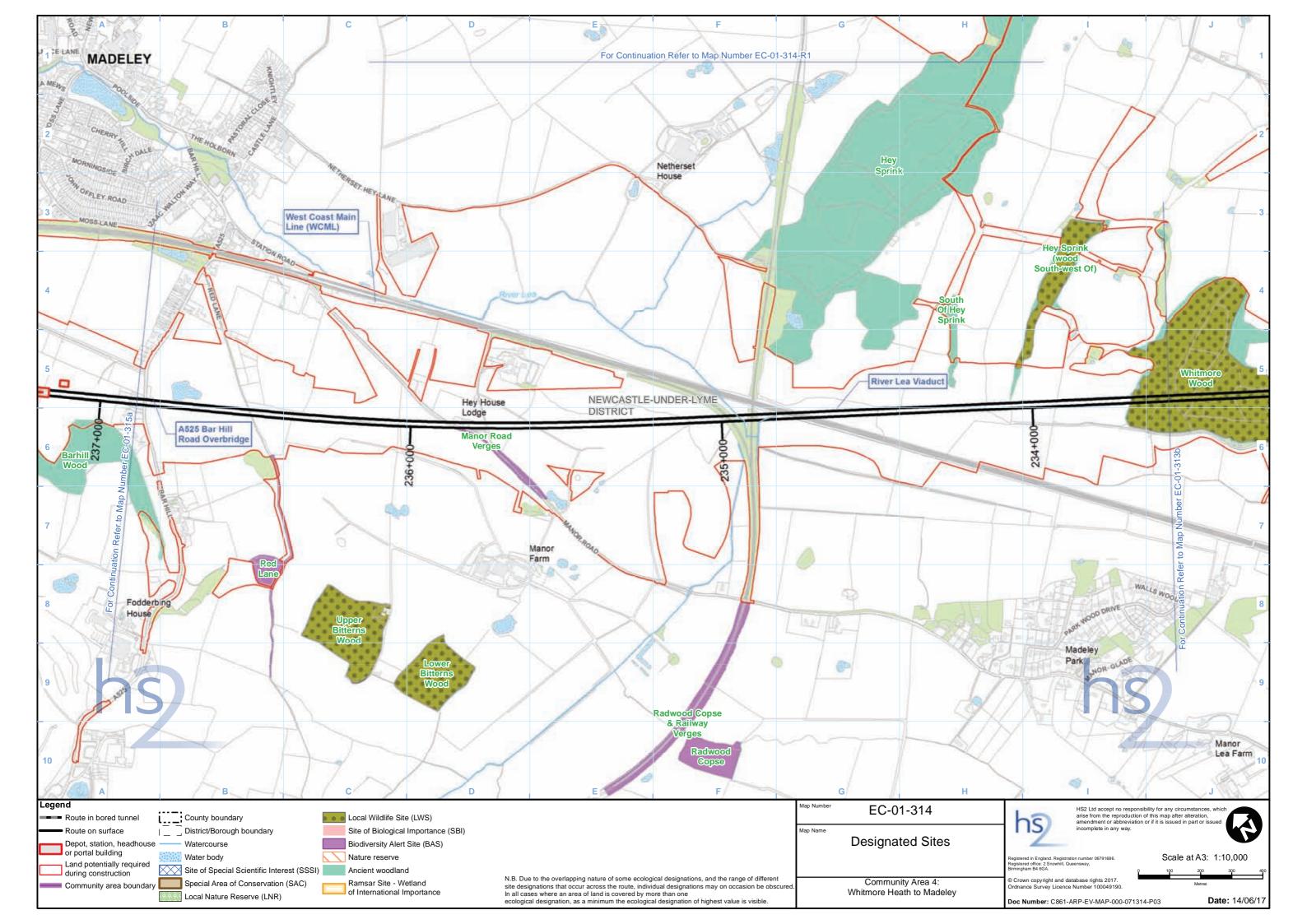
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