

Supplementary Environmental Statement 3 and Additional Provision 4 Environmental Statement

Volume 5 | Technical appendices map book Ecology

October 2015

SES3 and AP4 ES 3.5.2.5

Supplementary Environmental Statement 3 and Additional Provision 4 Environmental Statement Volume 5 | Technical appendices map book Ecology

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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.

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

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Contents

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Map series name	EC-04 - Amphibians		
Map series description	This map series shows the results of amphibian surveys conducted to inform the Environmental Assessment. It principally details the results of great crested newt surveys conducted. In addition it shows the location of those 'exceptional' populations of common amphibians recorded.		
Community Forum Area name			
CFA 04 – Kilburn (Brent) to Old Oak Common	×		
CFA o5 – Northolt Corridor	×		
CFA o6 – South Ruislip to Ickenham	✓		
CFA o7 – Colne Valley	✓		
CFA o8 – The Chalfonts and Amersham	×		
CFA 09 – Central Chilterns	✓		
CFA 10 – Dunsmore, Wendover and Halton	×		
CFA 11 — Stoke Mandeville and Aylesbury	×		
CFA 12 – Waddesdon and Quainton	✓		
CFA 13 — Calvert, Steeple Claydon, Twyford and Chetwode	✓		
CFA 14 – Newton Purcell to Brackley	✓		
CFA 15 – Greatworth to Lower Boddington	✓		
CFA 16 – Ladbroke and Southam	✓		
CFA 17 – Offchurch and Cubbington	✓		
CFA 18 – Stoneleigh, Kenilworth and Burton Green	✓		
CFA 19 – Coleshill Junction	✓		
CFA 20 – Curdworth to Middleton	✓		
CFA 21 — Drayton Bassett, Hints and Weeford	✓		
CFA 22 — Whittington to Handsacre	✓		
CFA 23 – Balsall Common and Hampton-in-Arden	✓		
CFA 24 — Birmingham Interchange and Chelmsley Wood	✓		
CFA 25 – Castle Bromwich and Bromford	✓		
CFA 26 – Washwood Heath to Curzon Street	✓		
Off-route – Heathrow Express (HEx) Depot Relocation	×		
Off-route – Modifications to WCML between Lichfield and Colwich	×		

Mapping explanatory notes

Structure of the HS2 Supplementary Environmental Statement 3 and Additional Provision 4 Environmental Statement

The Supplementary Environmental Statement 3 (SES3) and Additional Provision 4 Environmental Statement (AP4 ES) comprises:

- Non-technical summary (NTS). This provides a summary in non-technical language of the SES₃ (Part 1) and AP₄ ES (Part 2) and of any likely significant environmental effects, both beneficial and adverse, which are new or different to those reported in the High Speed 2 (HS₂) Phase One Environmental Statement (ES) submitted to Parliament in November 2013 in support of the hybrid Bill ('the Bill') for Phase One of HS₂ (hereafter referred to as 'the main ES') as updated by subsequent SES and AP ES documents;
- Volume 1: Introduction to the SES3 and AP4 ES. This introduces the supplementary environmental information and design changes included within the SES3 and amendments, which have resulted in the need to amend the Bill, within the AP4 ES. It also explains any changes to the scope, methodology, assumptions and limitations required for the environmental assessment;
- Volume 2: CFA reports and Map Books. These describe the supplementary environmental information and design changes included within the SES₃ (Part 1) and amendments within the AP₄ ES (Part 2). Any new or different likely significant environmental effects arising from these changes and amendments in each CFA, compared to those reported in the main ES, as updated by SES and SES₂ documents (and SES₃ for the AP₄ amendments) are reported. The AP₁, AP₂ and AP₃ amendments are also taken into account where relevant. In addition, the main local alternatives that have been considered are described, where relevant;
- Volume 3: Route-wide effects. This reports new or different likely significant route-wide effects arising from the supplementary environmental information and design changes included within the SES3 (Part 1) and amendments within the AP4 ES (Part 2) compared to those reported in the main ES as updated by SES and SES2 (and SES3 for the AP4 amendments). The AP1, AP2 and AP3 amendments are also taken into account where relevant;
- Volume 4: Off-route effects. This reports new or different likely significant off-route effects arising from the supplementary environmental information included within the SES₃ and an amendment within the AP4 ES compared to those reported in the main ES as updated by SES and SES₂ (and SES₃ for the AP4 amendment). The AP1, AP2 and AP3 amendments are also taken into account where relevant;
- Volume 5: Appendices and Map Books. This contains environmental information and associated maps in support of the other volumes of the SES3 and AP4 ES; and
- Glossary of terms and list of abbreviations. This contains any new or different terms and abbreviations used throughout the SES and AP ES reports, compared to those included in the main 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 SES₃ and AP₄ 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 SES3 and AP4 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. 77+000 or 158+500.

Chainage (known as reference chainage) is referenced from Euston Station, which is 0+000, and the value presented is in metres. E.g. 77+000 refers to the point, 77,000m, or 77km, 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 1km intervals. For maps at 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 different amounts of alignment on the map.

Map sheet layout

Each map in Volume 2 is presented twice, with the main ES map (published November 2013) on the left hand page and the SES3 and AP4 ES map on the right. For the CT-05 and CT-06 map series, the SES3 and AP4 ES map is annotated with different coloured clouds which highlight the areas of change. The coloured text box provides a brief description of the design change and amendment, and gives the SES3 and AP4 ES reference number. Only maps which have been amended as a result of the SES3 and AP4 ES are included within the map books. Other design changes which are within the existing limits of the Bill and do not result in new or different likely significant effects are also shown on the maps, but are not indicated by a cloud. The below table highlights the coloured clouds used, and their description.

Cloud / text box colour	Description	
Blue	Design changes relating to the SES ₃ (Part 1 of each Volume 2 CFA report).	
Red	Proposed amendments relating to AP4 (Part 2 of each Volume 2 CFA report).	
Grey	Proposed amendments and design changes relating to previous APs and SESs, provided for reference.	

Each Volume 5 map is annotated to describe the change to a receptor or significant effect, and to give the SES3 and AP4 ES reference number. For more detailed information about the SES3 and AP4 ES annotation, refer to the map series legend. Only maps which have been amended as a result of the SES3 and AP4 ES are included within the map book. Changes to receptors or significant effects relating to previous APs and SESs are also provided for reference.

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 the West Midlands to the left.

The exception to this, are map series LV-03 and LV-04, 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 the West Midlands to the top.

Map books

In total there are 35 map books which make up the SES3 and AP4 ES, spread across volumes 2, 4 and 5. A list of the titles is provided below for reference.

Name	Name		
Volume 2 Community forum area map book: CFA4 Kilburn (Brent) to Old Oak Common	Volume 2 Community forum area map book: CFA23 Balsall Common and Hampton-in-Arden		
Volume 2 Community forum area map book: CFA5 Northolt Corridor	Volume 2 Community forum area map book: CFA24 Birmingham Interchange and Chelmsley Wood		
Volume 2 Community forum area map book: CFA6 South Ruislip to Ickenham	Volume 2 Community forum area map book: CFA25 Castle Bromwich and Bromford		
Volume 2 Community forum area map book: CFA7 Colne Valley	Volume 2 Community forum area map book: CFA26 Washwood Heath to Curzon Street		
Volume 2 Community forum area map book: CFA8 The Chalfonts and Amersham	Volume 4 Off-route effects map book		
Volume 2 Community forum area map book: CFA9 Central Chilterns	Volume 5 Technical appendices map book: Agriculture, forestry and soils		
Volume 2 Community forum area map book: CFA10 Dunsmore, Wendover and Halton	Volume 5 Technical appendices map book: Air quality		
Volume 2 Community forum area map book: CFA11 Stoke Mandeville and Aylesbury	Volume 5 Technical appendices map book: Community		
Volume 2 Community forum area map book: CFA12 Waddesdon and Quainton	Volume 5 Technical appendices map book: Cultural heritage		
Volume 2 Community forum area map book: CFA13 Calvert, Steeple Claydon, Twyford and Chetwode	Volume 5 Technical appendices map book: Ecology		
Volume 2 Community forum area map book: CFA14 Newton Purcell to Brackley	Volume 5 Technical appendices map book: Land quality		
Volume 2 Community forum area map book: CFA15 Greatworth to Lower Boddington	Volume 5 Technical appendices map book: Landscape and visual		
Volume 2 Community forum area map book: CFA16 Ladbroke and Southam	Volume 5 Technical appendices map book: Socio-economics		
Volume 2 Community forum area map book: CFA17 Offchurch and Cubbington	Volume 5 Technical appendices map book: Sound, noise and vibration		
Volume 2 Community forum area map book: CFA18 Stoneleigh, Kenilworth and Burton Green	Volume 5 Technical appendices map book: Traffic and transport		
Volume 2 Community forum area map book: CFA19 Coleshill Junction	Volume 5 Technical appendices map book: Water resources		
Volume 2 Community forum area map book: CFA20 Curdworth to Middleton	Volume 5 Technical appendices map book: Cross-topic appendix 1 - Committed developments		
Volume 2 Community forum area map book: CFA22 Whittington to Handsacre			



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Volume 5 Data dictionary and definitions

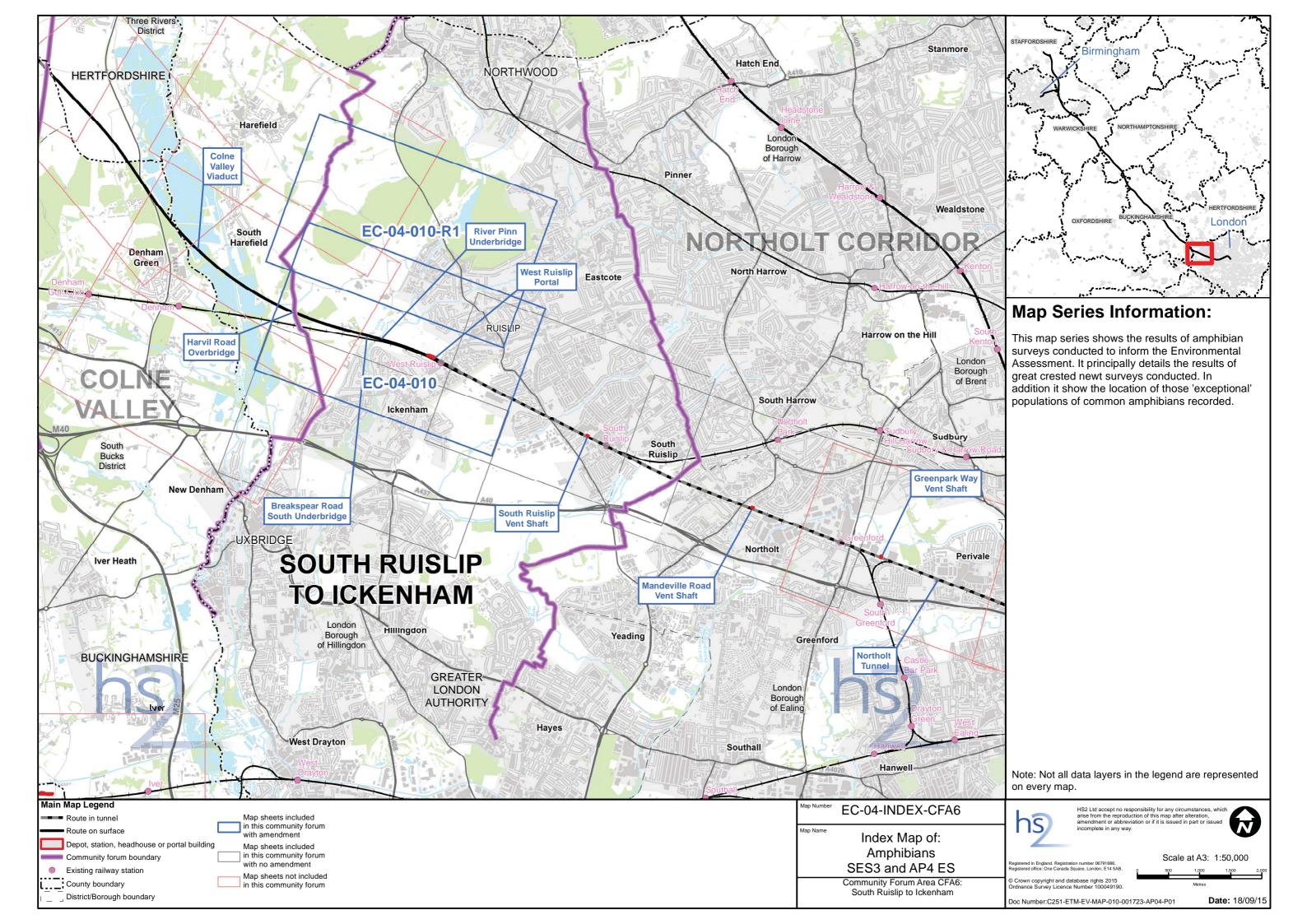
Data dictionary and definitions

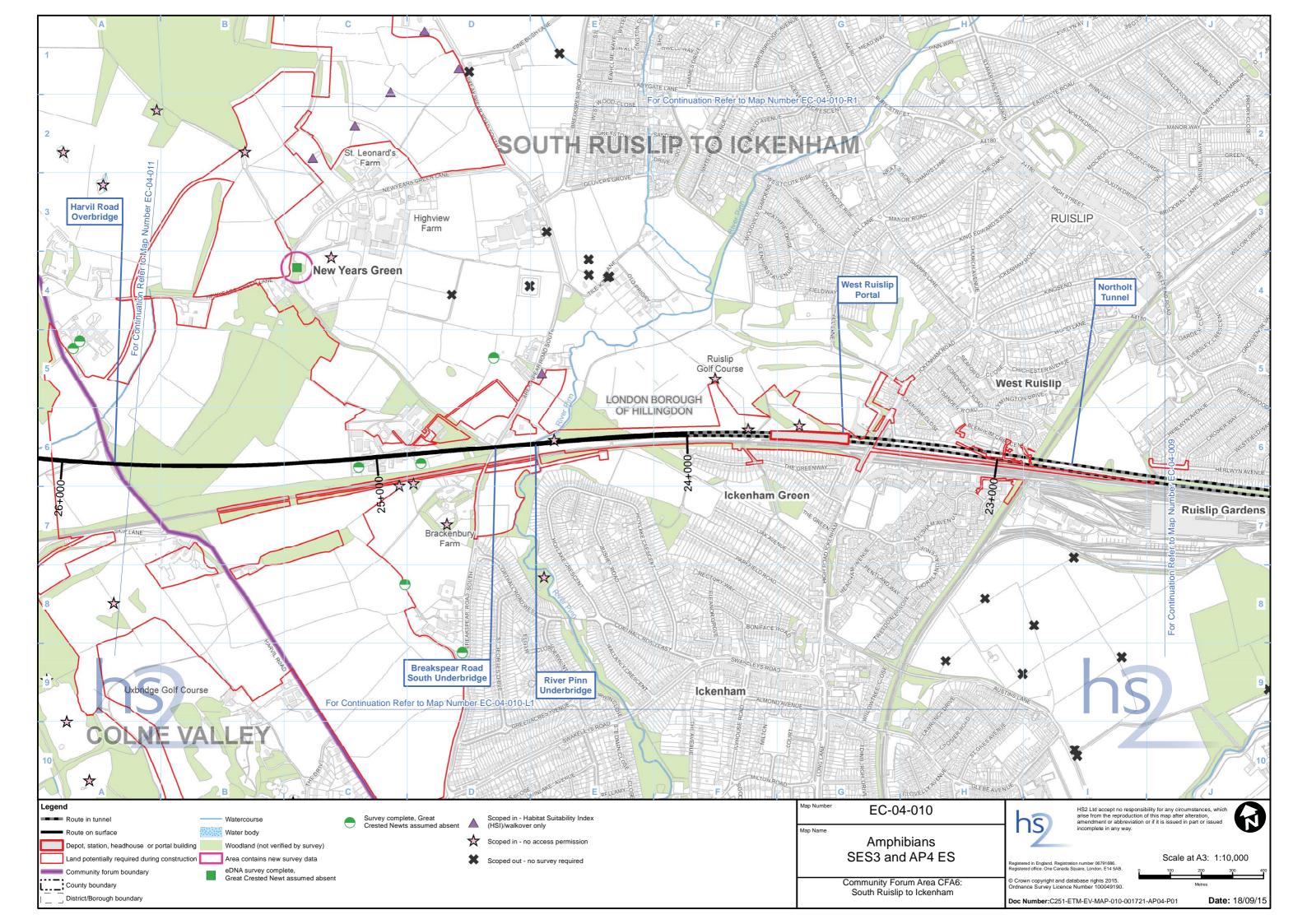
Legend features	Definition	Source	Copyright
250m radius from all water bodies where presence of Great Crested Newt is confirmed.	250m radius from all water bodies where presence of Great Crested Newt (GCN) is confirmed.	High Speed Two (HS2) Ltd	
50m radius from all water bodies where presence of Great Crested Newt is confirmed.	50m radius from all water bodies where presence of Great Crested Newt (GCN) is confirmed.	High Speed Two (HS2) Ltd	
500m radius from all water bodies where presence of Great Crested Newt is confirmed.	500m radius from all water bodies where presence of Great Crested Newt (GCN) is confirmed.	High Speed Two (HS2) Ltd	
Areas isolated by significant barriers to amphibian movement	Areas isolated by significant barriers to amphibian movement.	High Speed Two (HS2) Ltd	
Community forum boundary	The Environmental Statement has been split into 26 sections called Community Forum Areas.	High Speed Two (HS2) Ltd	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2015.
County boundary	County boundaries from Ordnance Survey boundary mapping.	Ordnance Survey	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2015.
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	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2015.
Great Crested Newt (GCN) survey locations	Results from Great Crested Newt pond surveys.	High Speed Two (HS2) Ltd	
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	
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	
Water body	Based on Ordnance Survey Vector Map District.	Ordnance Survey	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2015.
Watercourse	The Detailed River Network (DRN) is the only large-scale, accurate and fully attributed digital river centreline covering England and Wales.	Environment Agency	© Environment Agency copyright and/or database right 2015. All rights reserved.
Woodland (not verified by survey) Woodland (verified by survey)	Woodland areas derived from Ordnance Survey mastermap data.	Ordnance Survey	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2015.

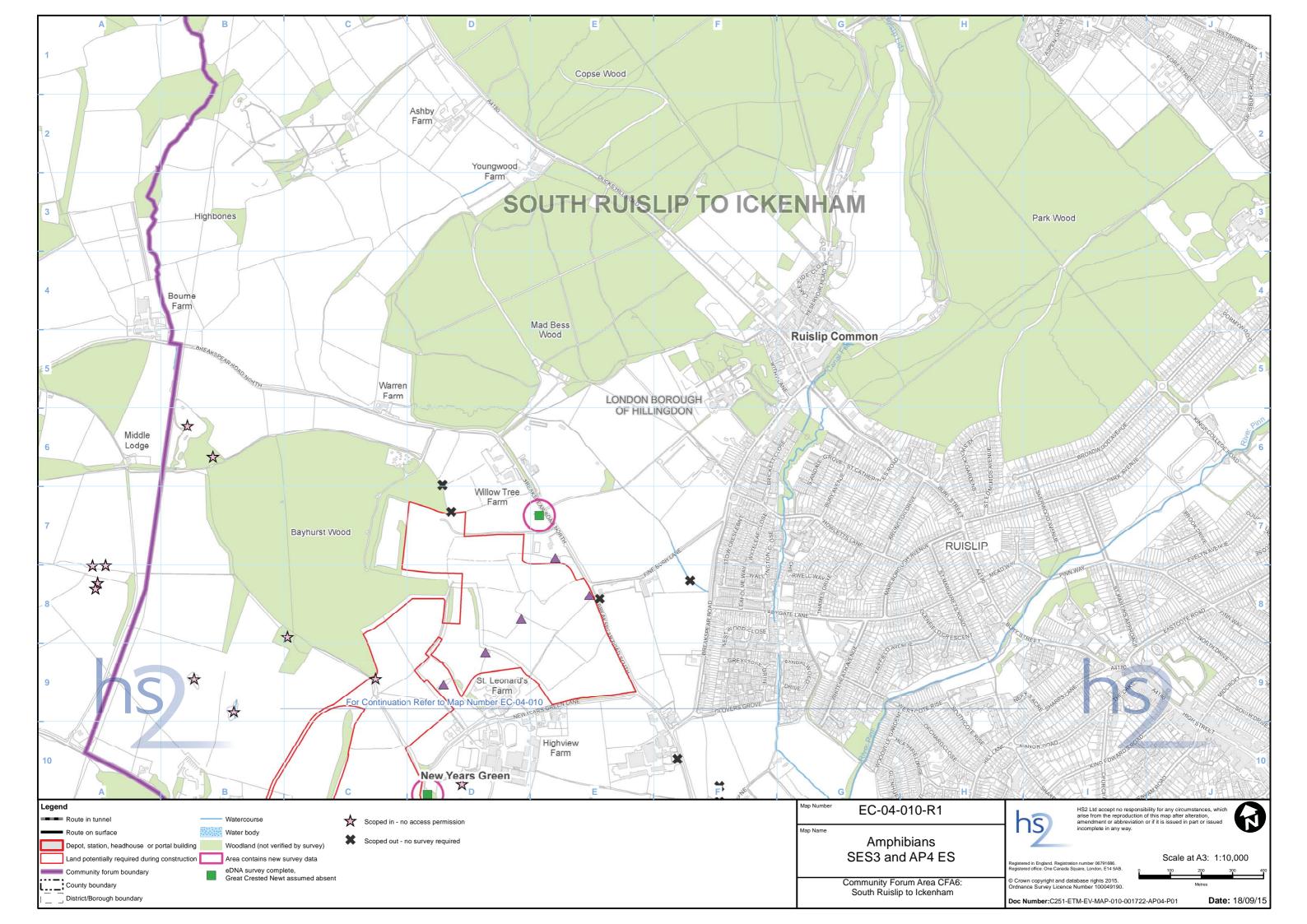


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Volume 5 | CFA6 South Ruislip to Ickenham EC-04 – Amphibians