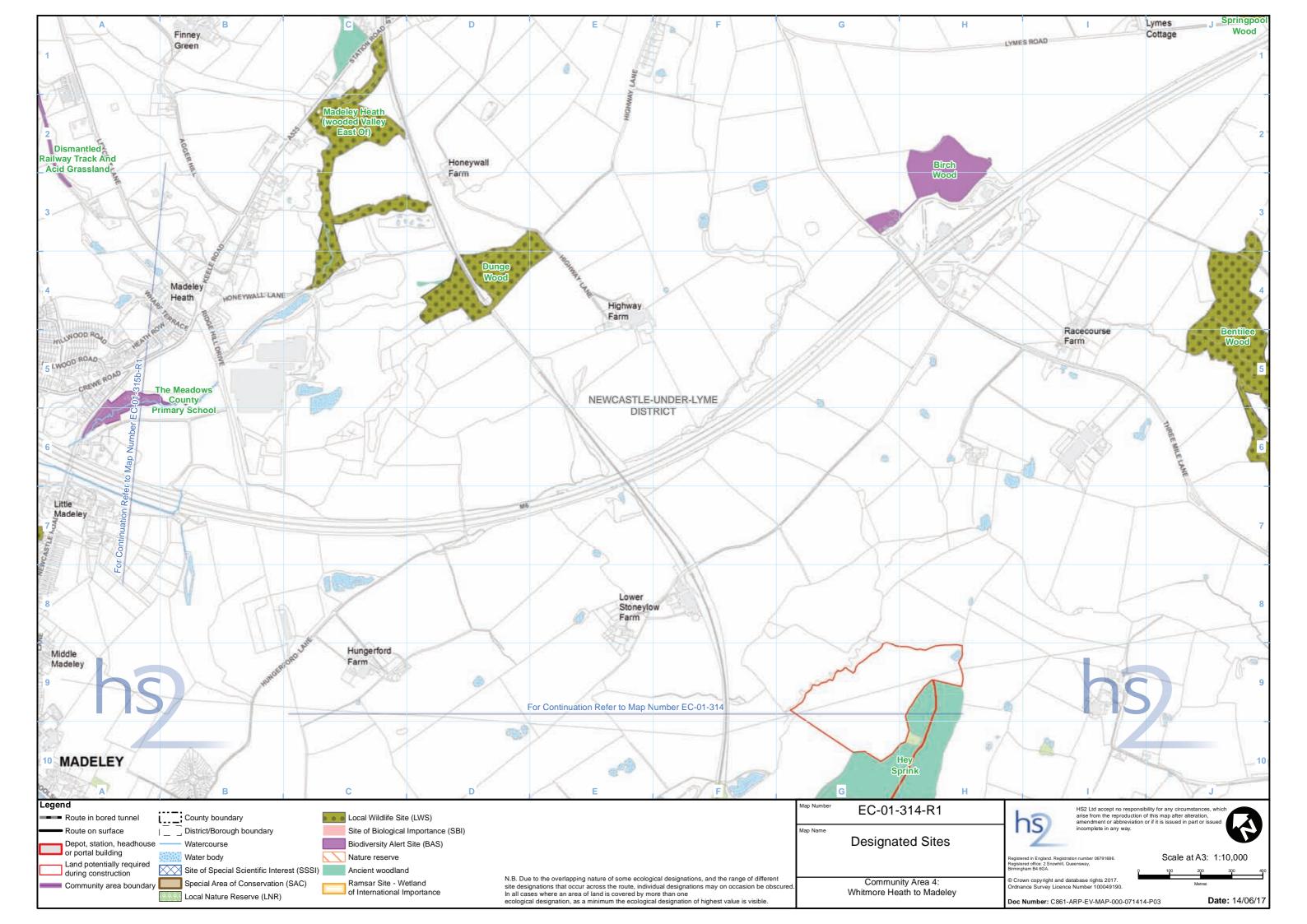