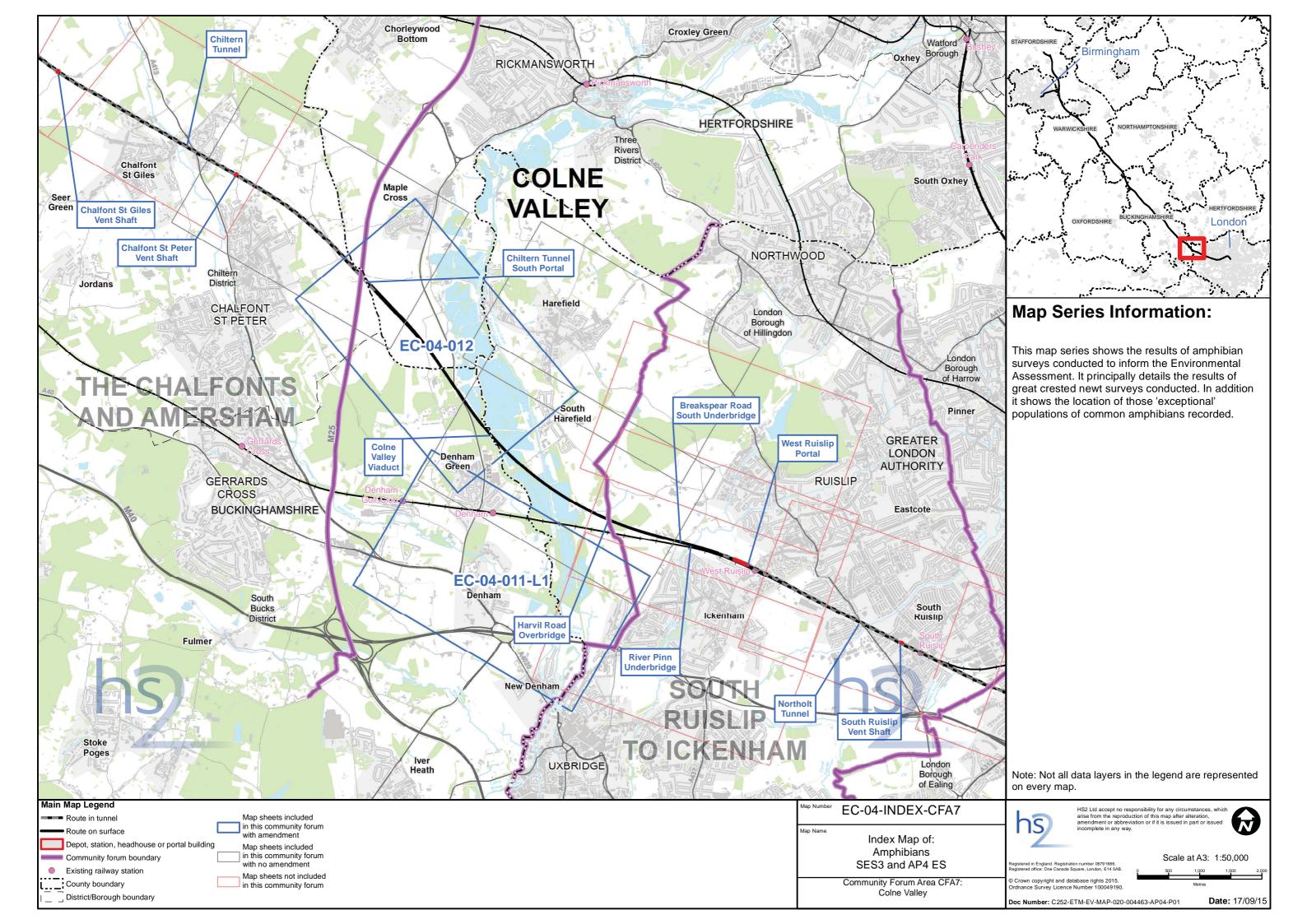


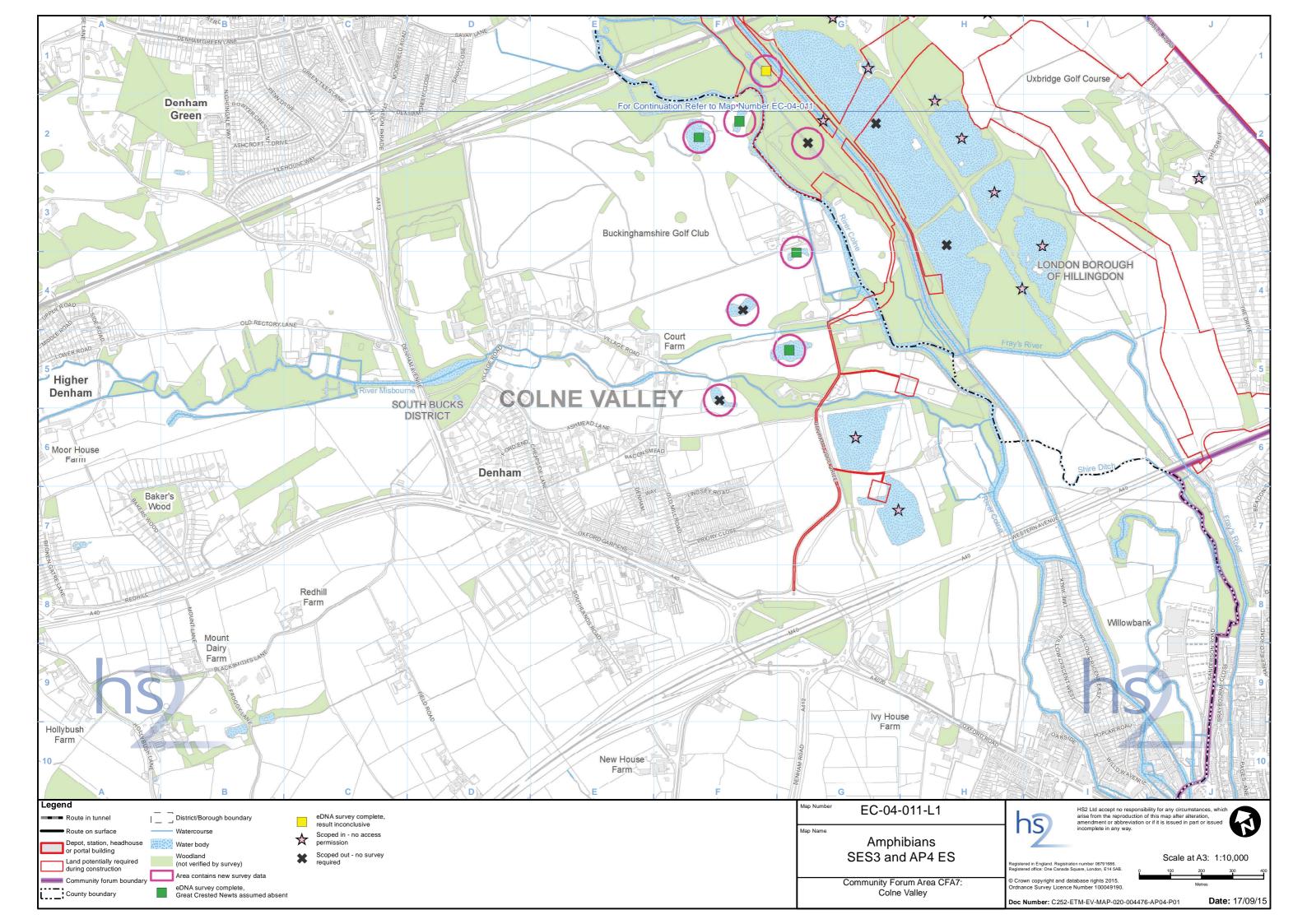


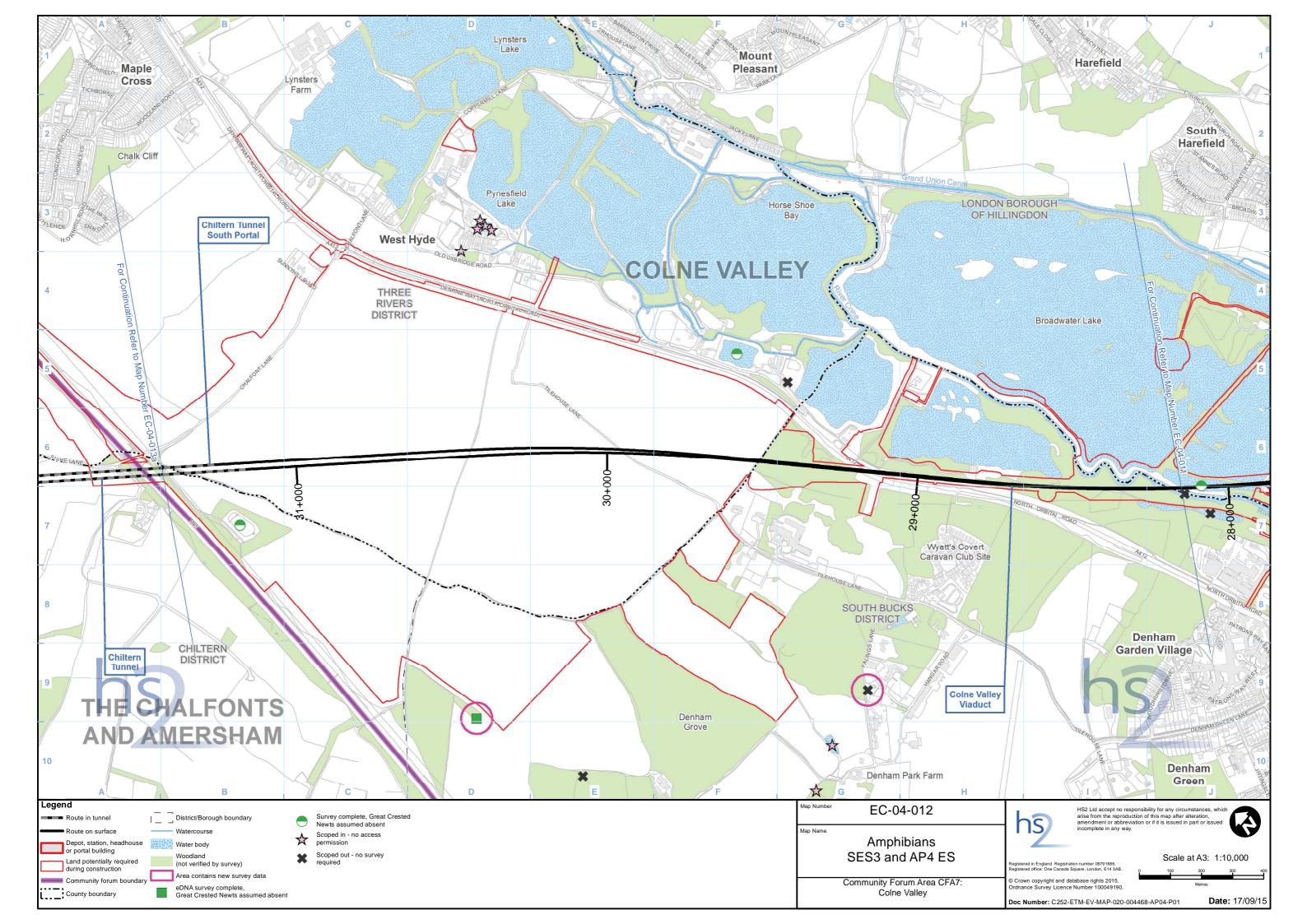


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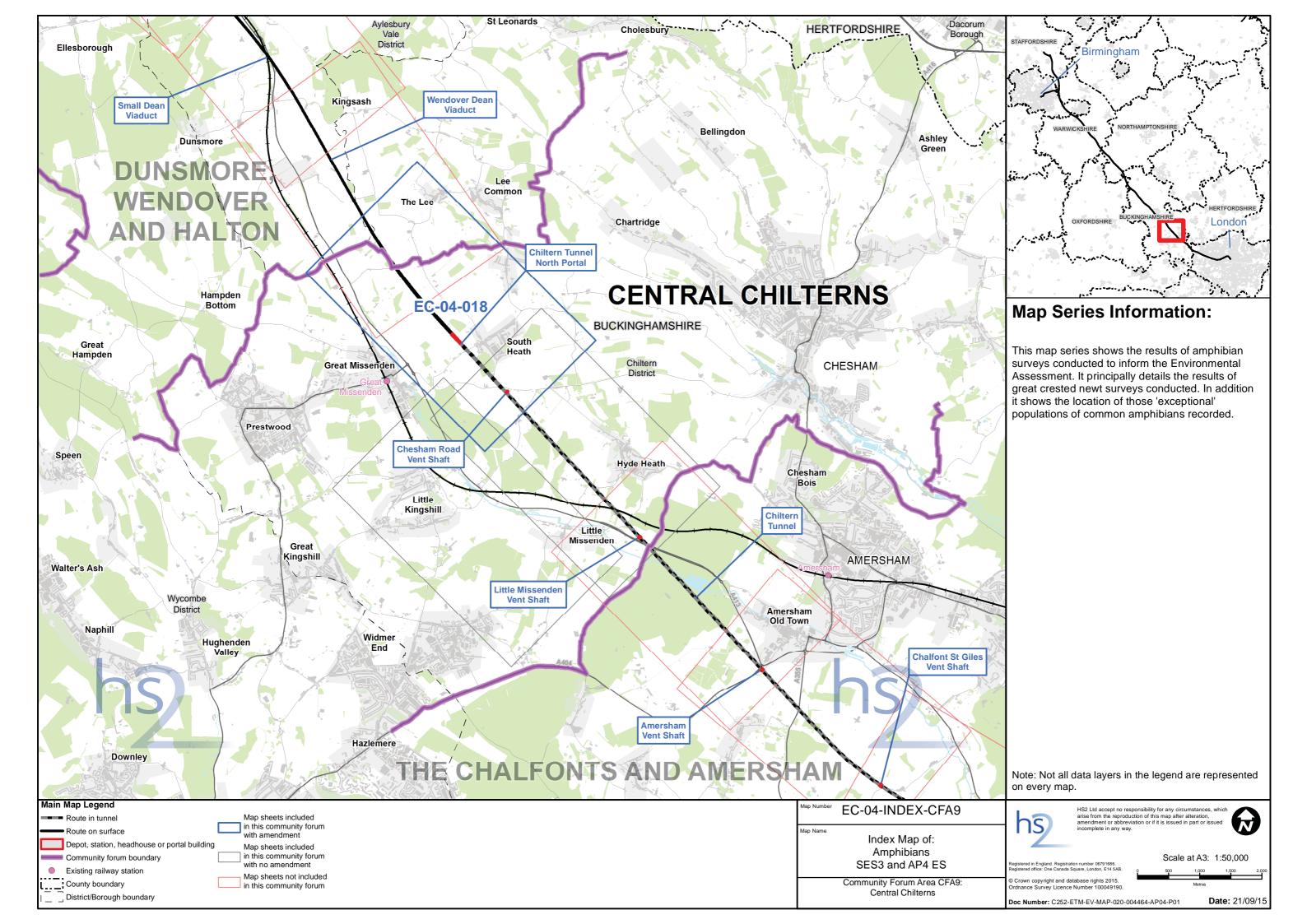


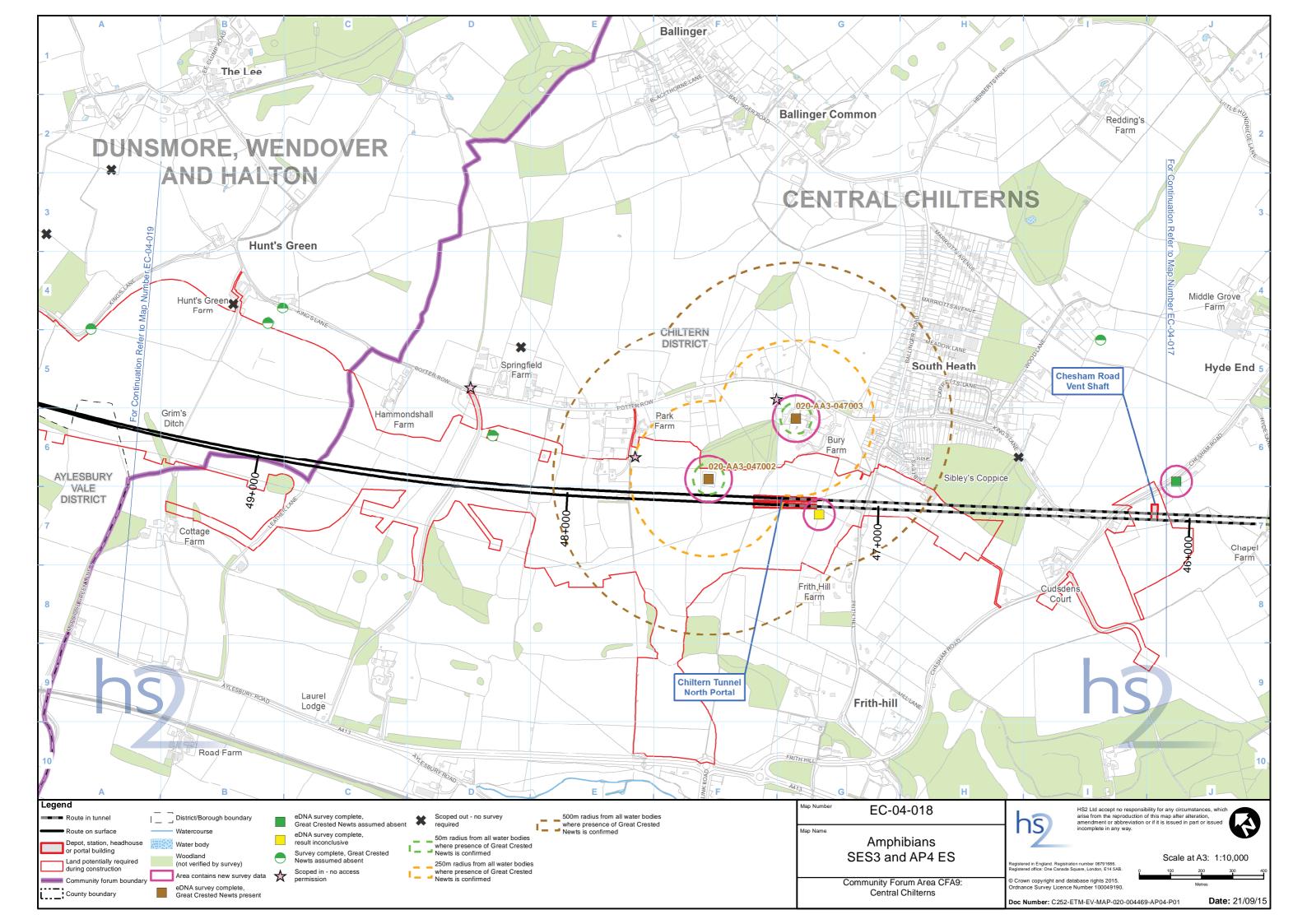


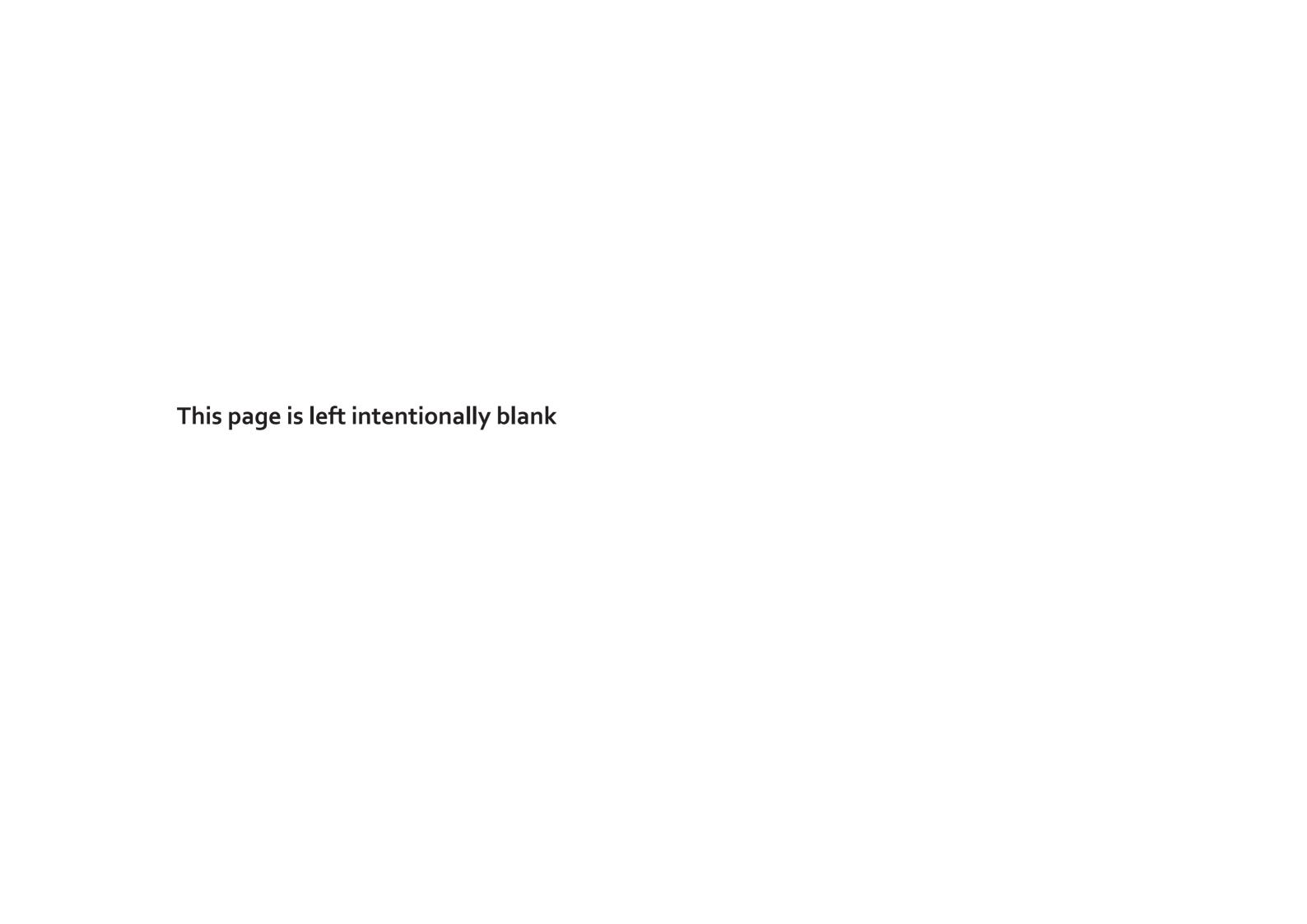


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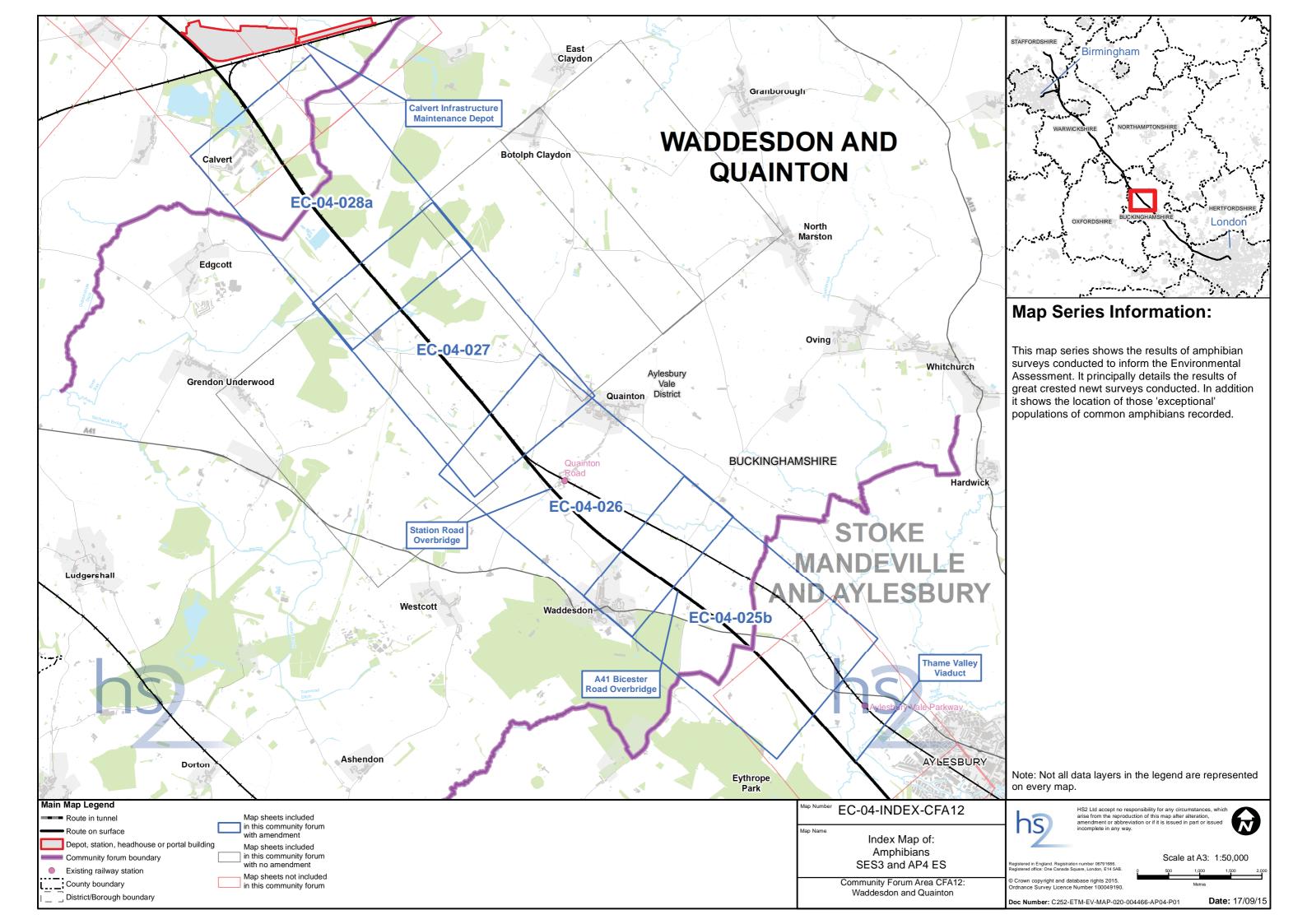