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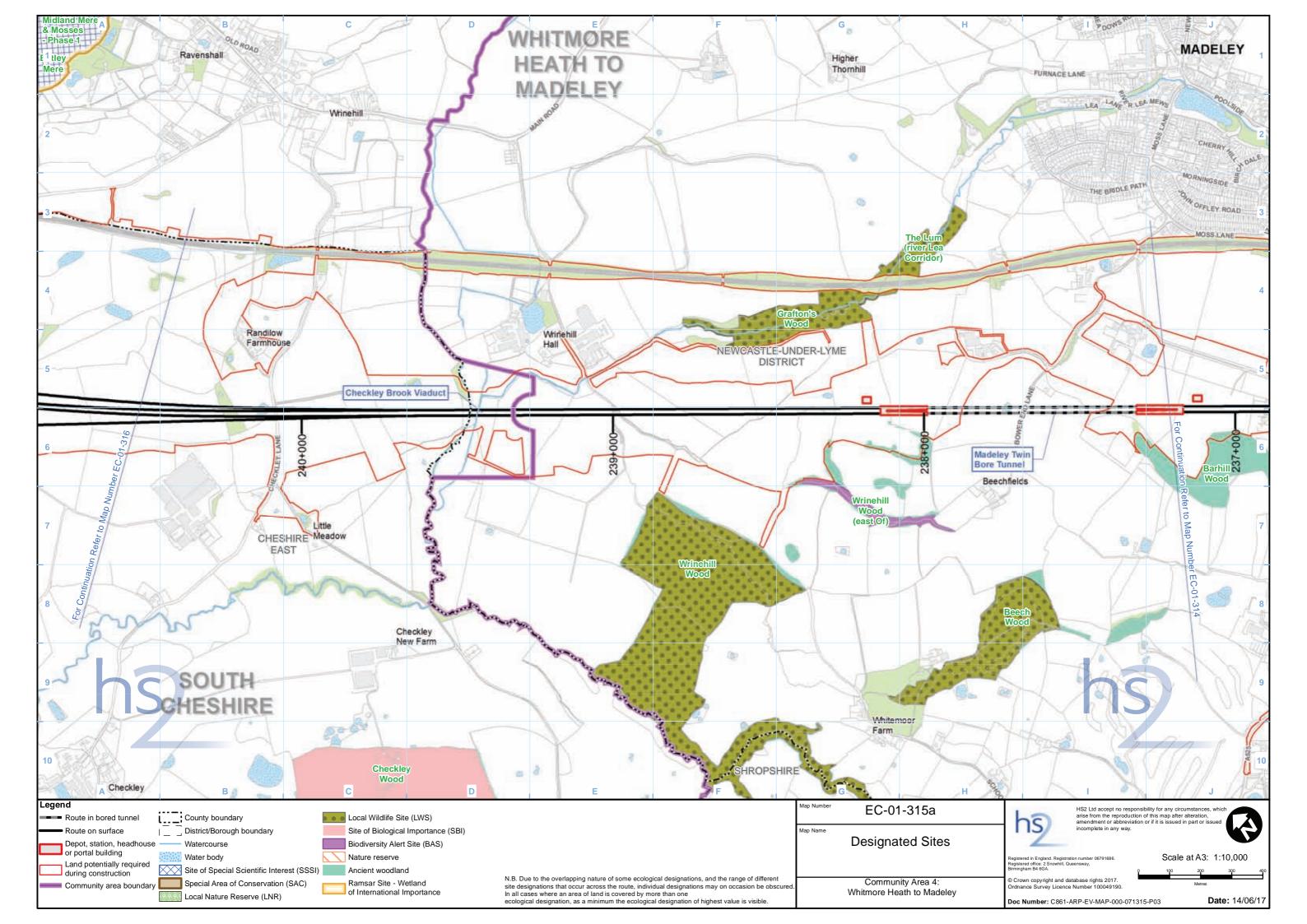