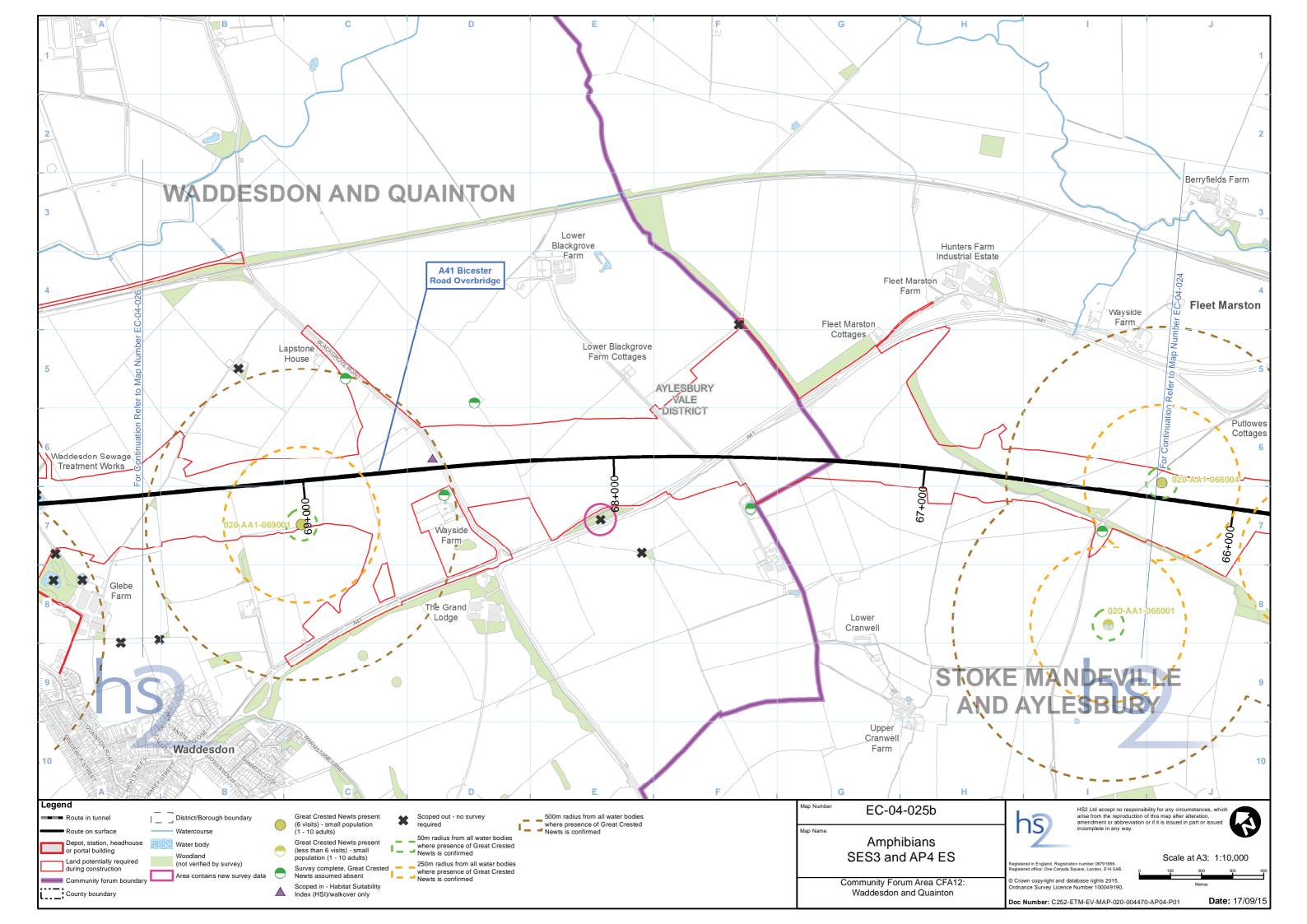


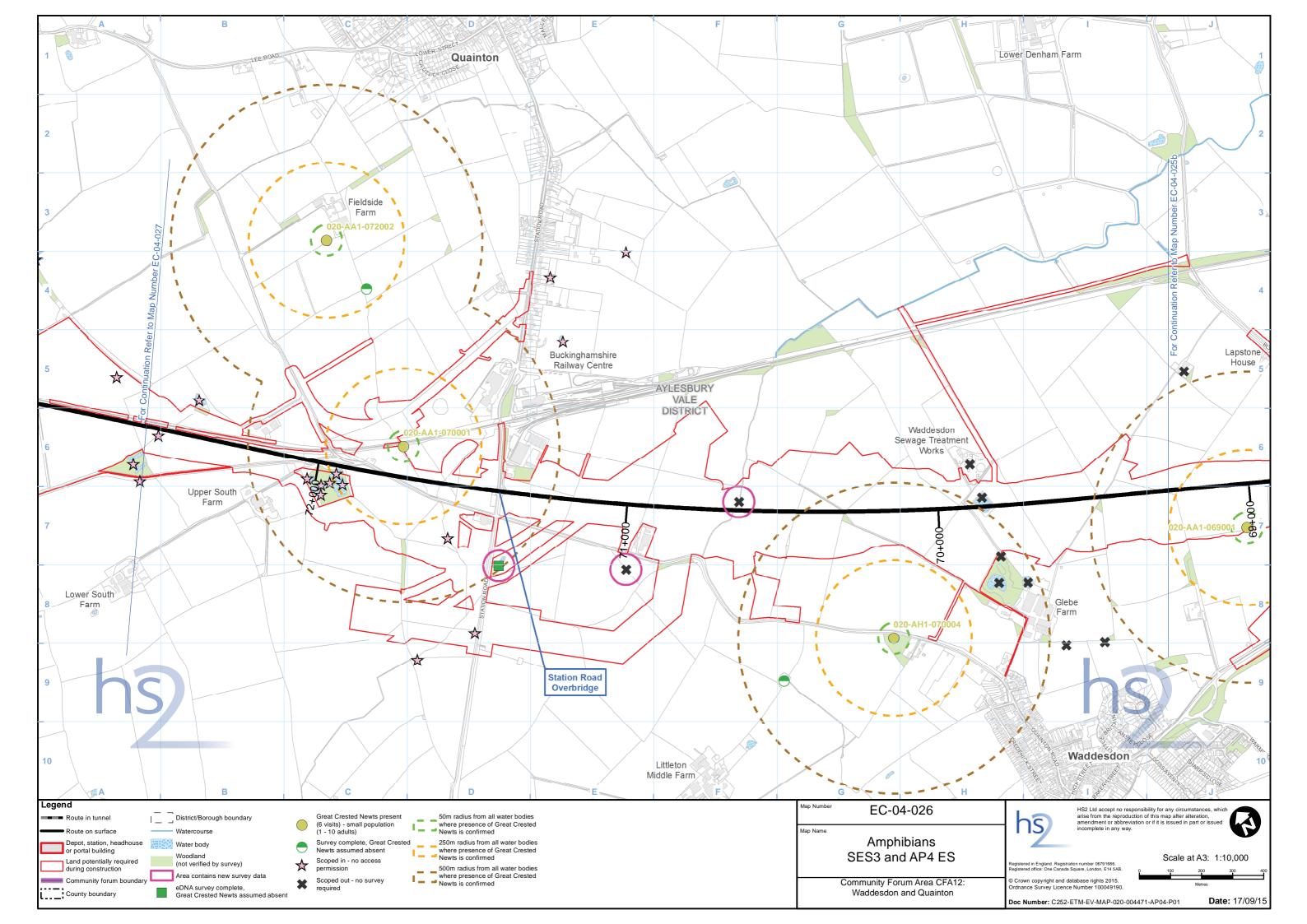


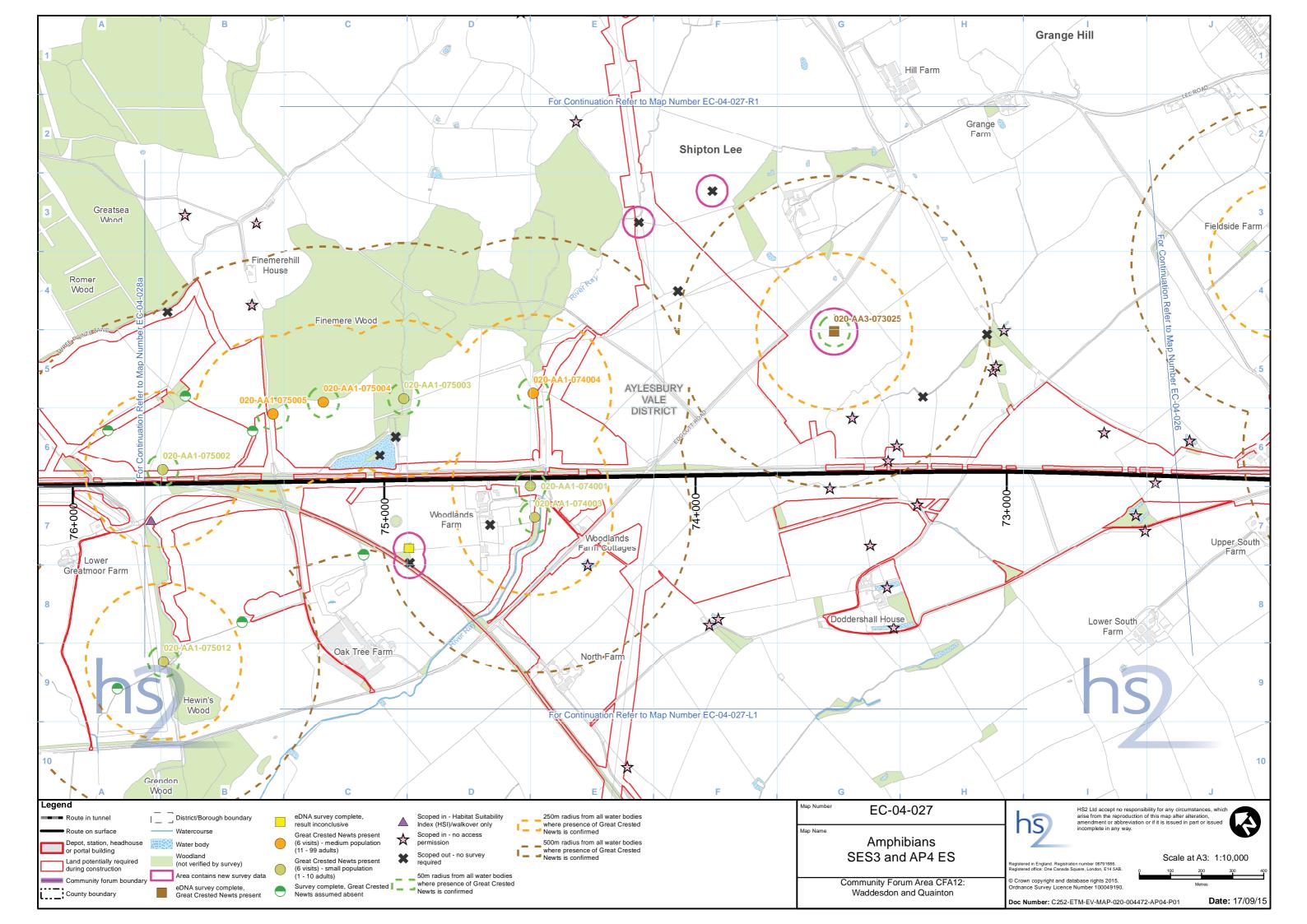
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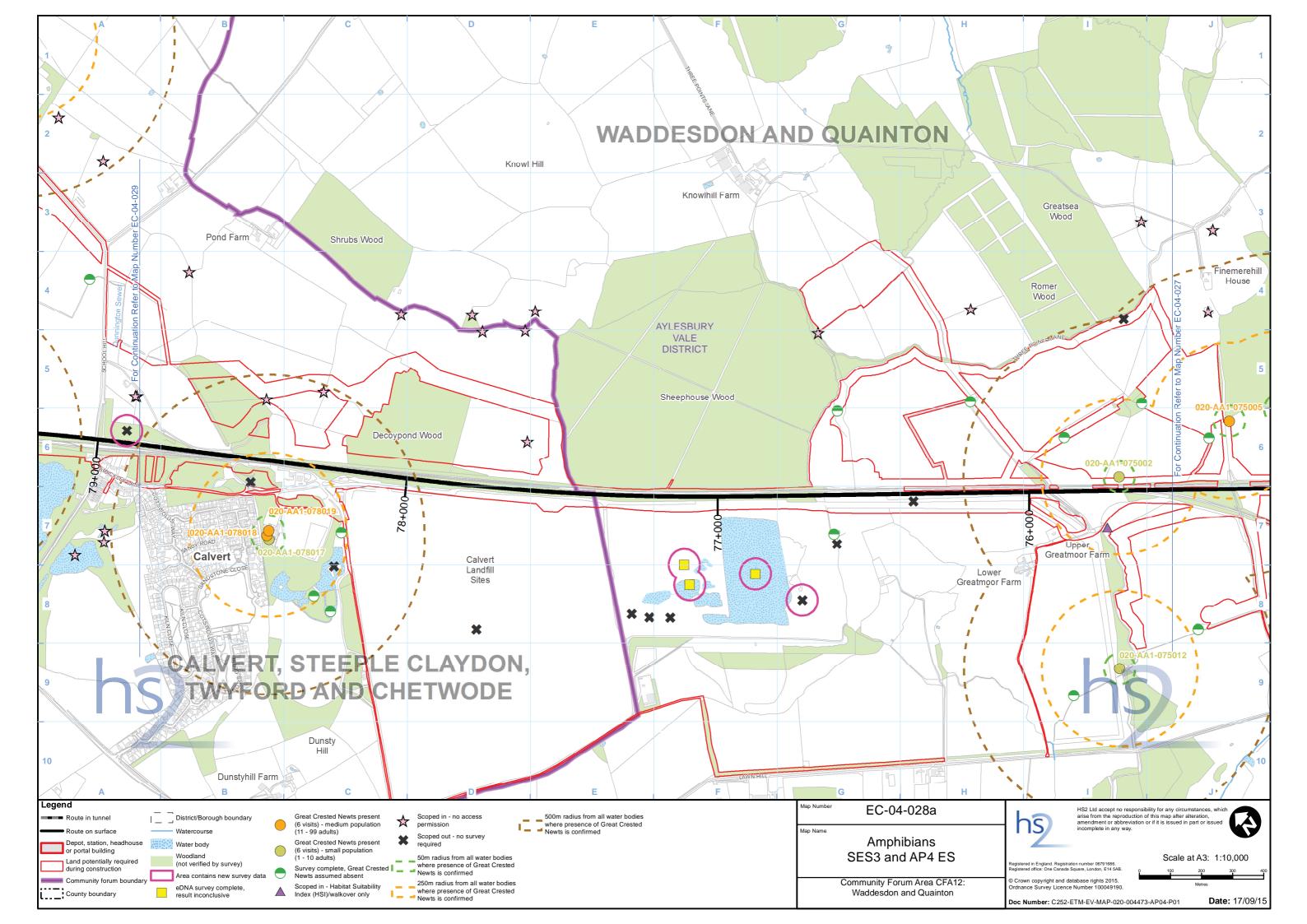
Volume 5 | CFA12 Waddesdon and Quainton EC-04 – Amphibians







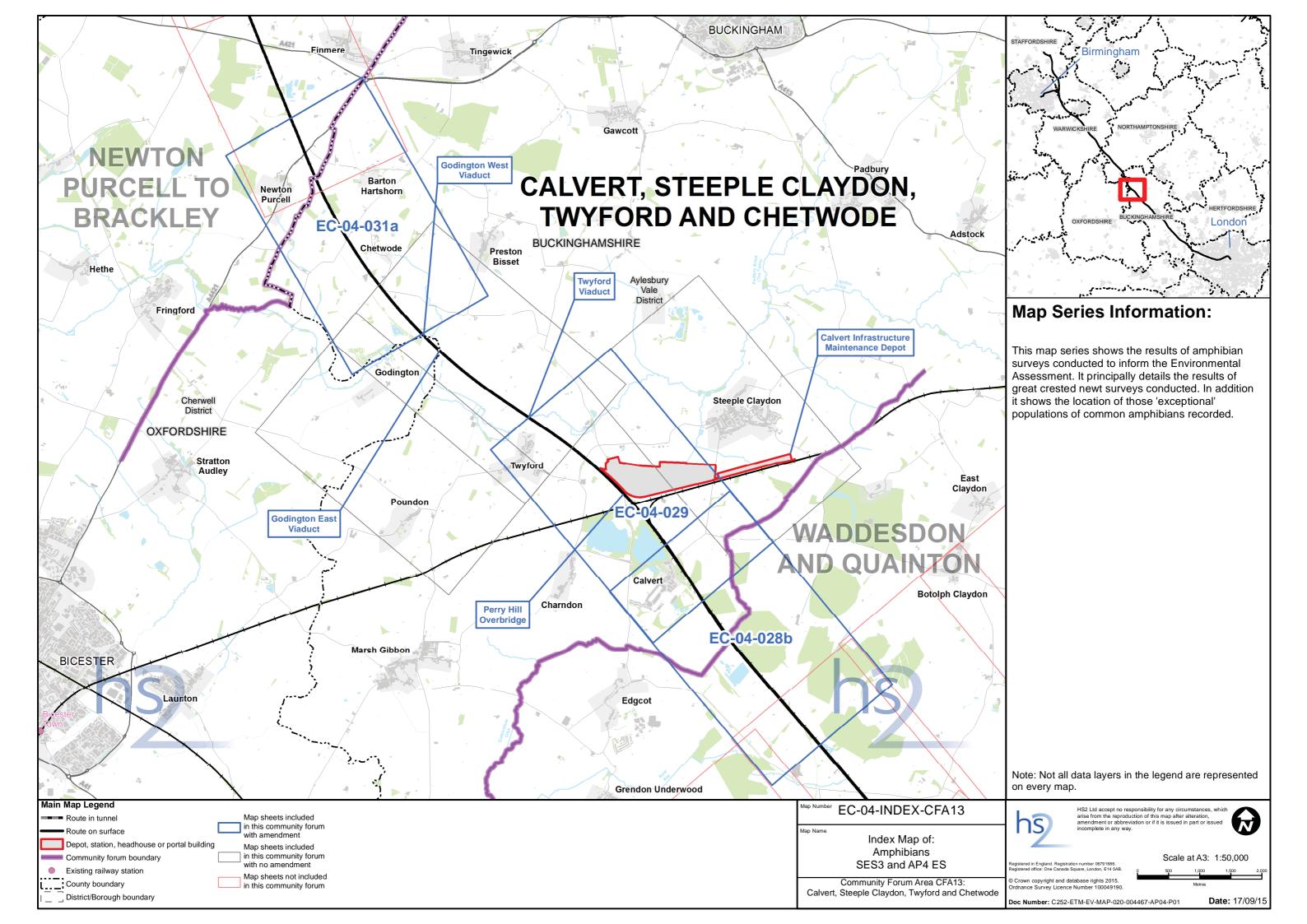


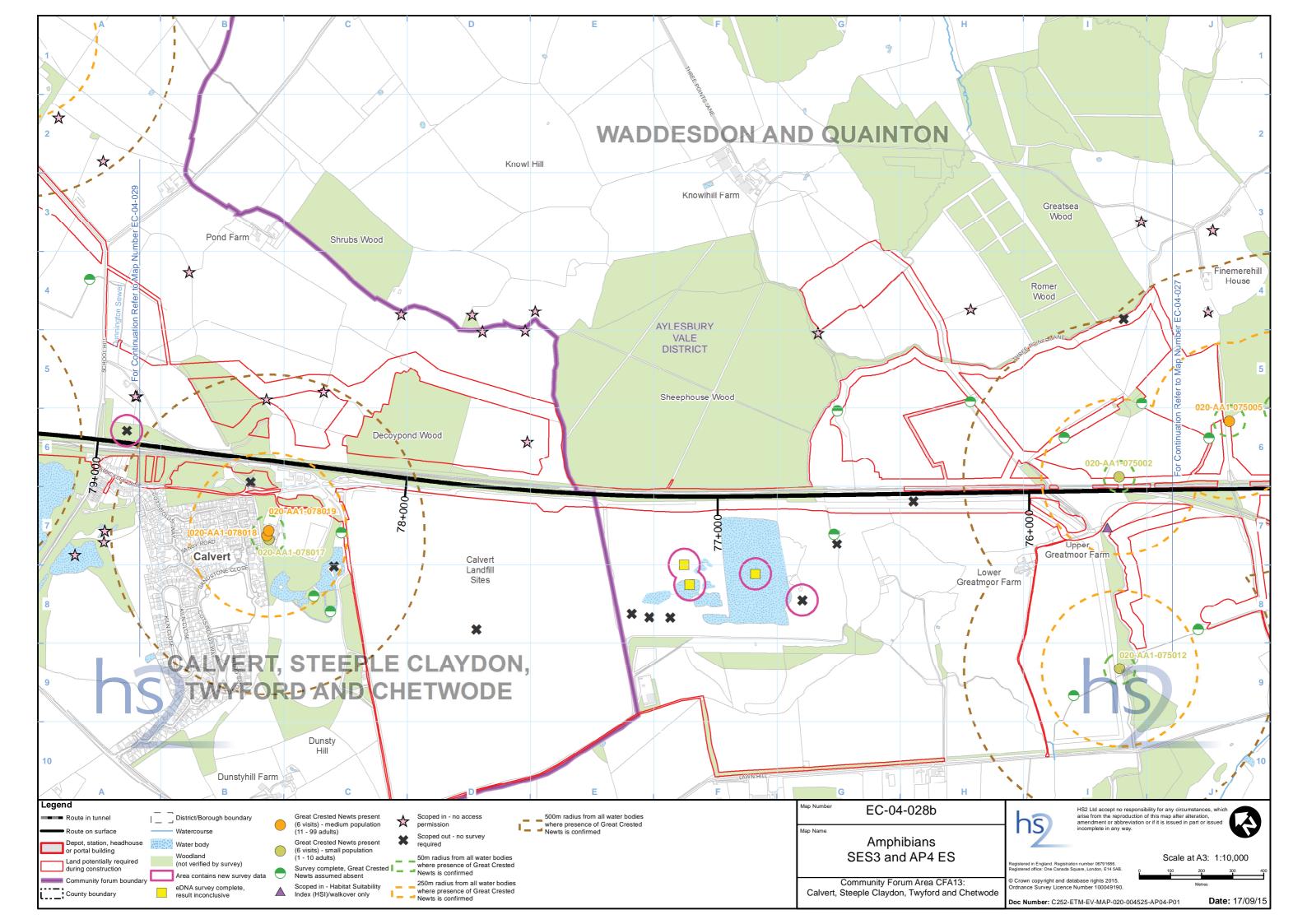


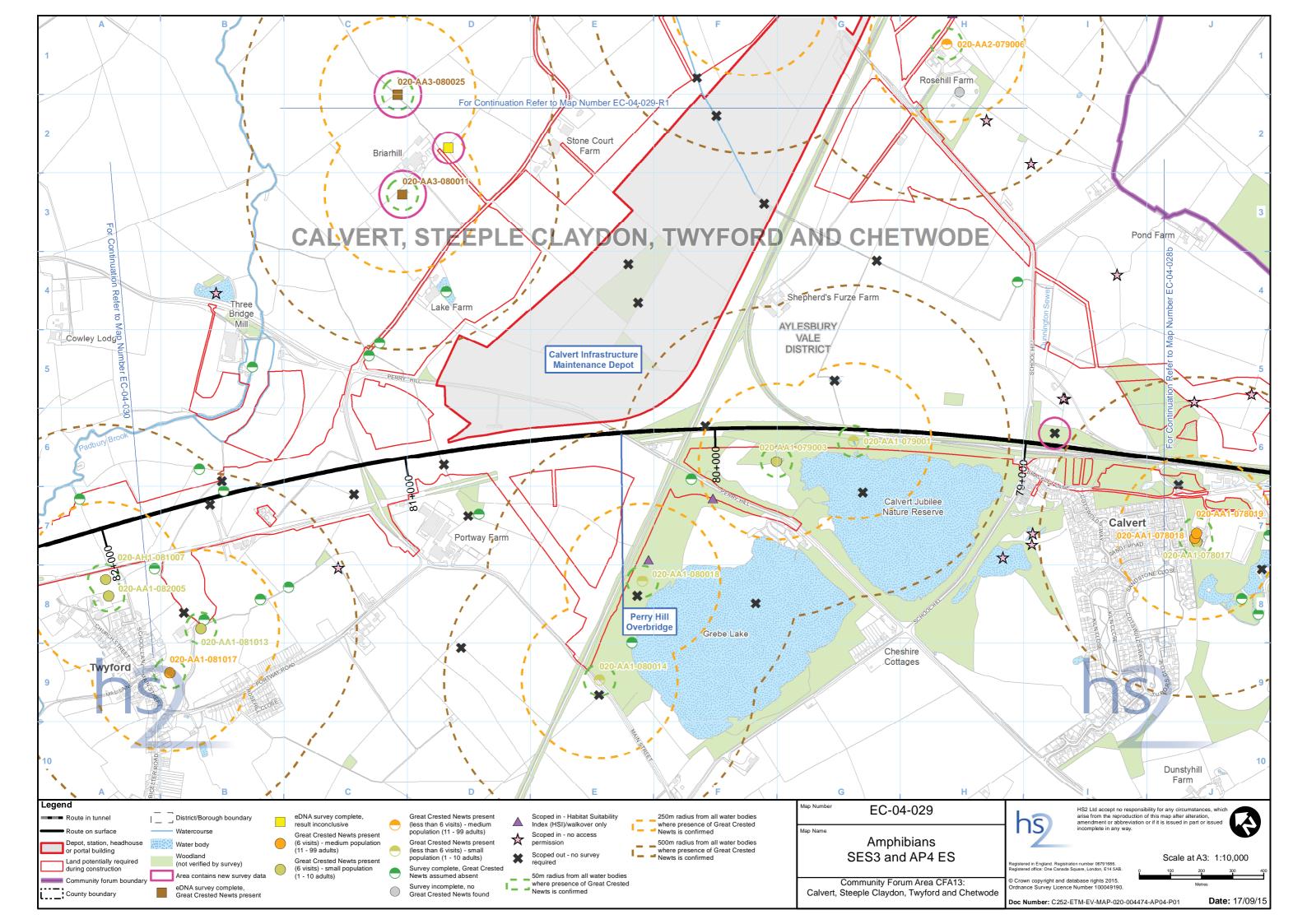


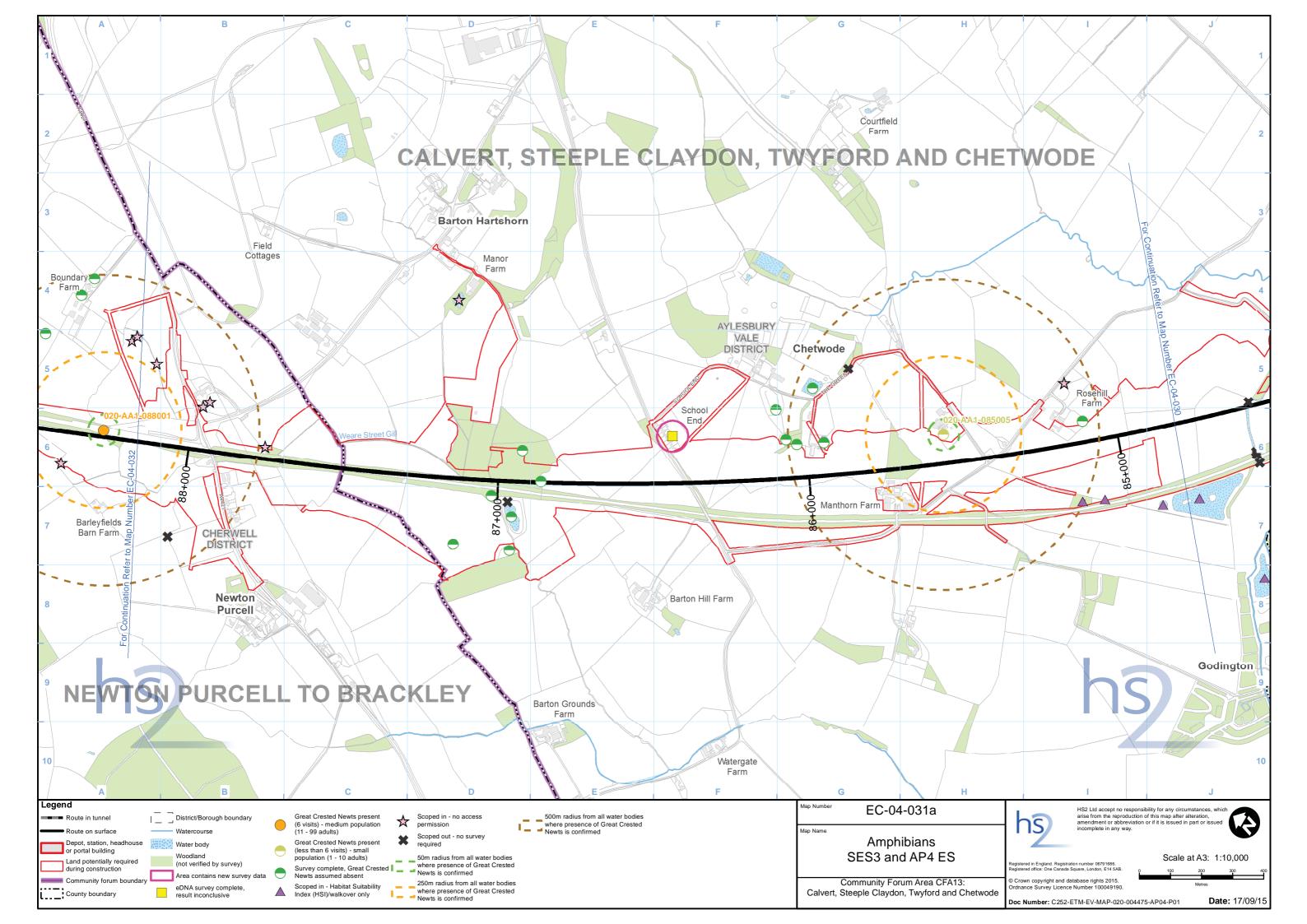
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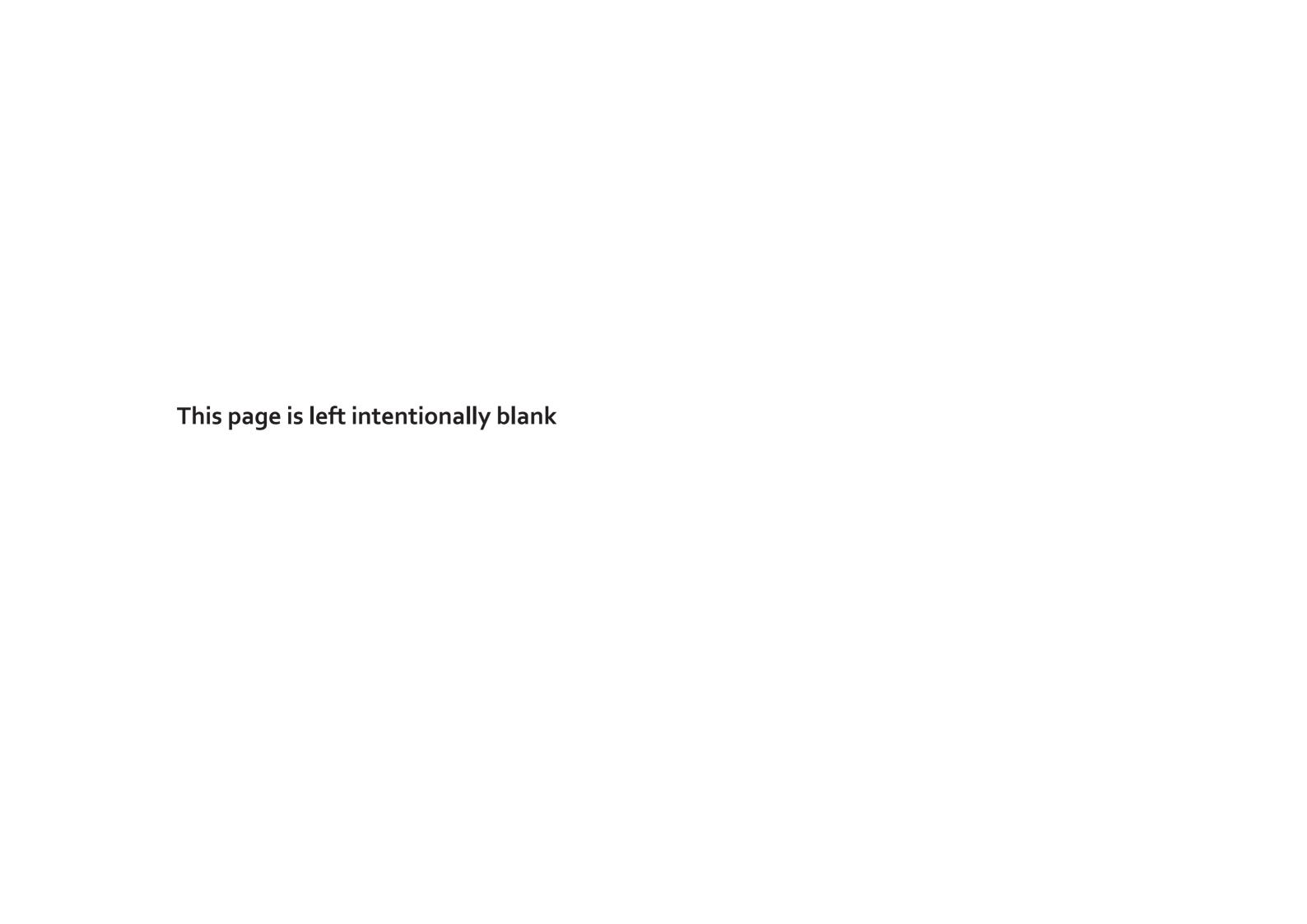
Volume 5 | CFA13 Calvert, Steeple Claydon, Twyford and Chetwode EC-04 – Amphibians