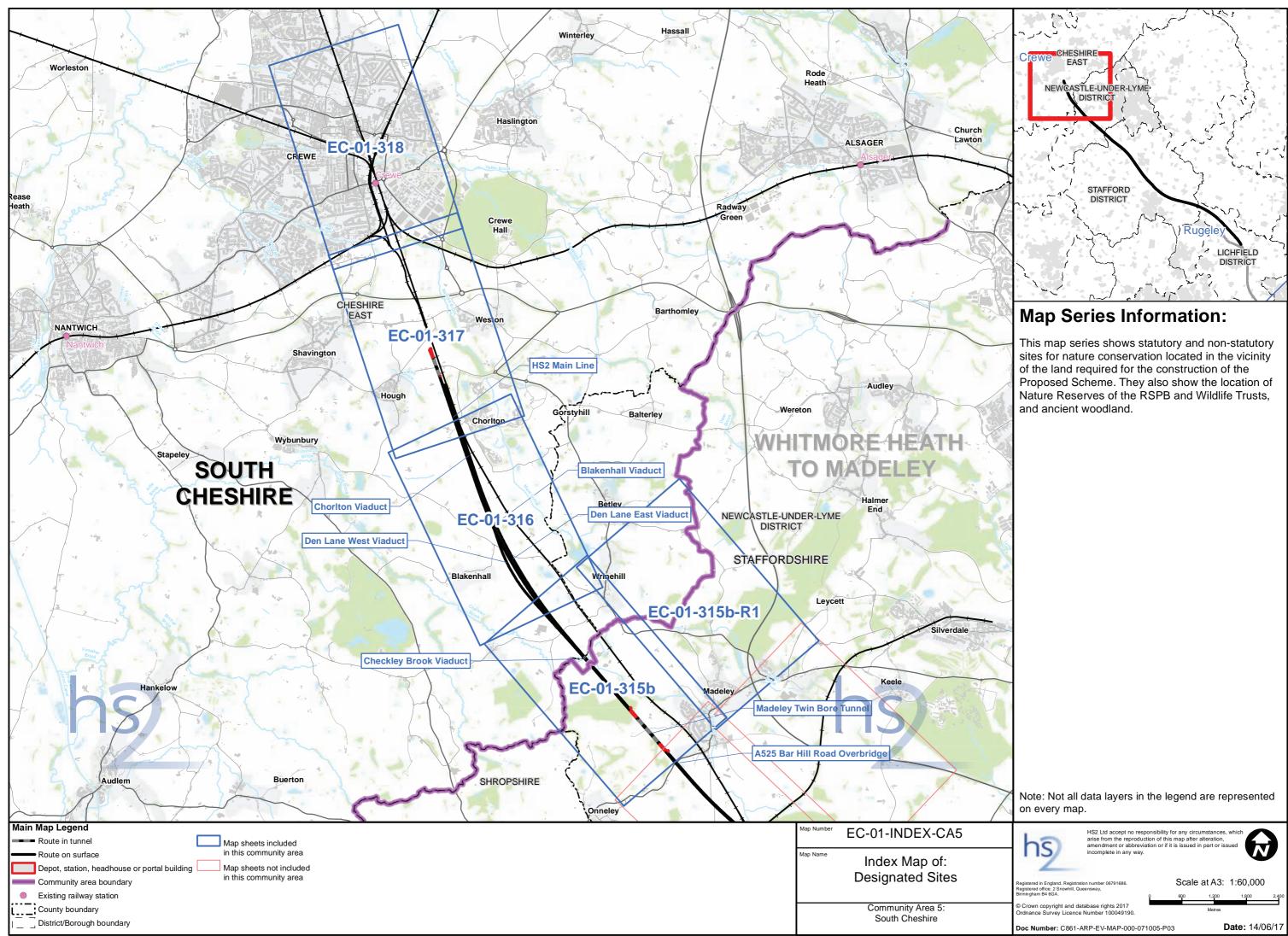


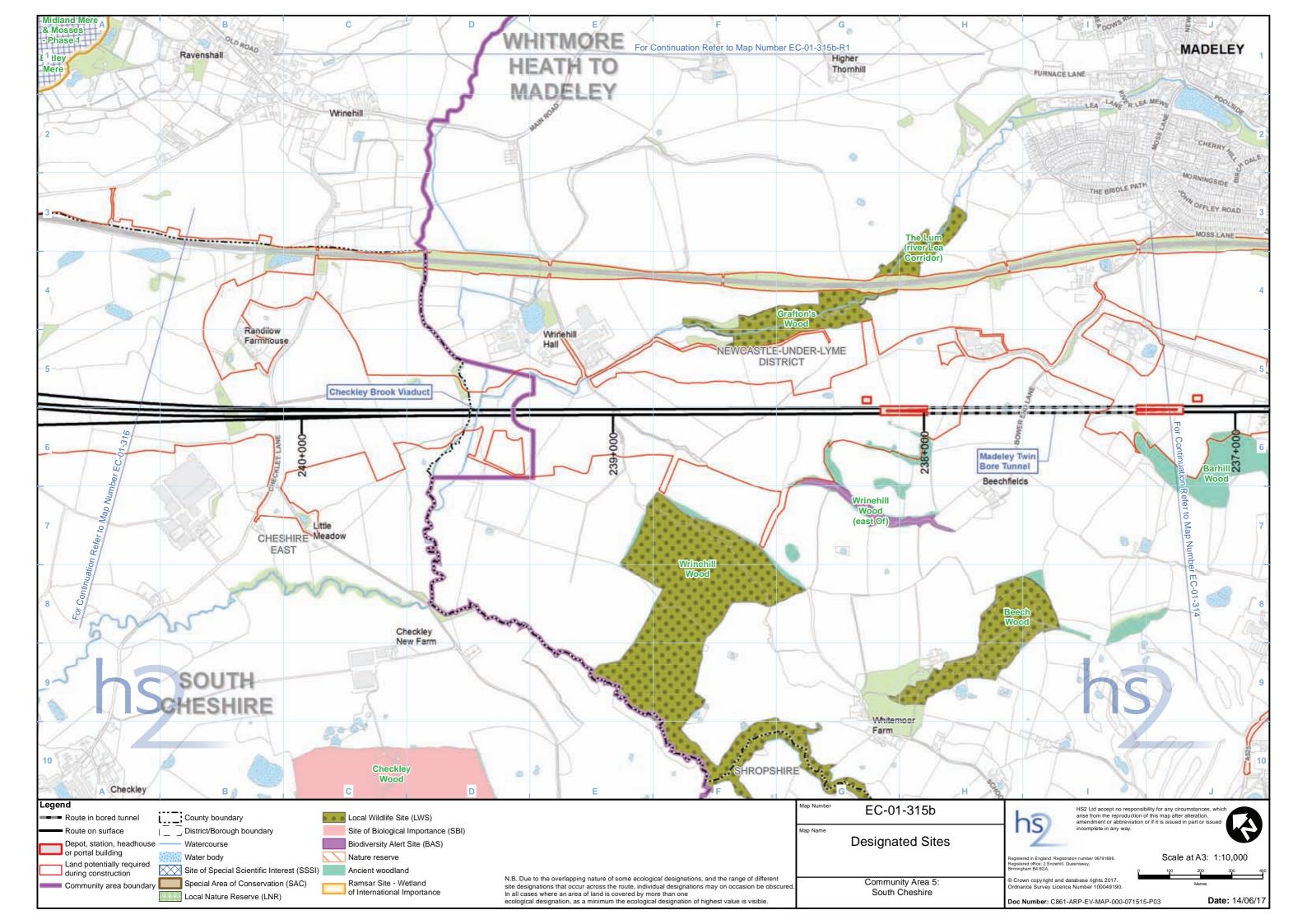