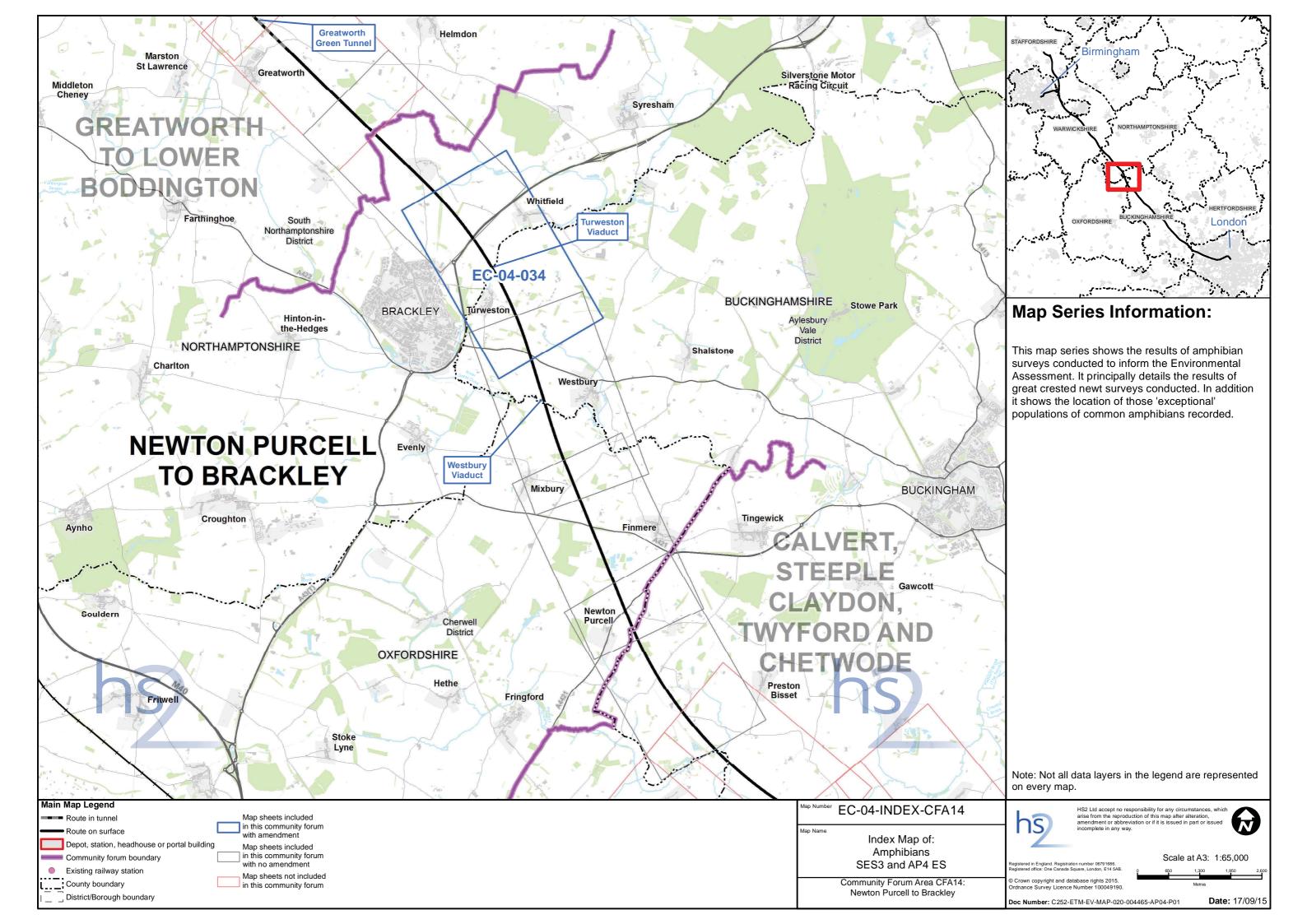


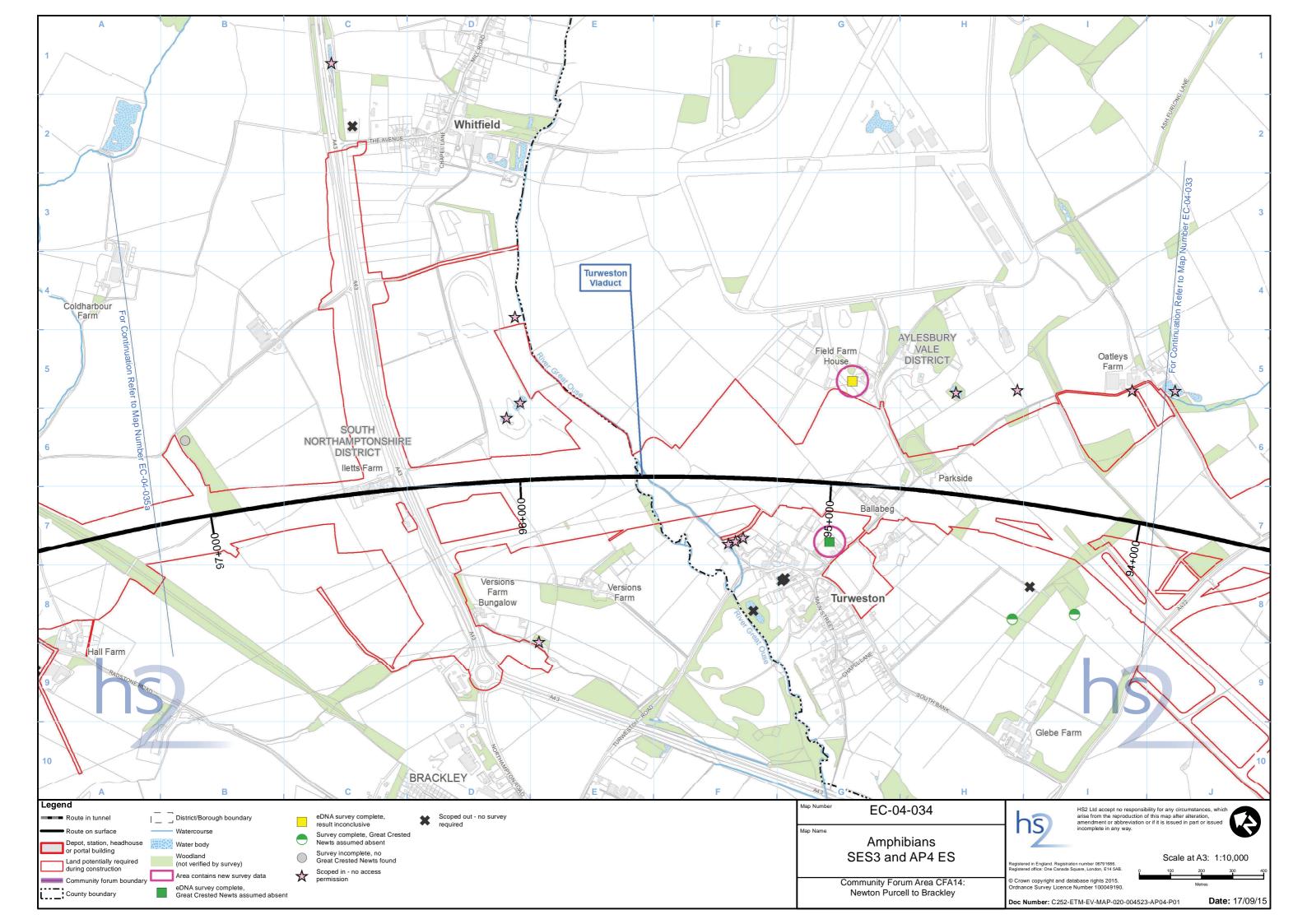


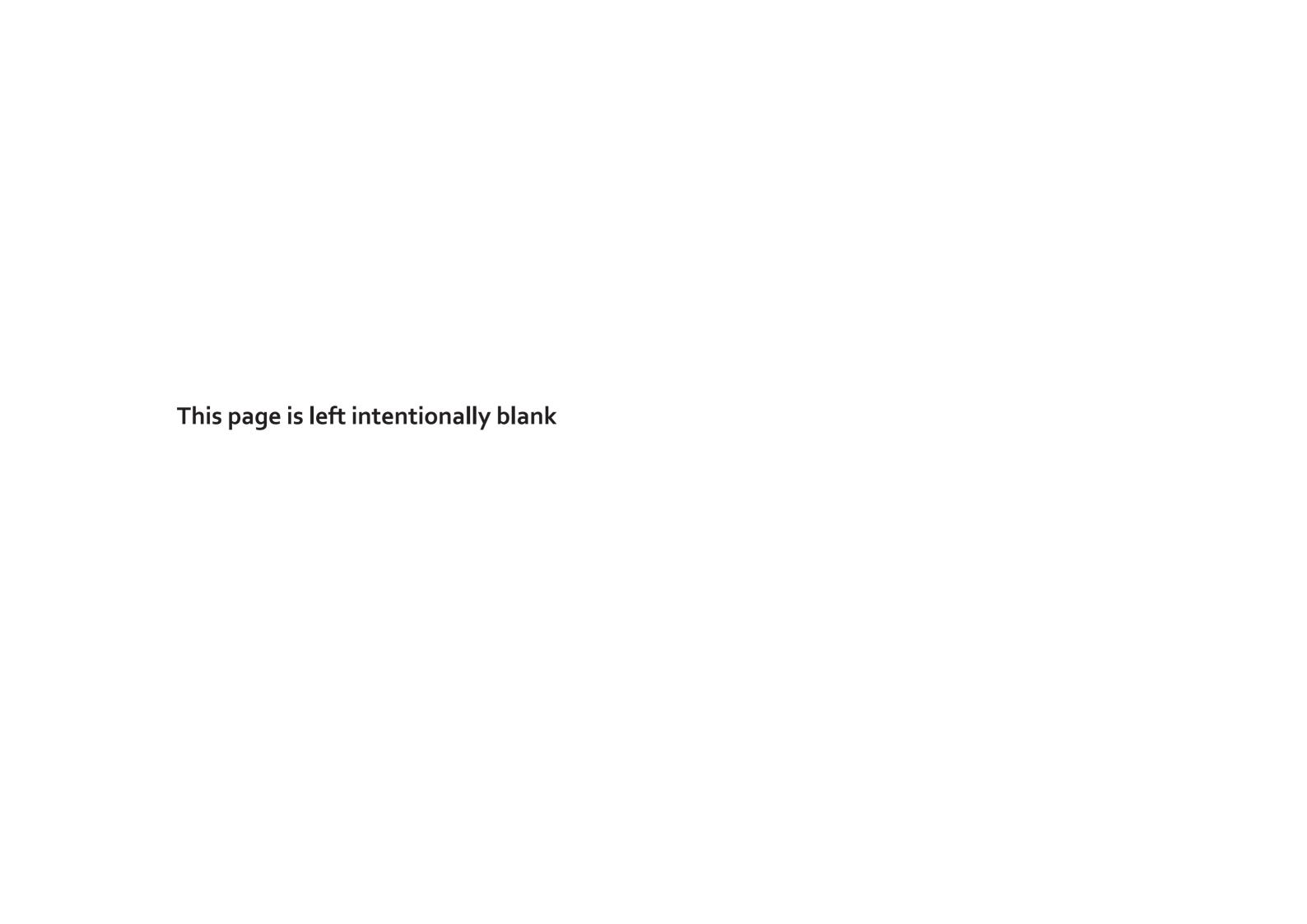


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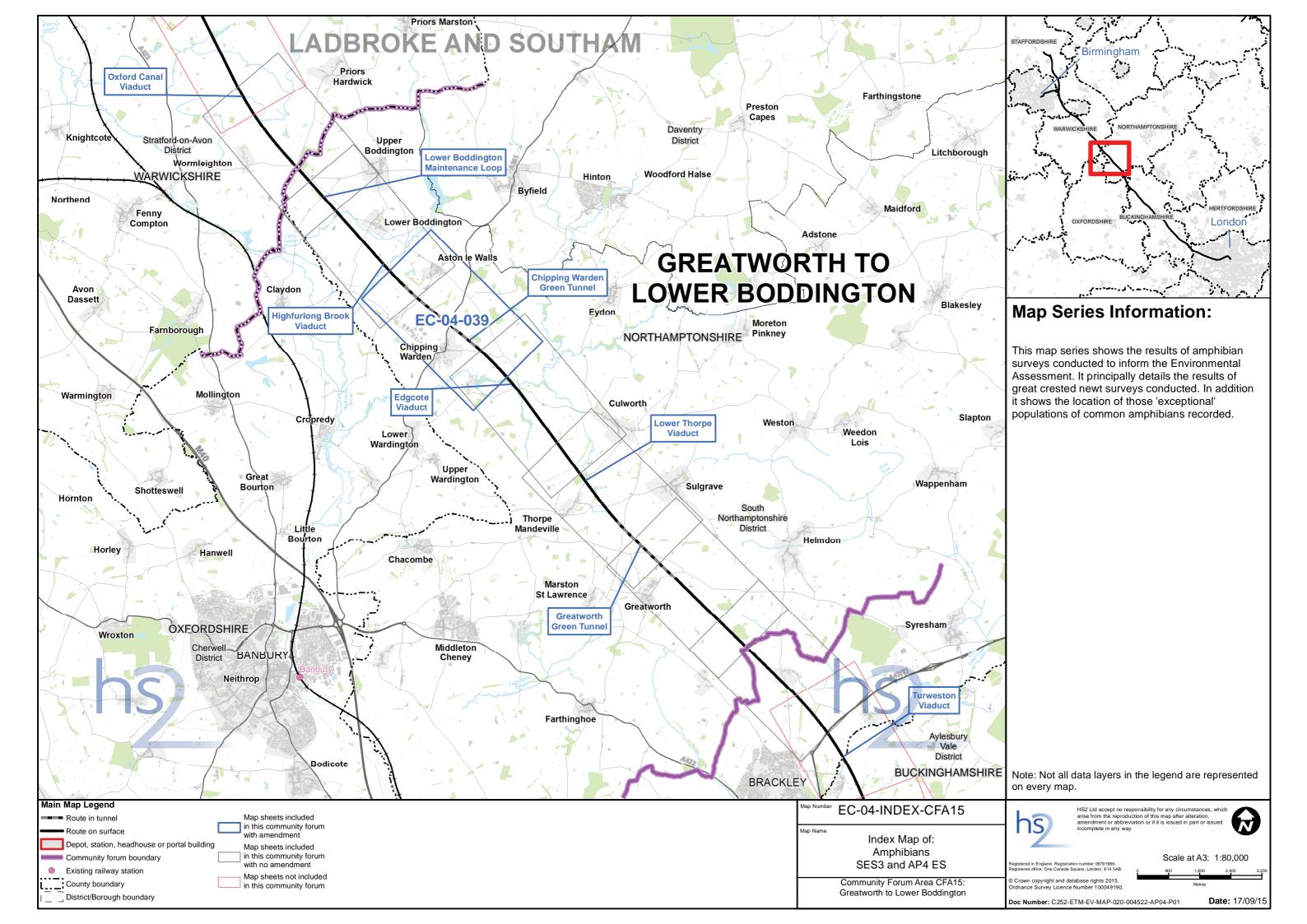


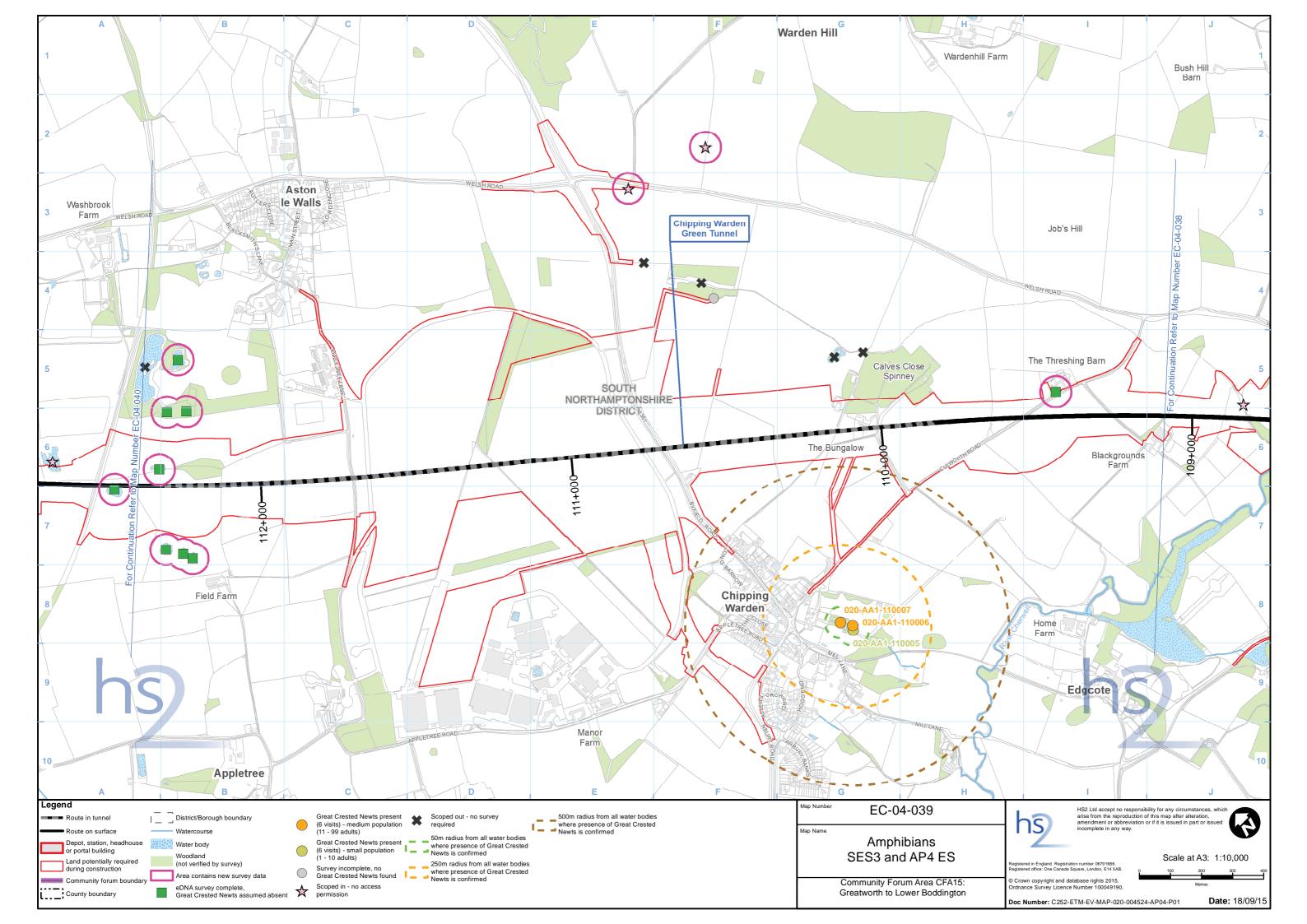


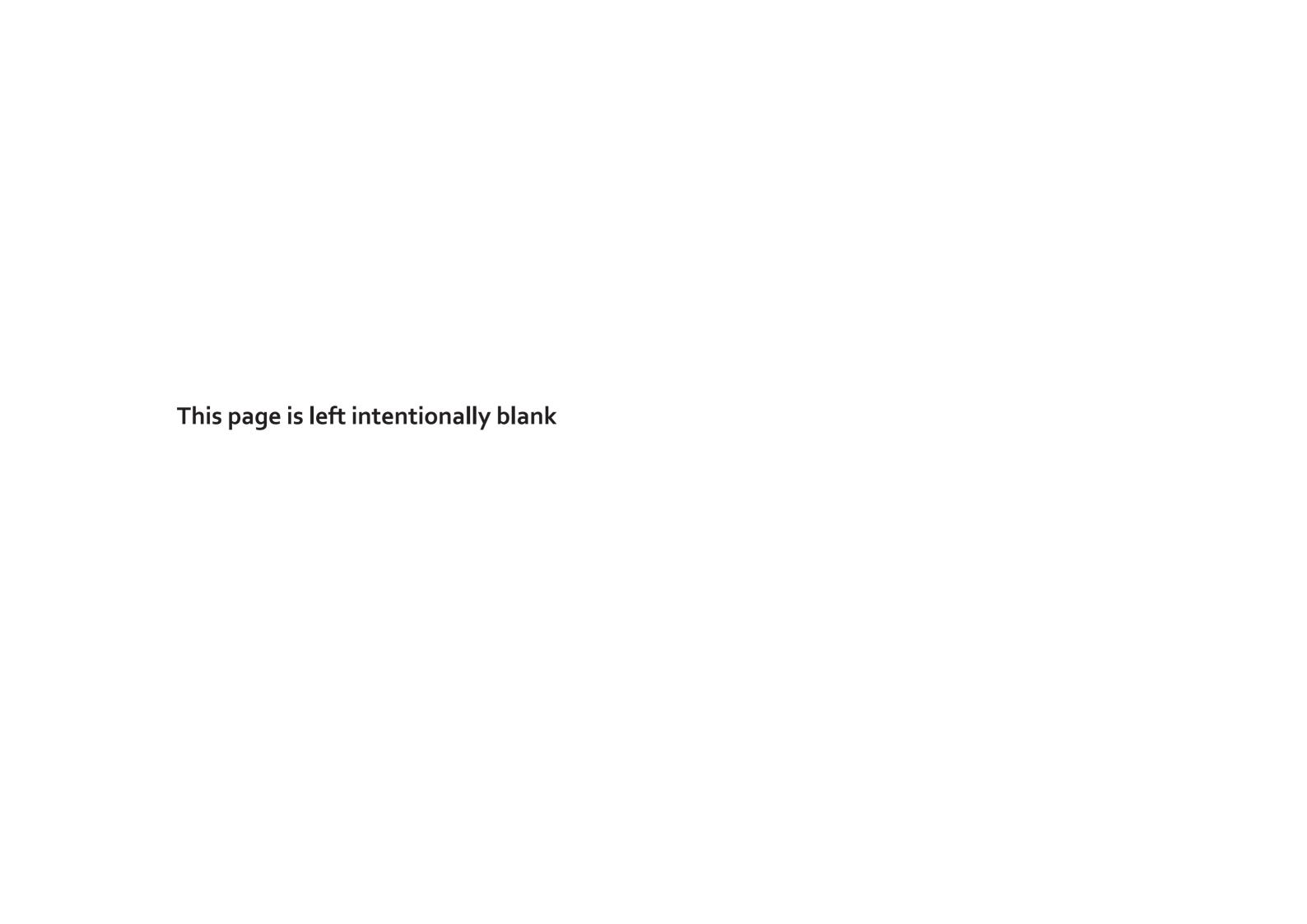


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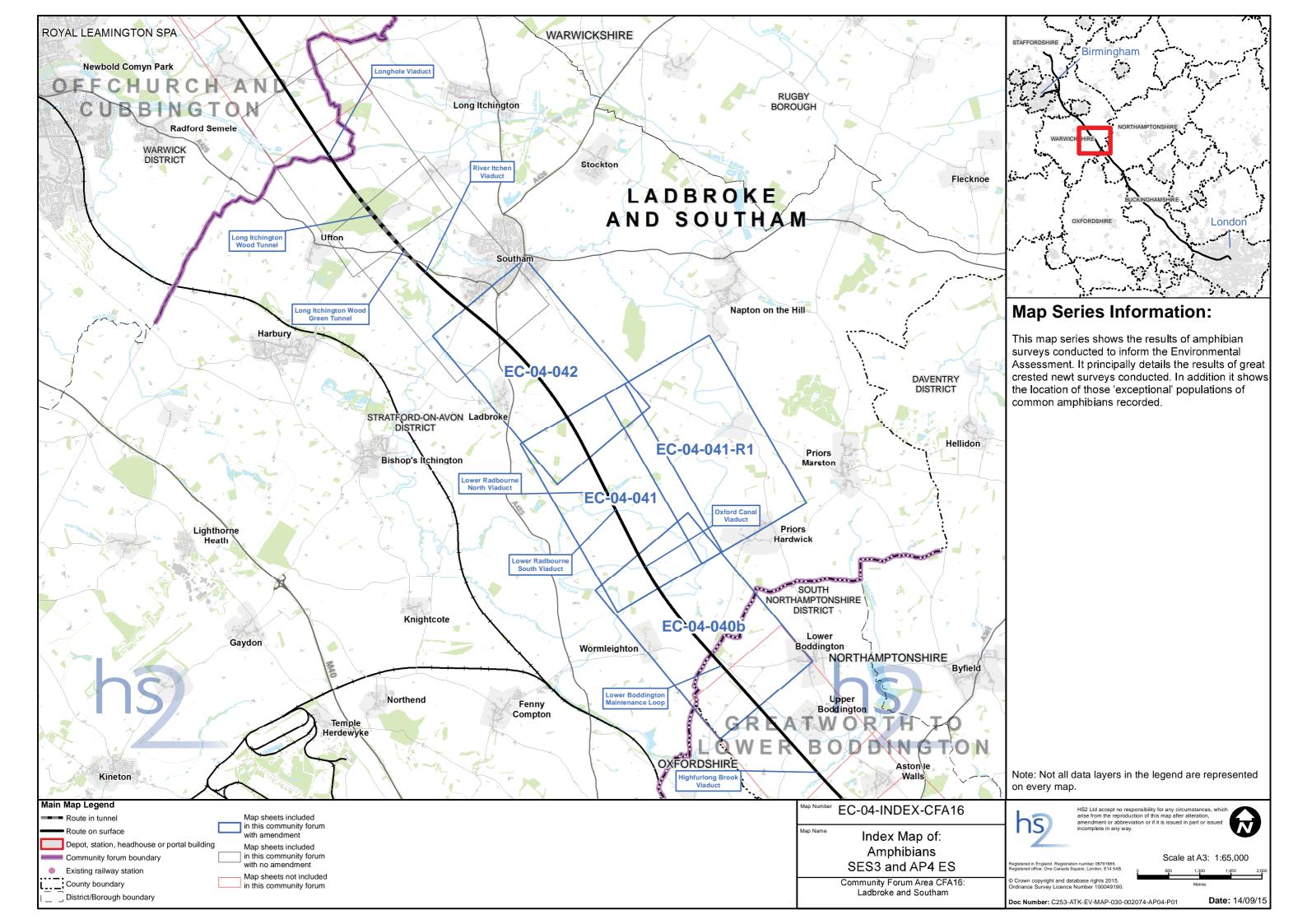


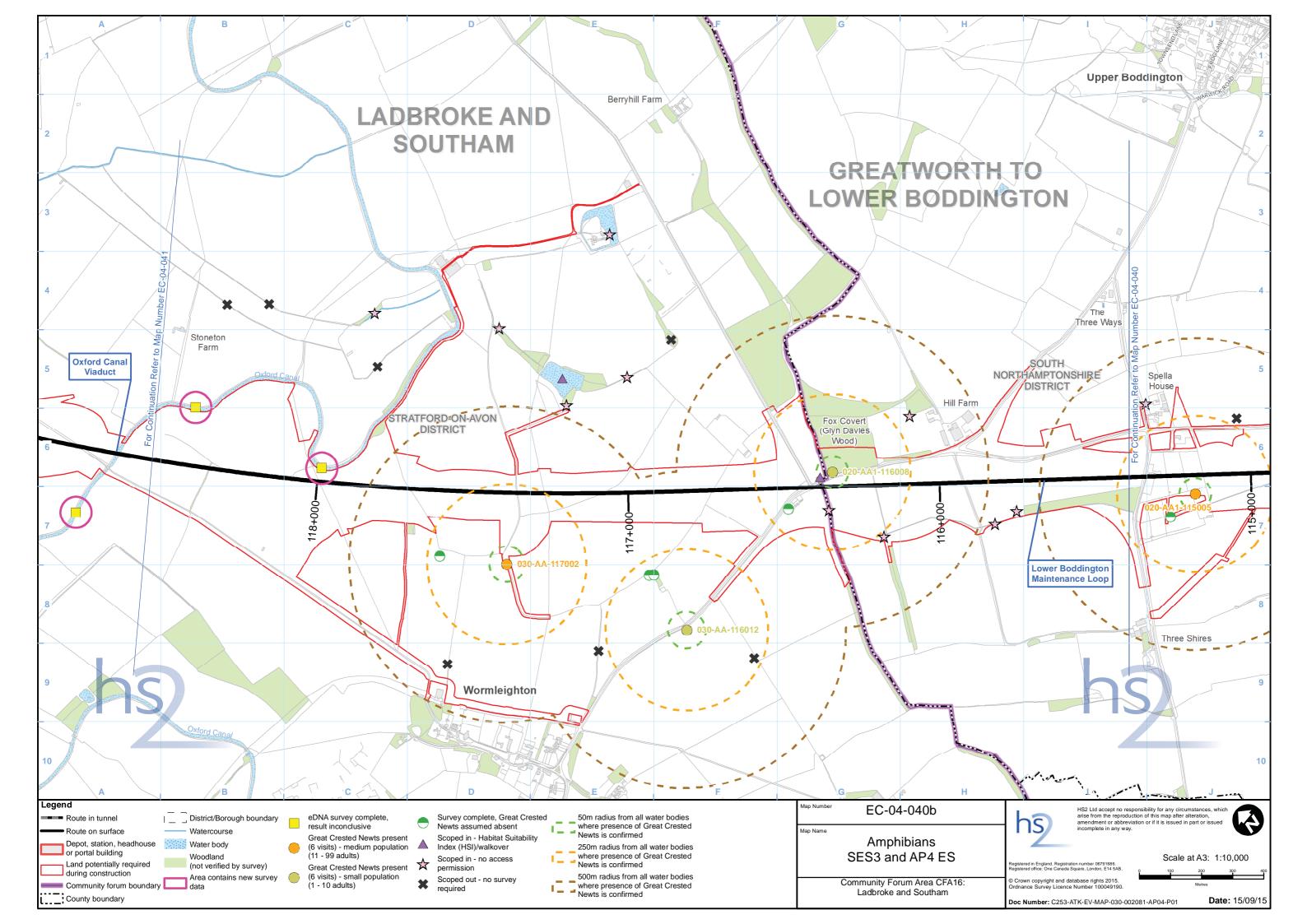


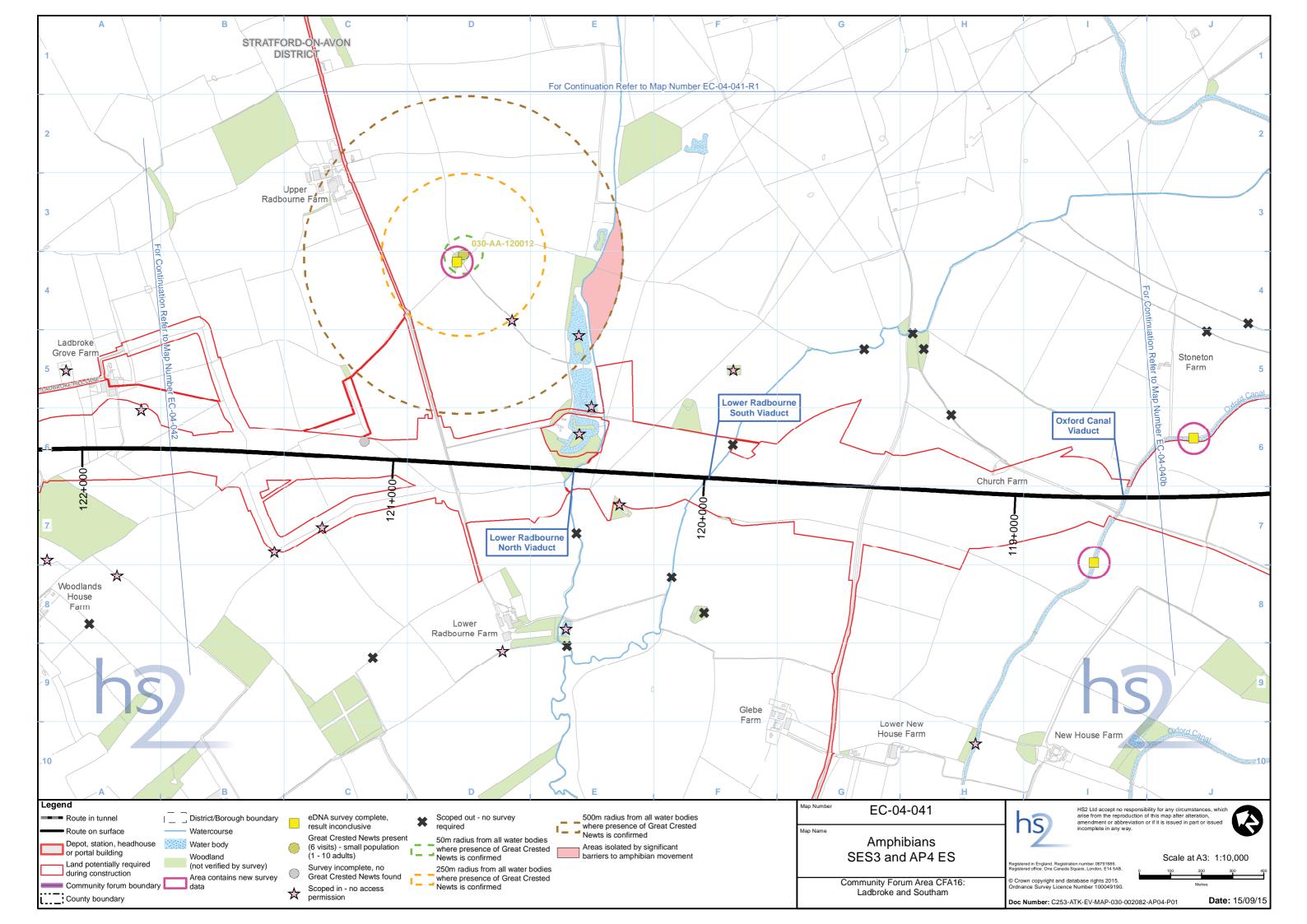


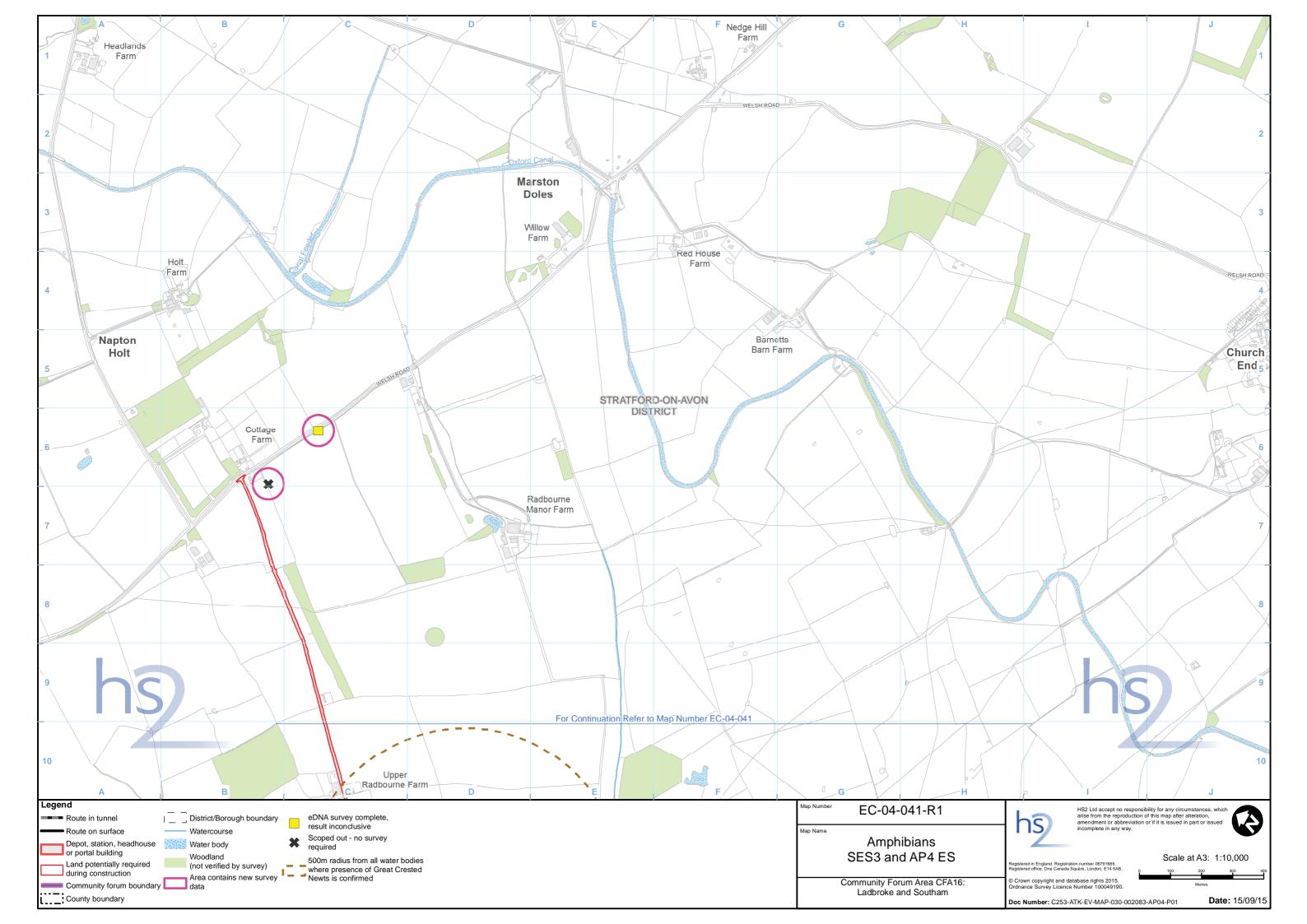
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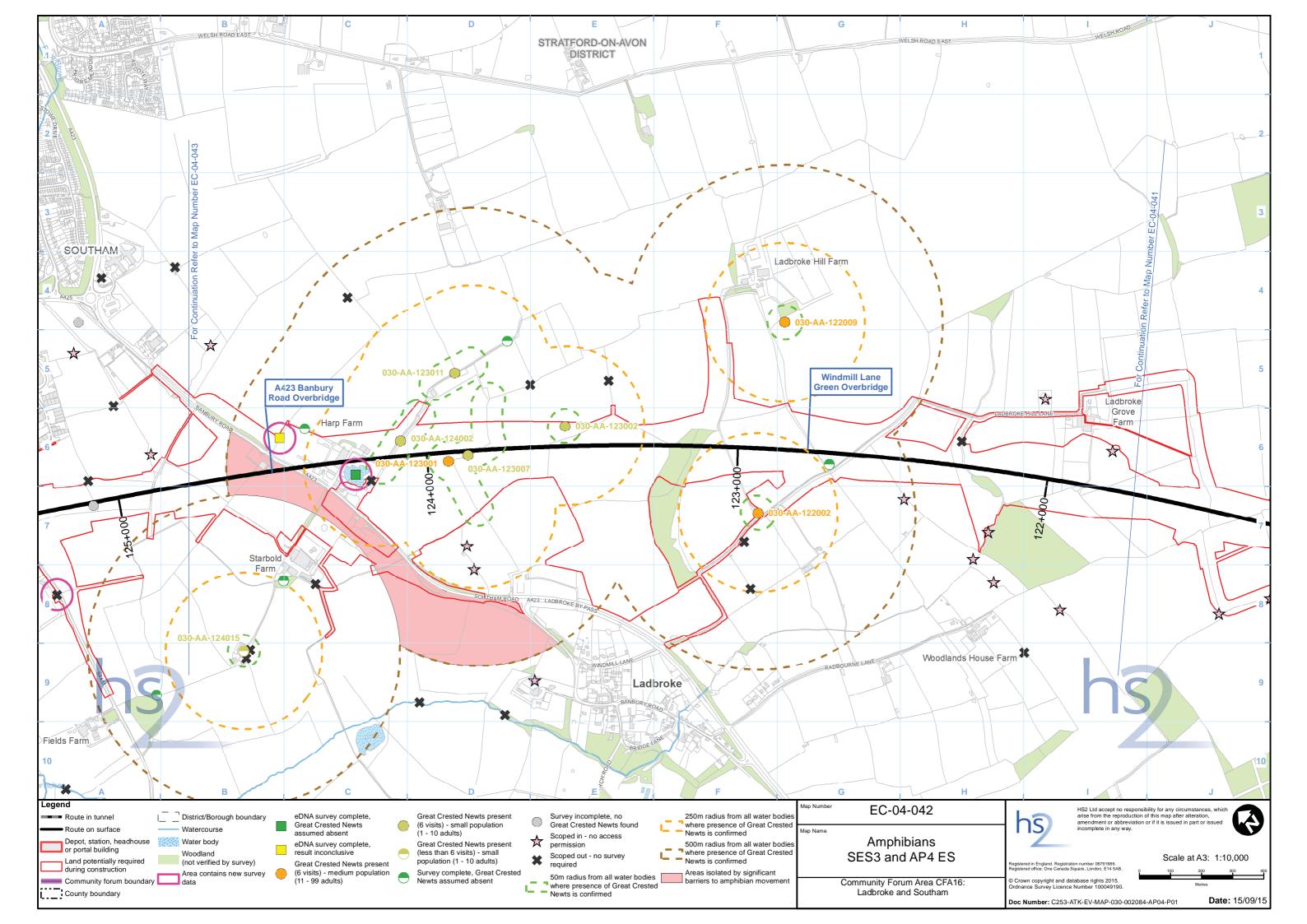
Volume 5 | CFA16 Ladbroke and Southam EC-04 – Amphibians