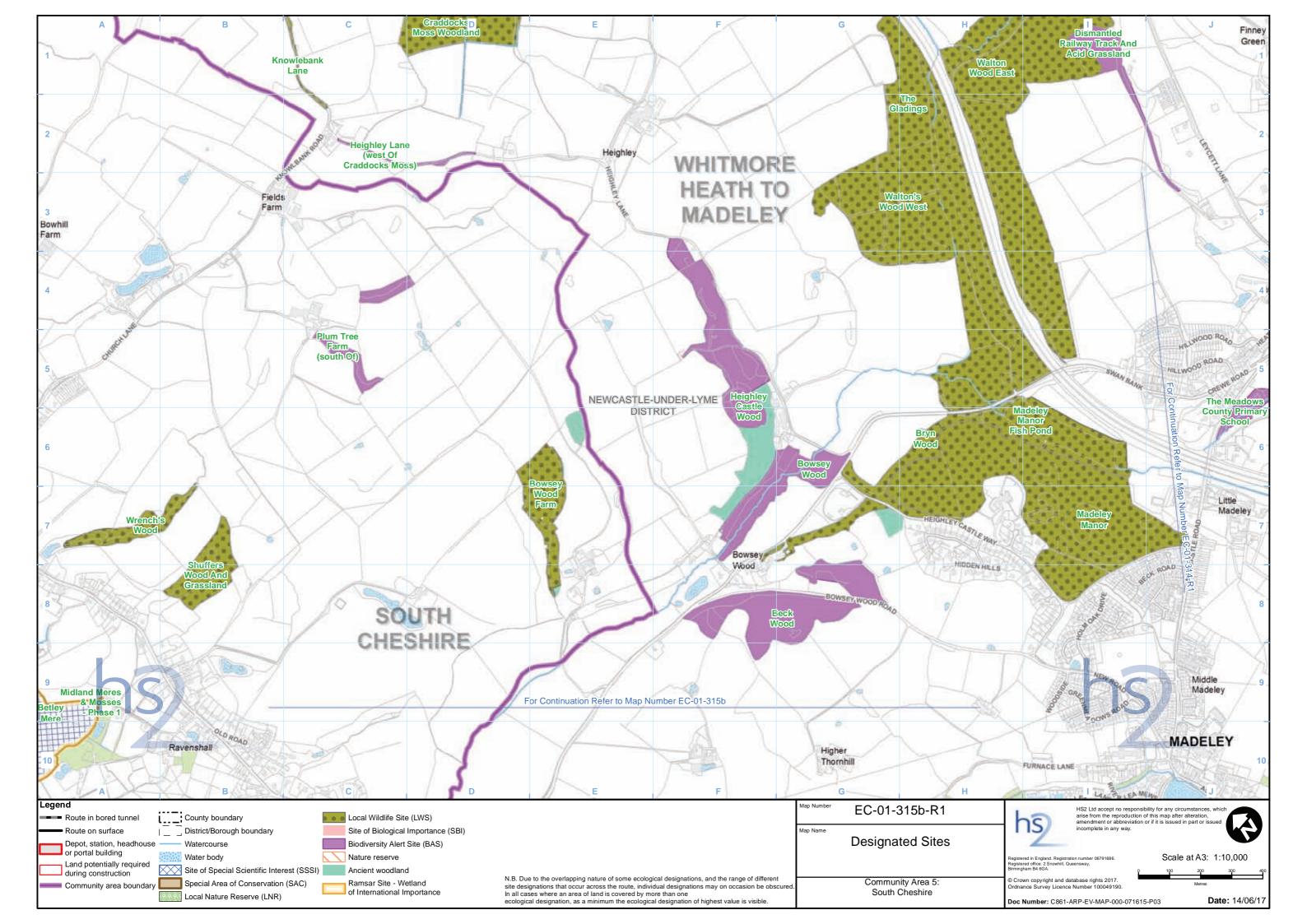