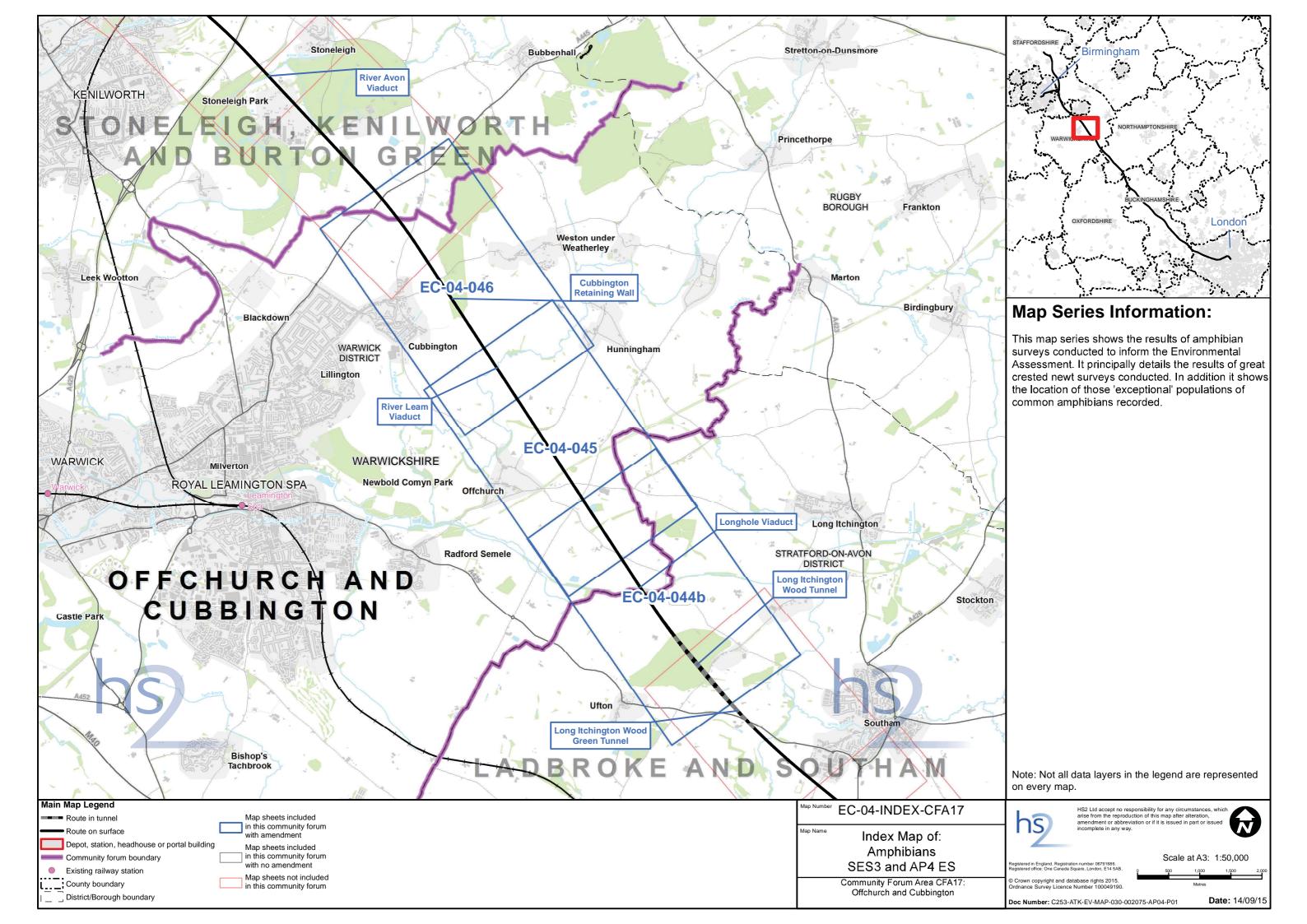


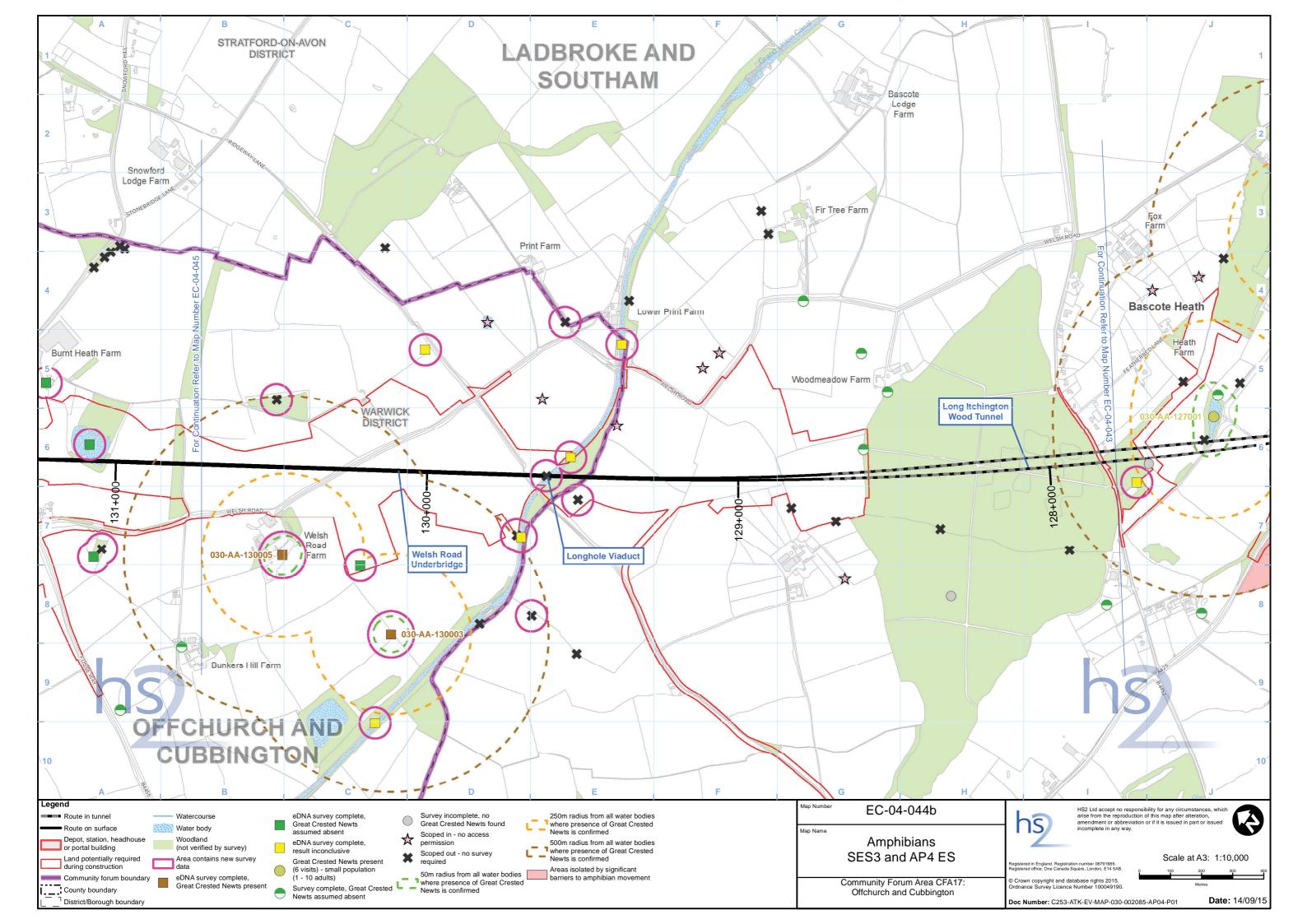


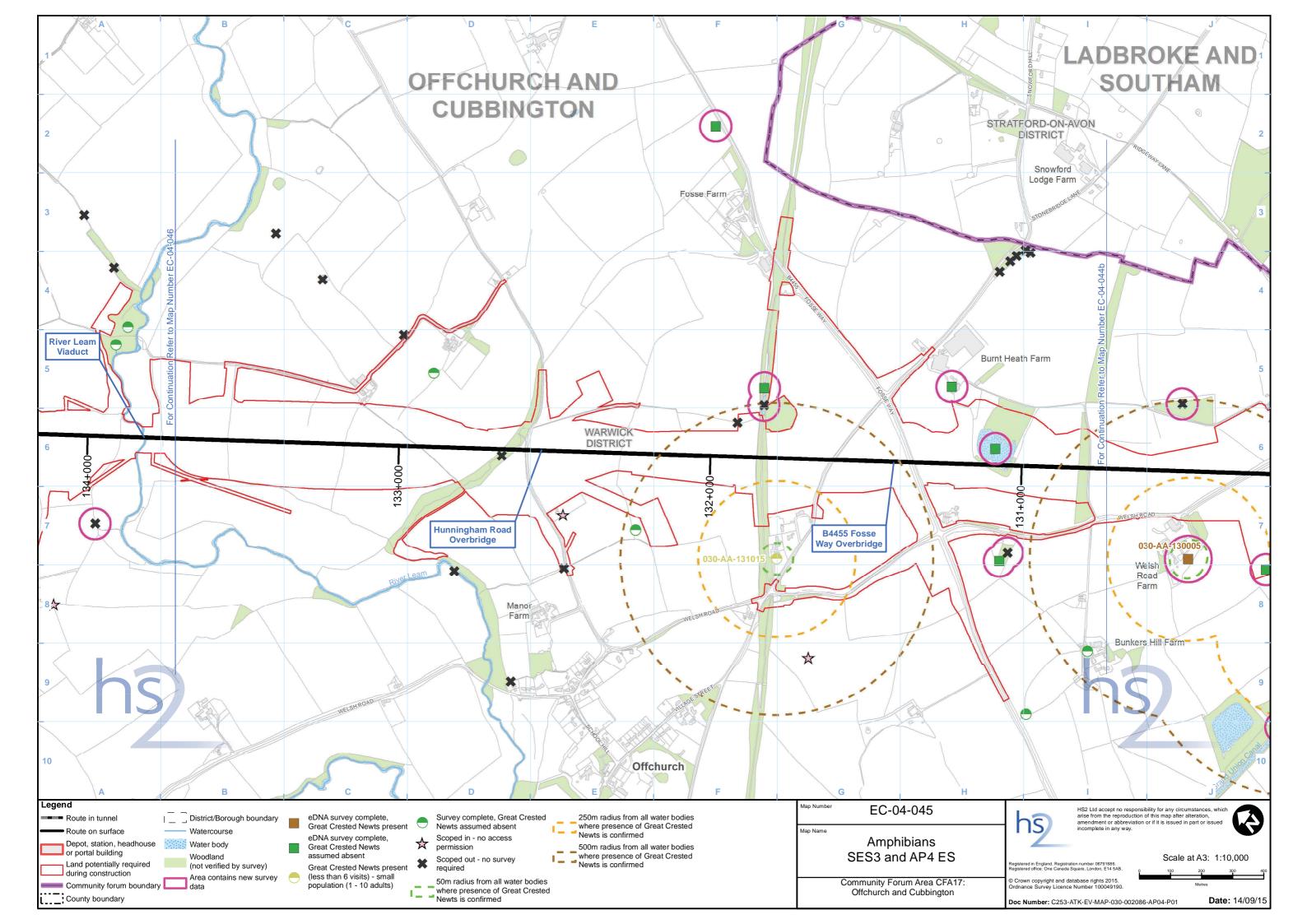


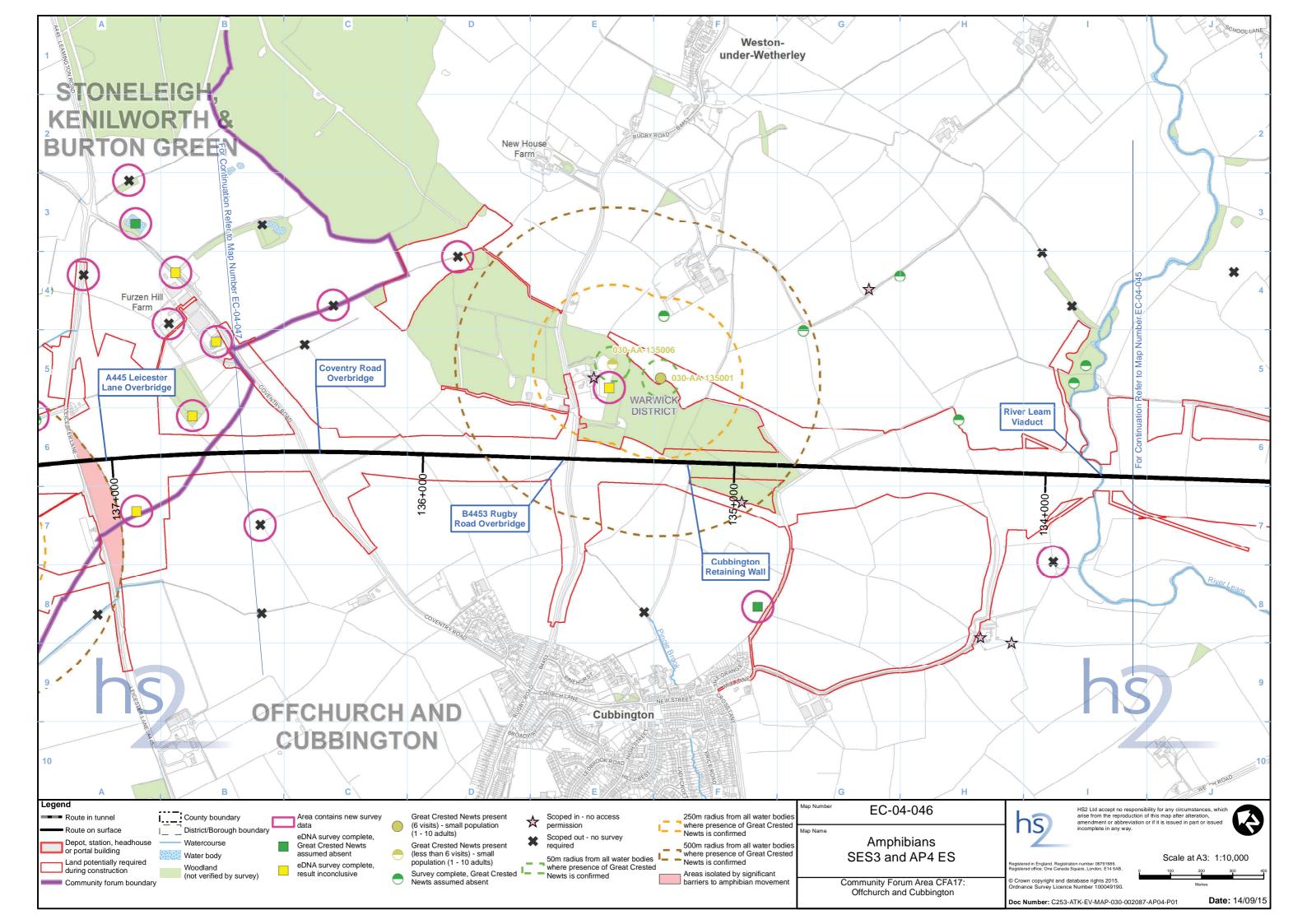
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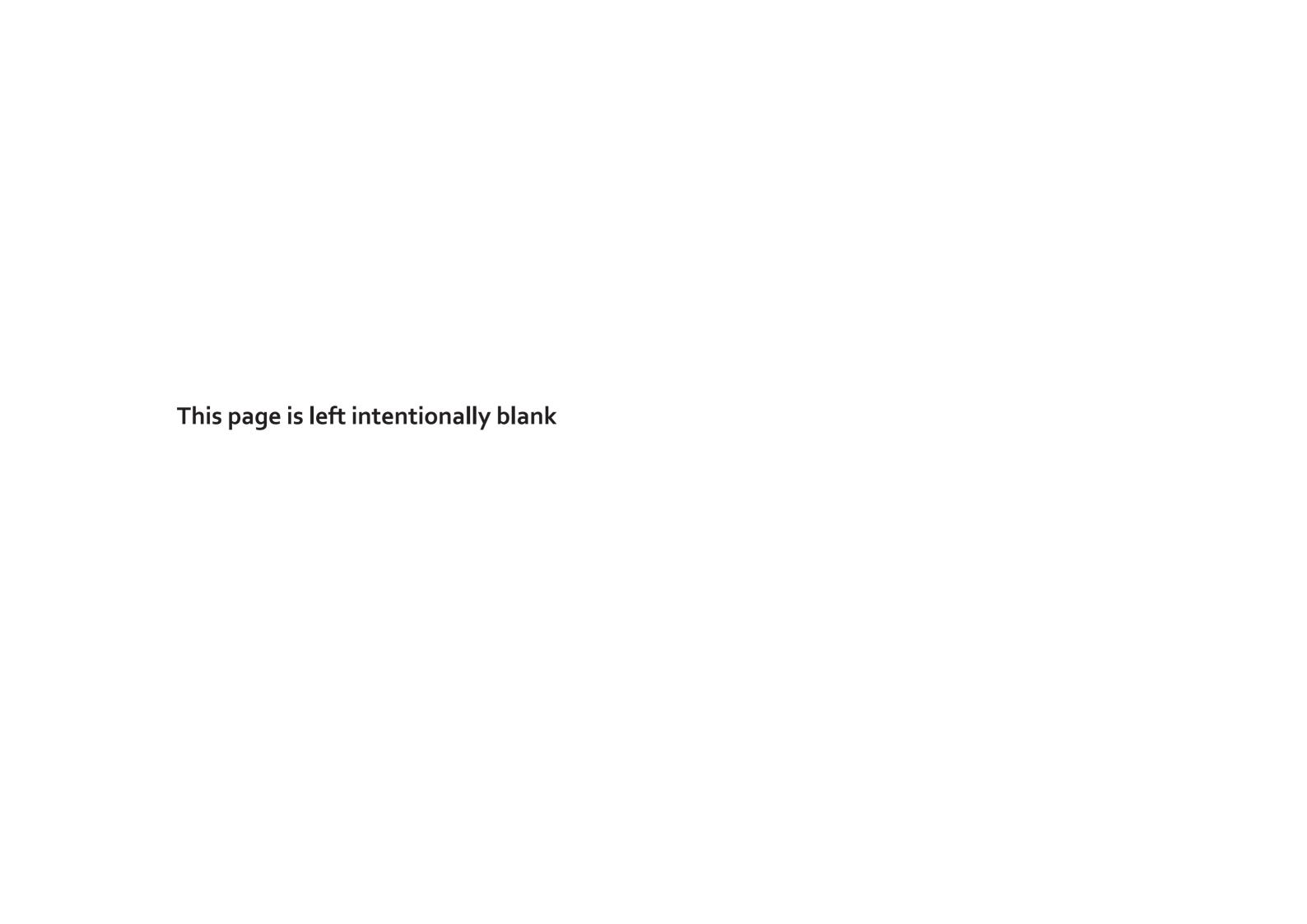
Volume 5 | CFA17 Offchurch and Cubbington EC-04 – Amphibians







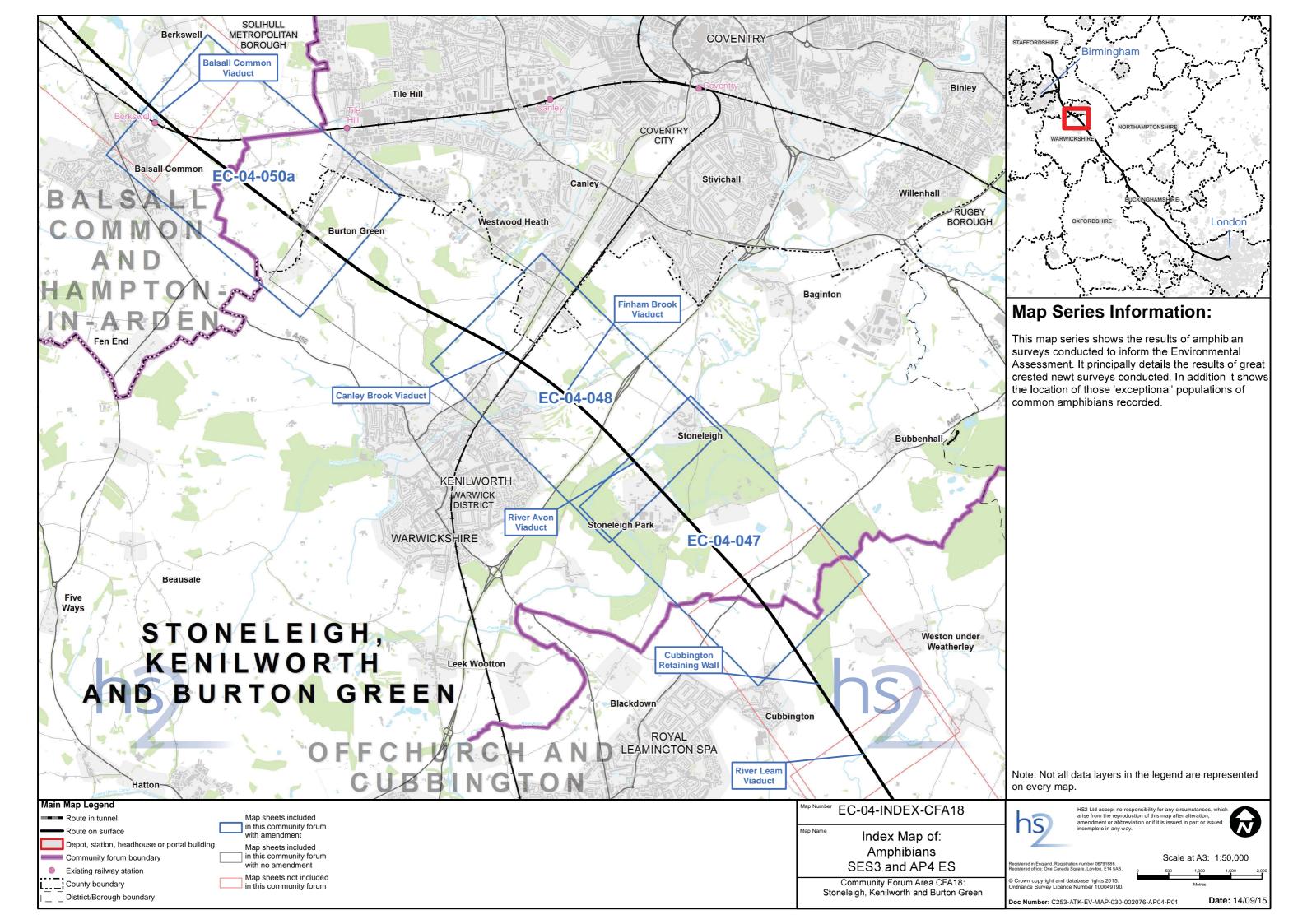


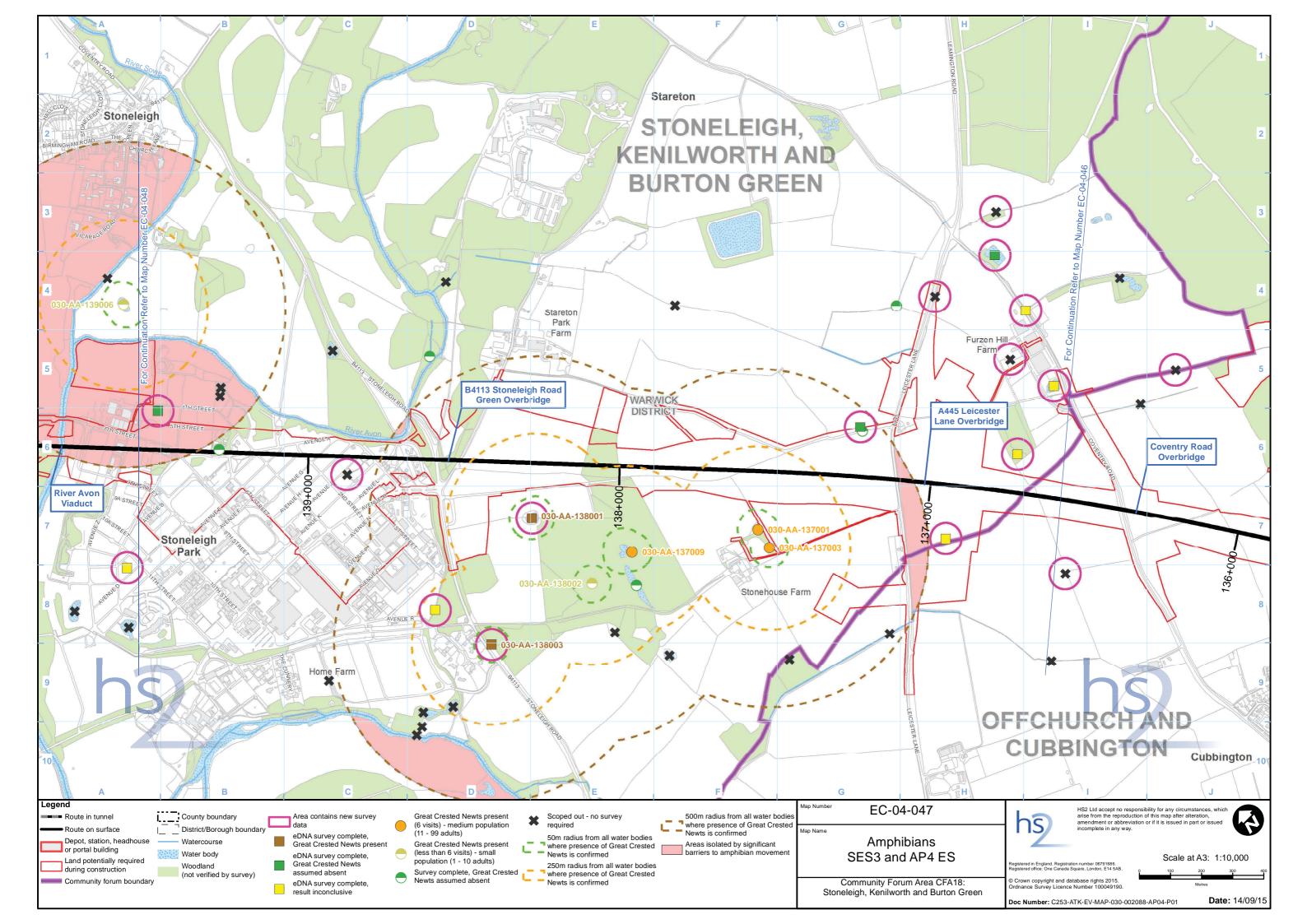


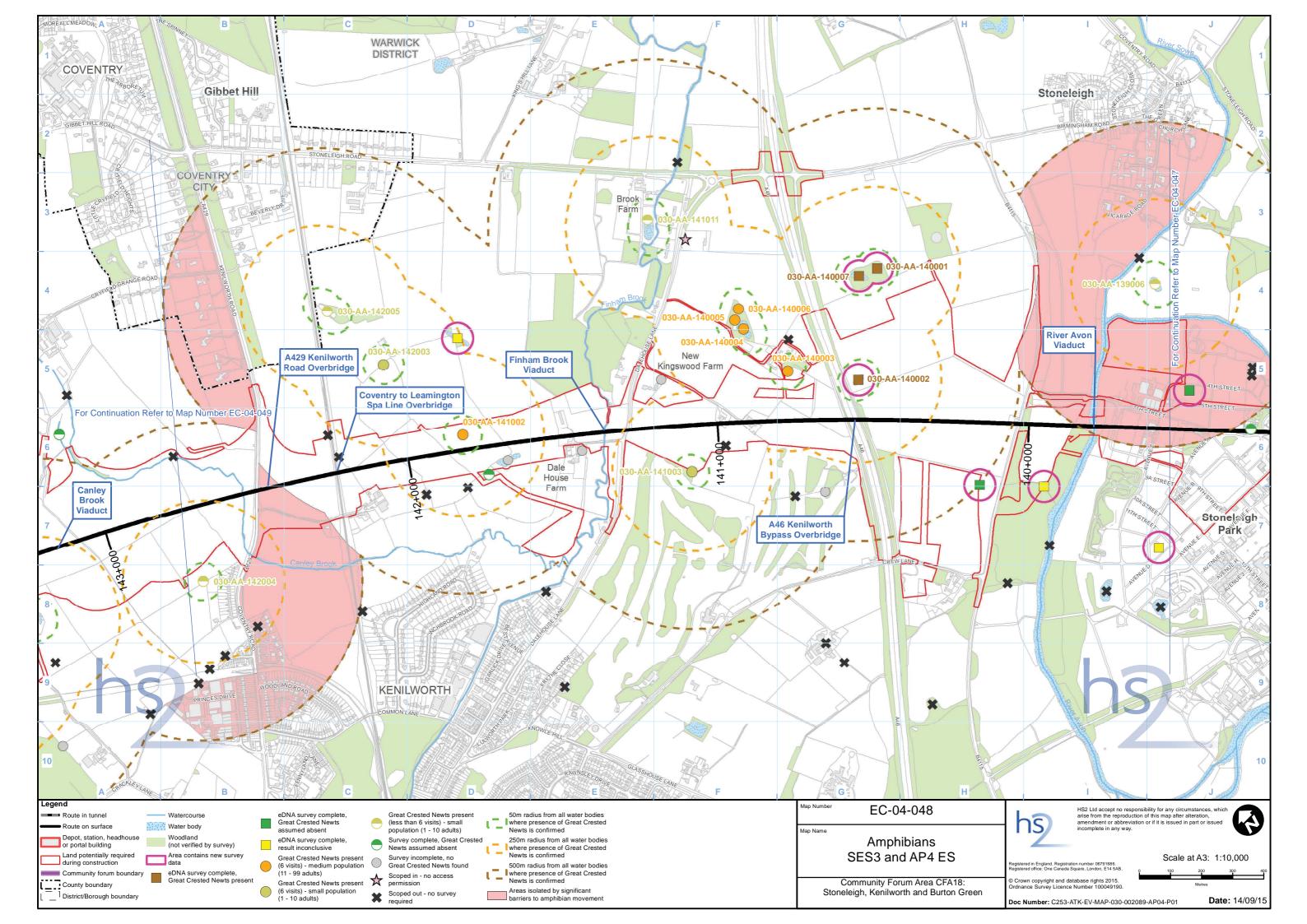


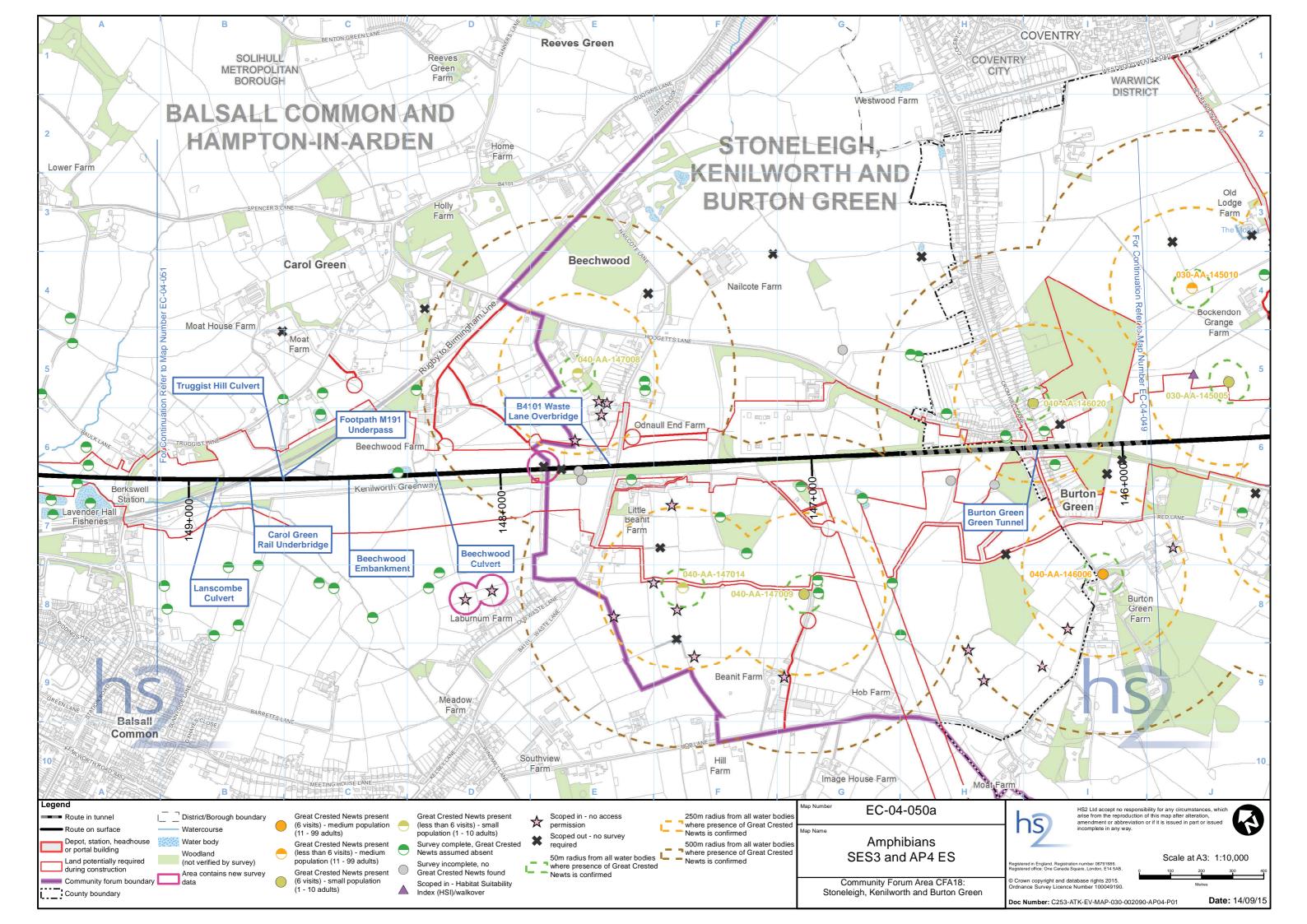
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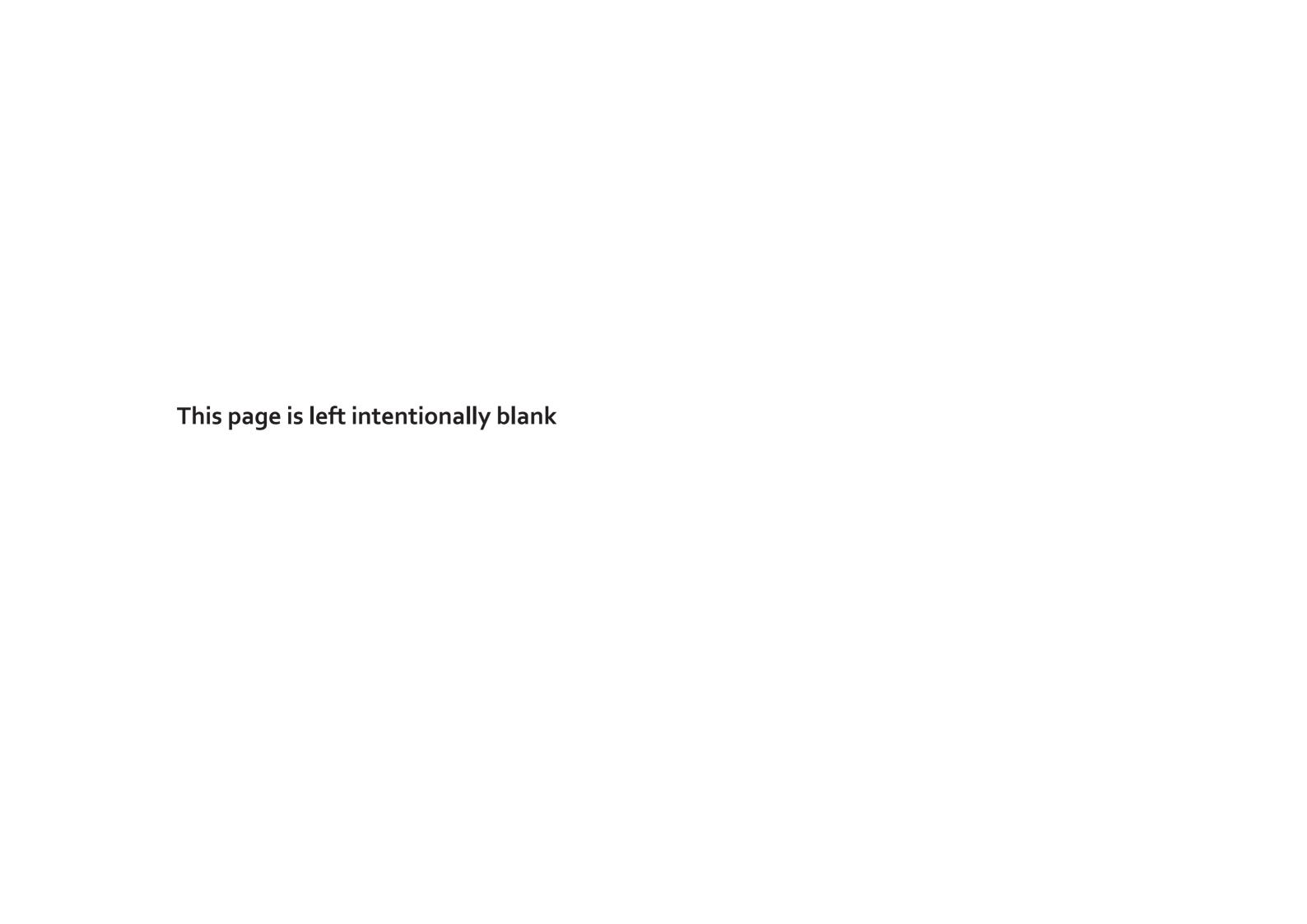
Volume 5 | CFA18 Stoneleigh, Kenilworth and Burton Green EC-04 – Amphibians