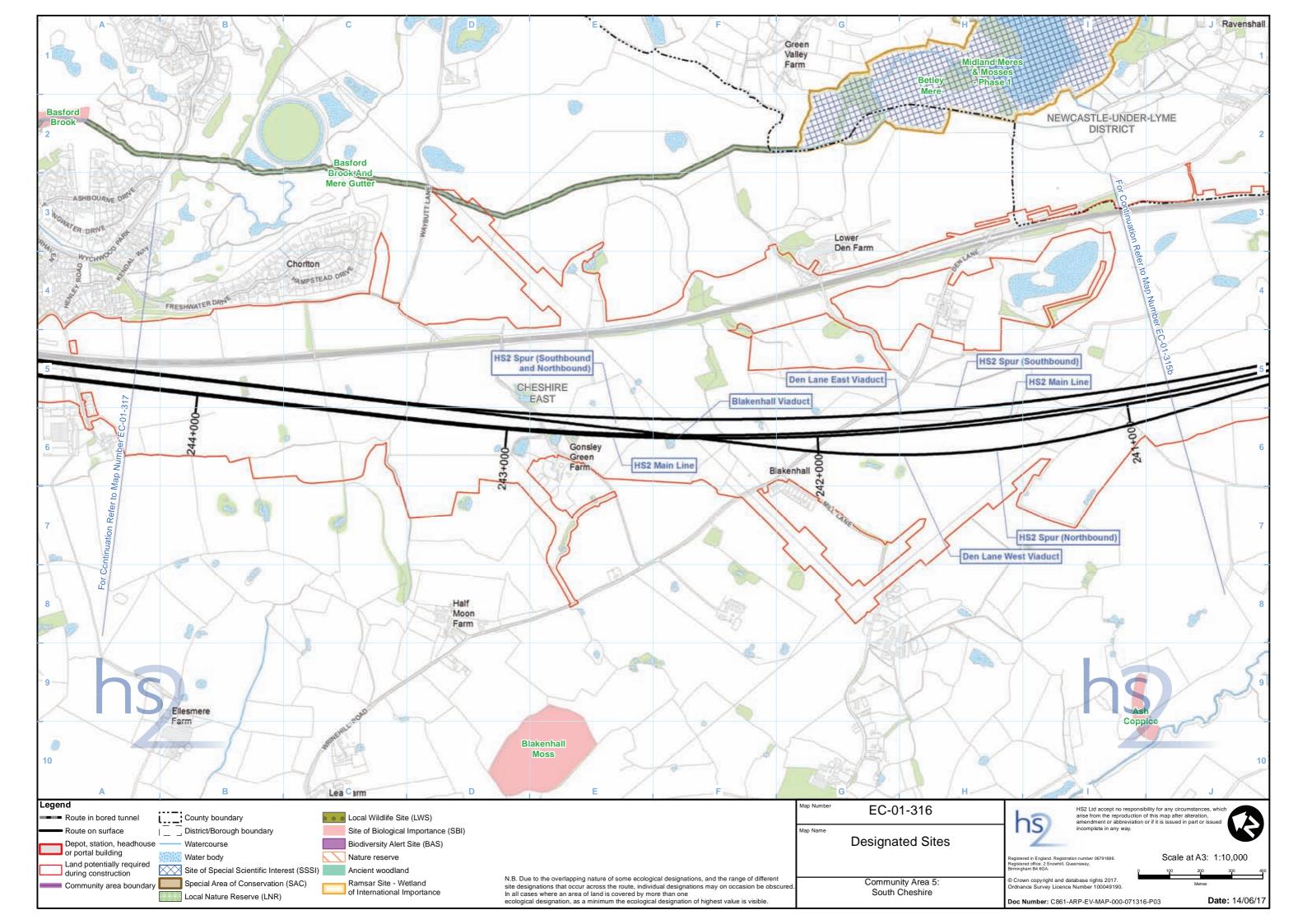
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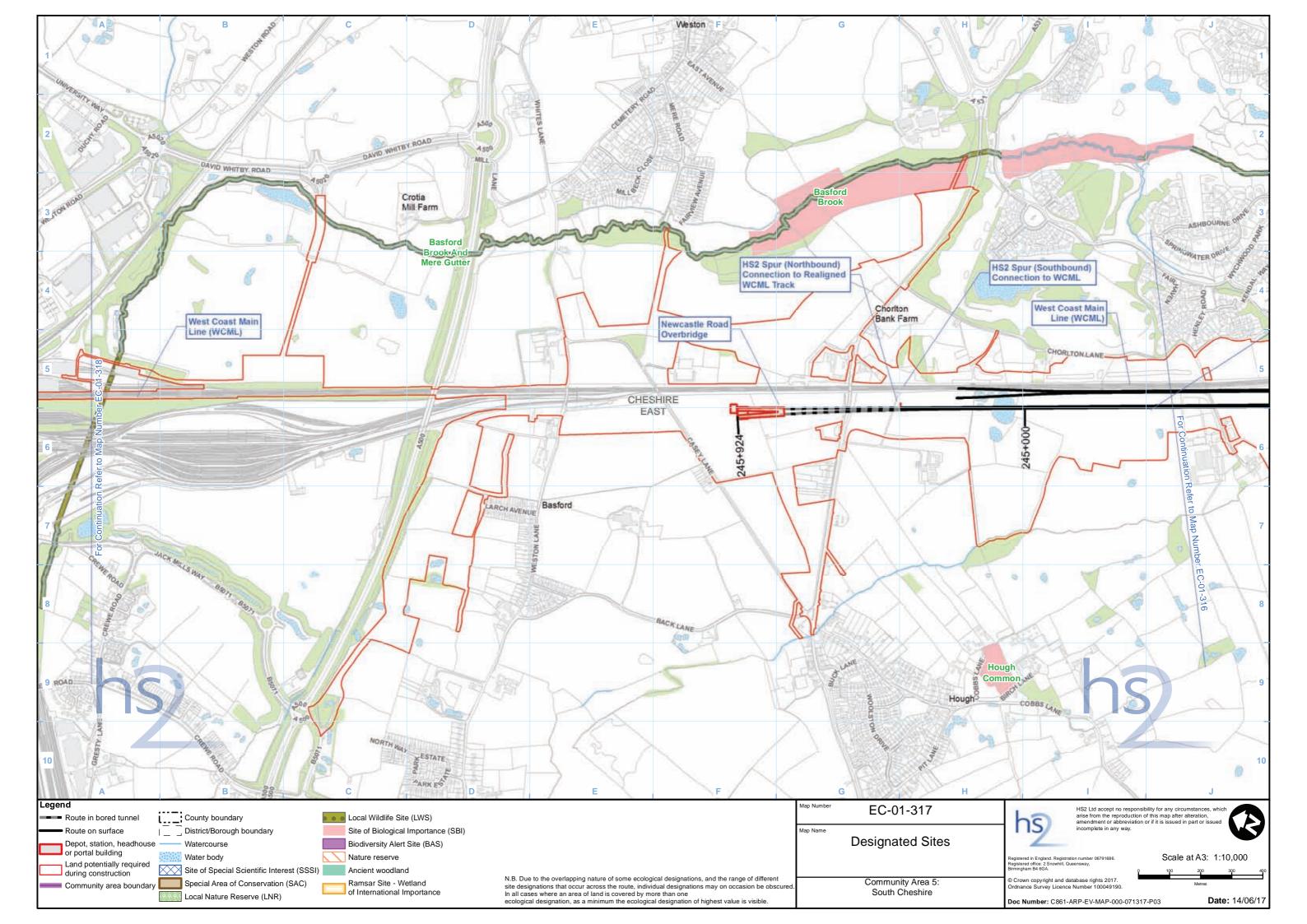


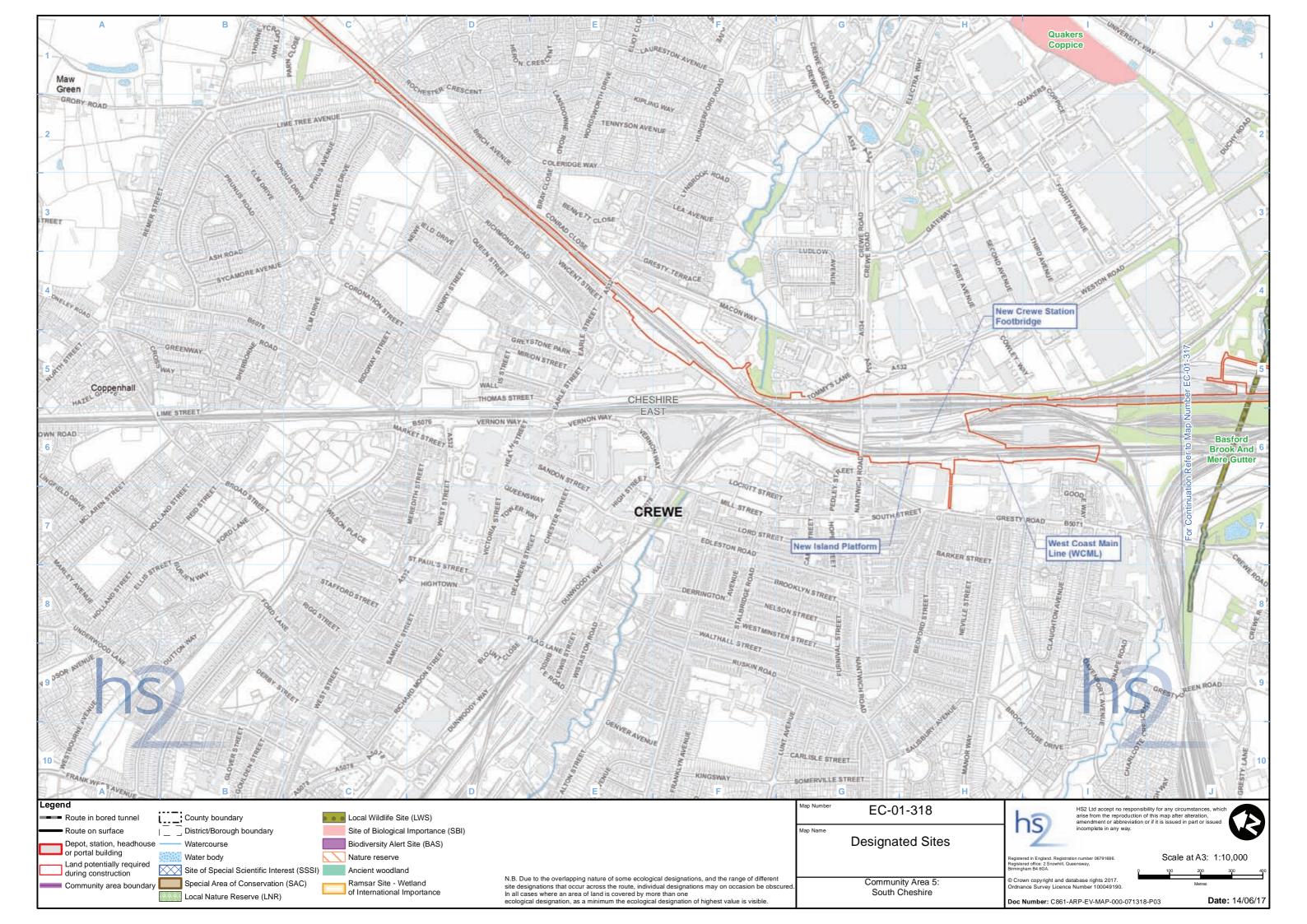












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