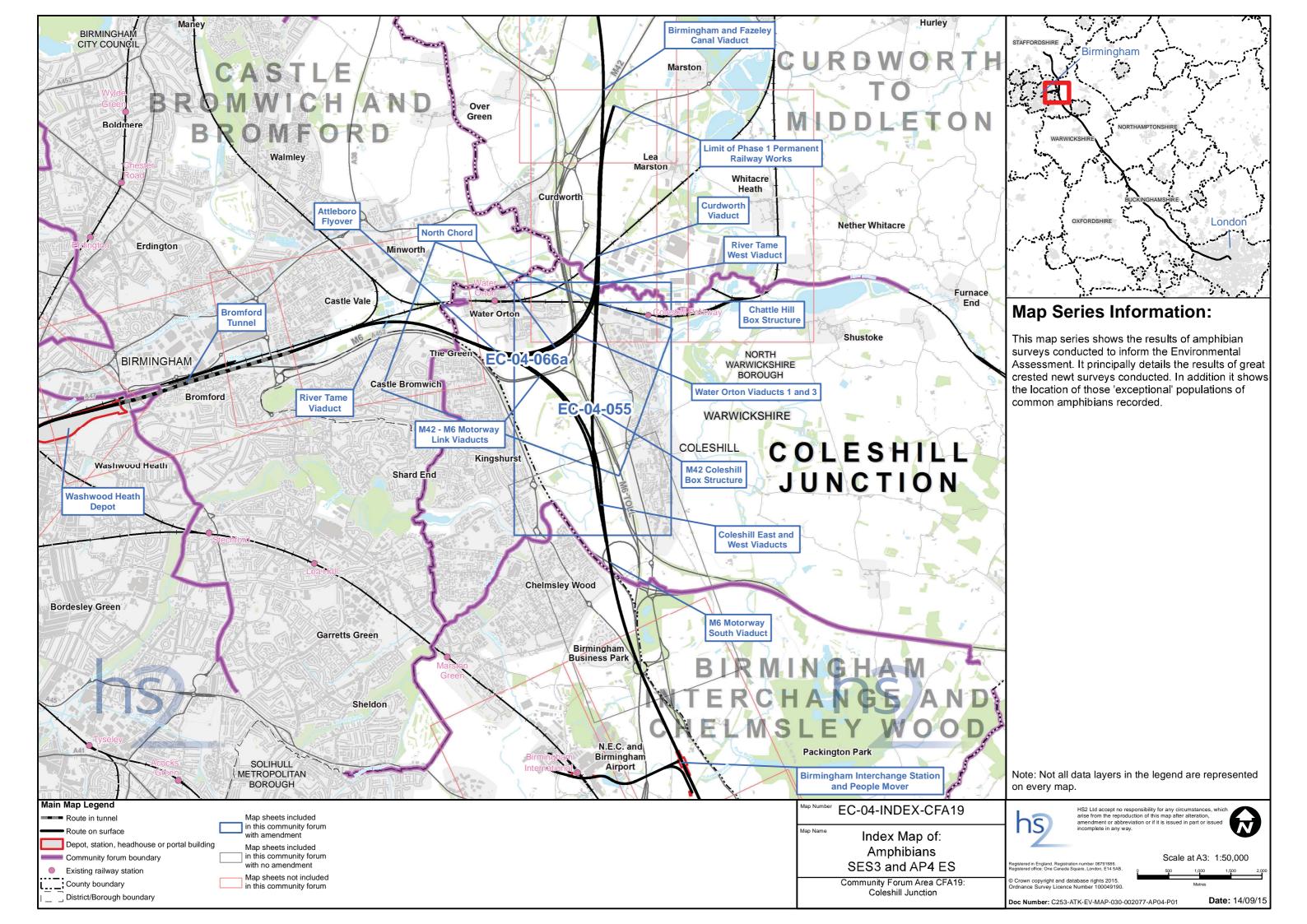


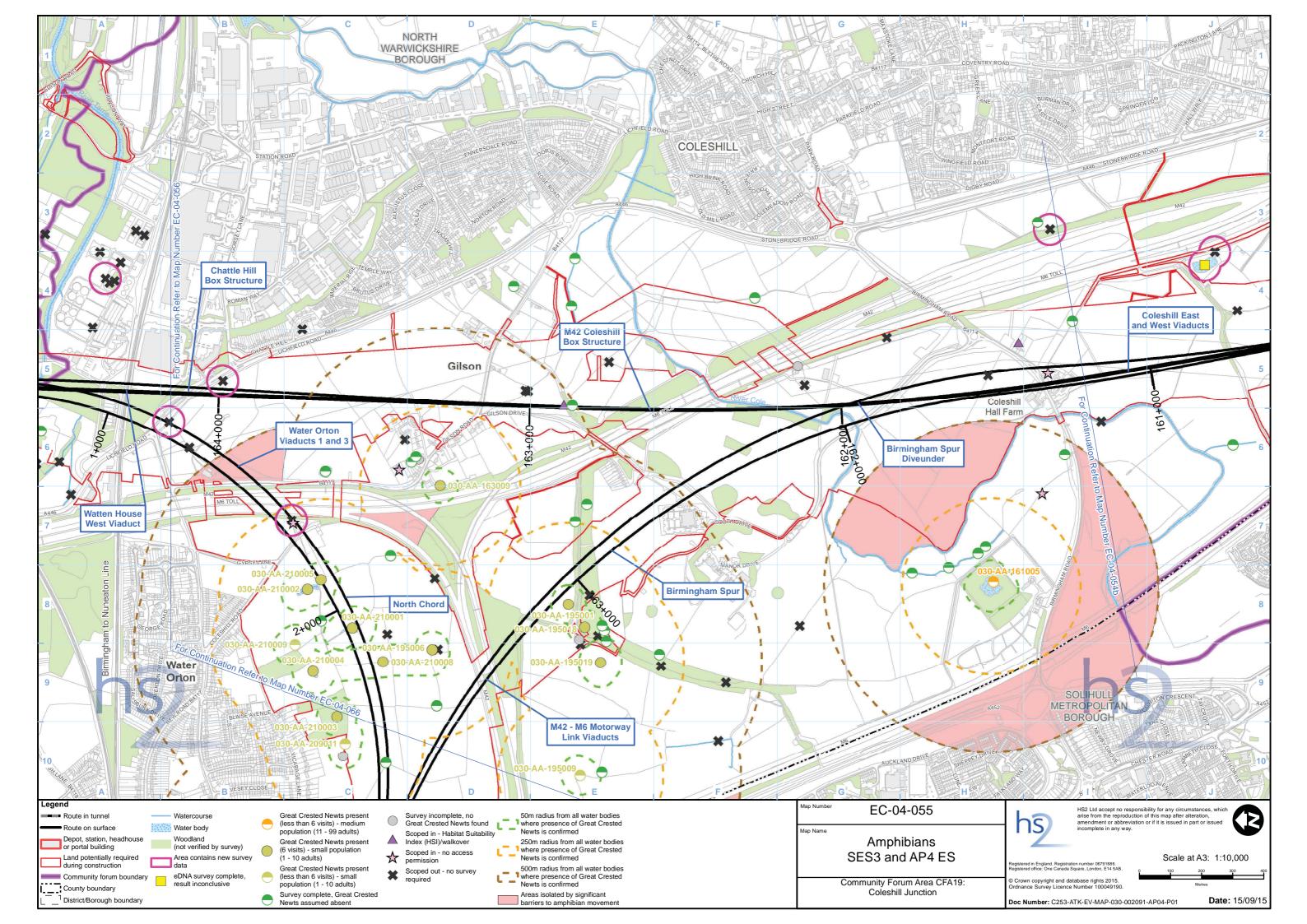


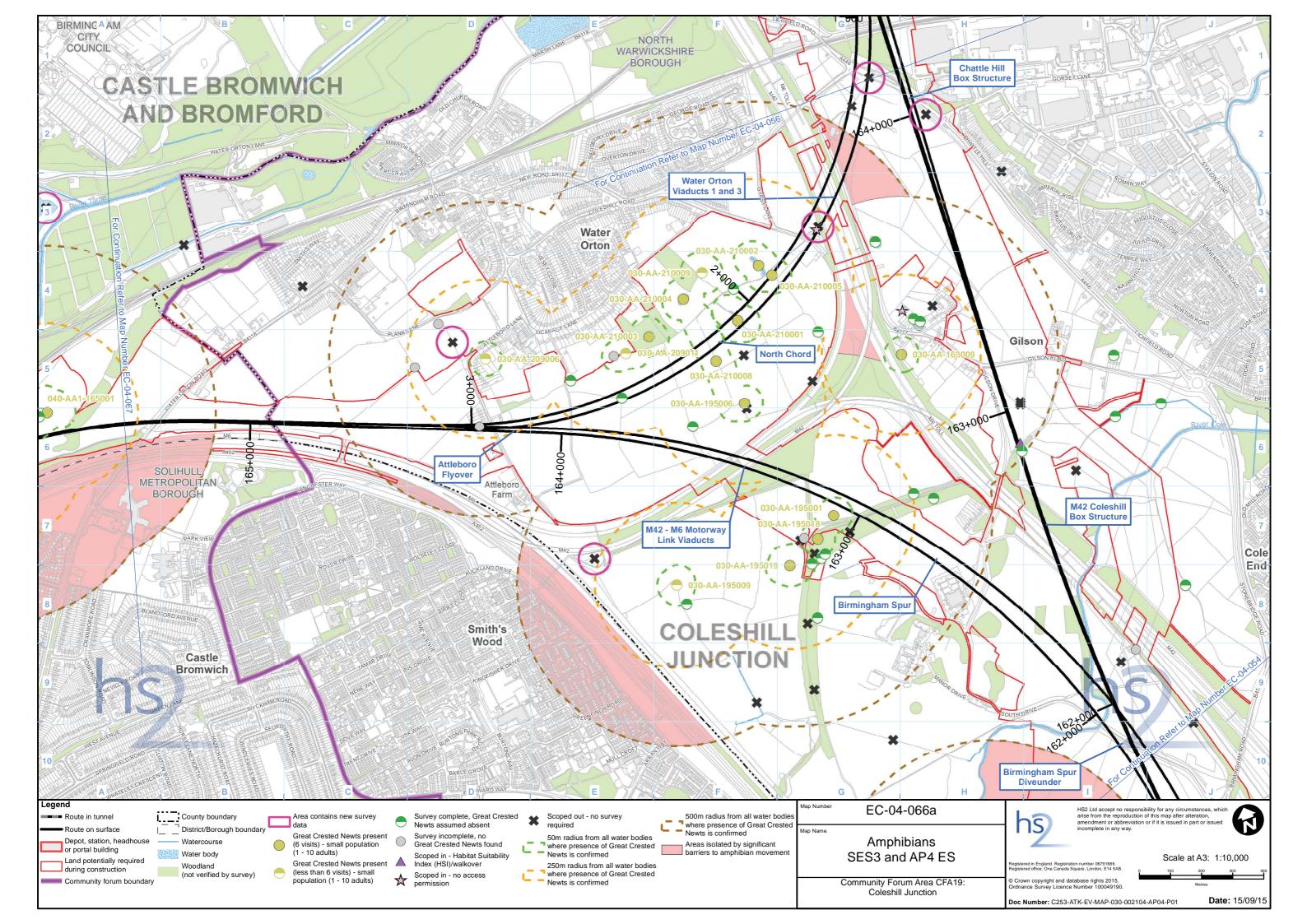


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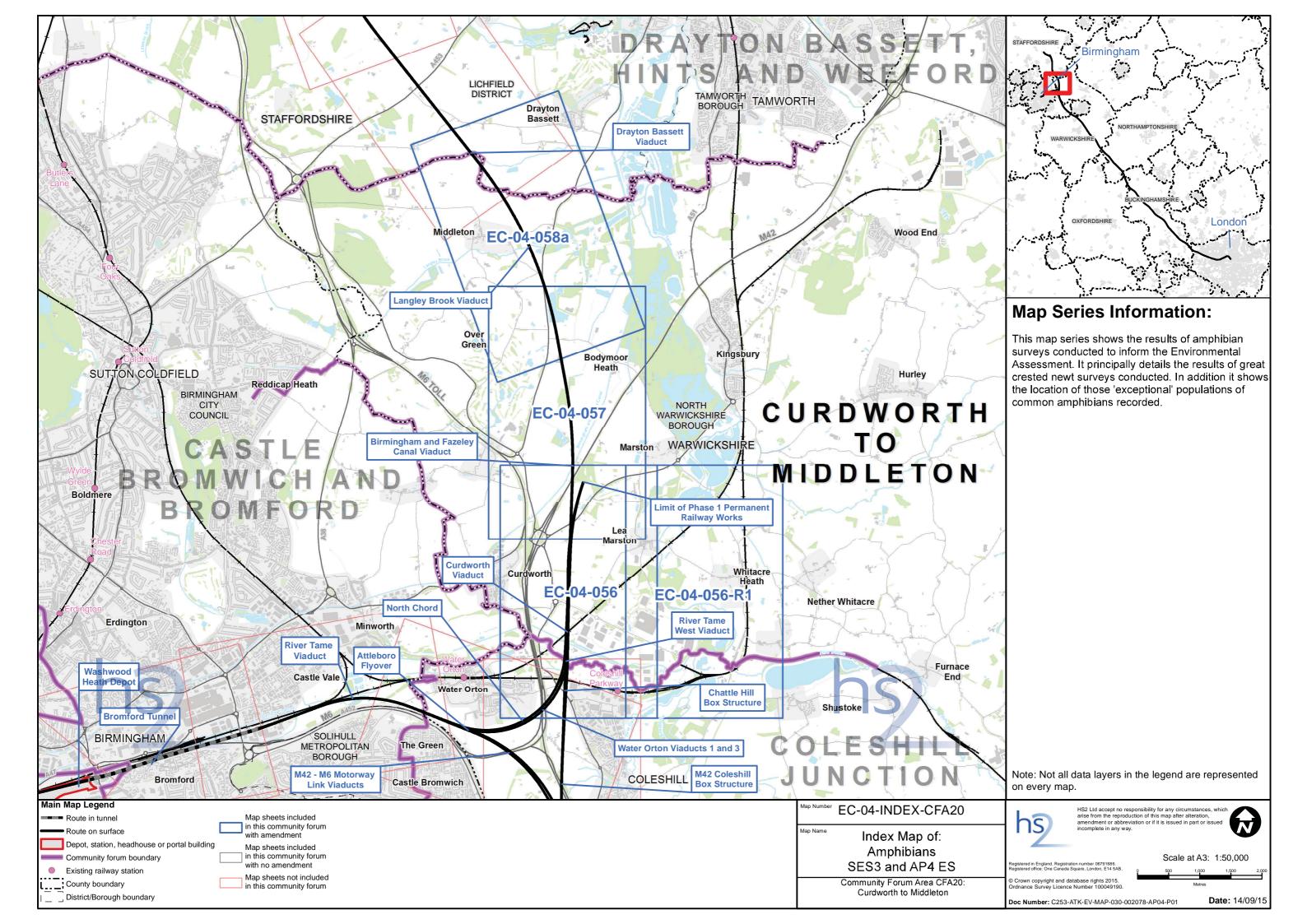


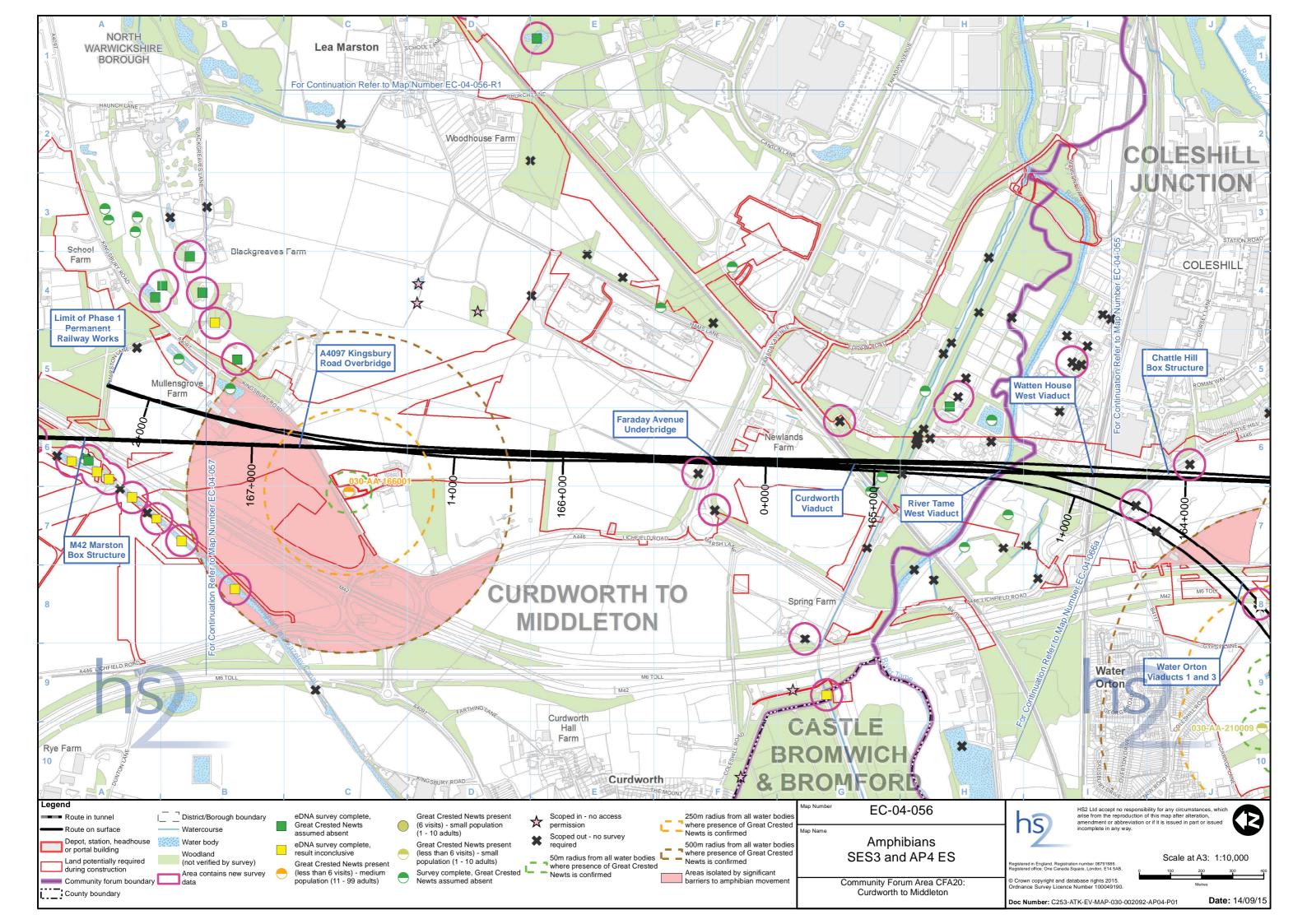


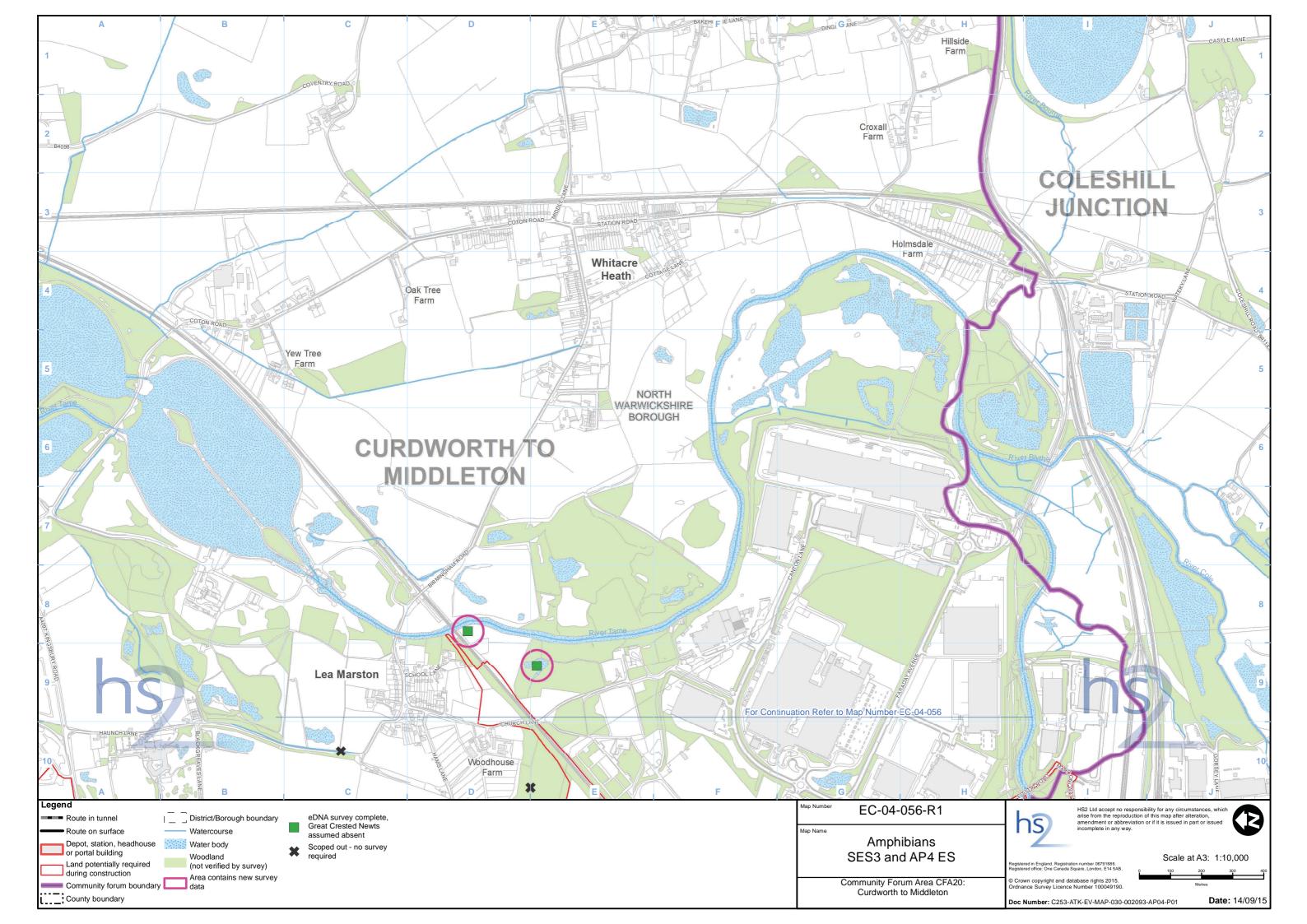


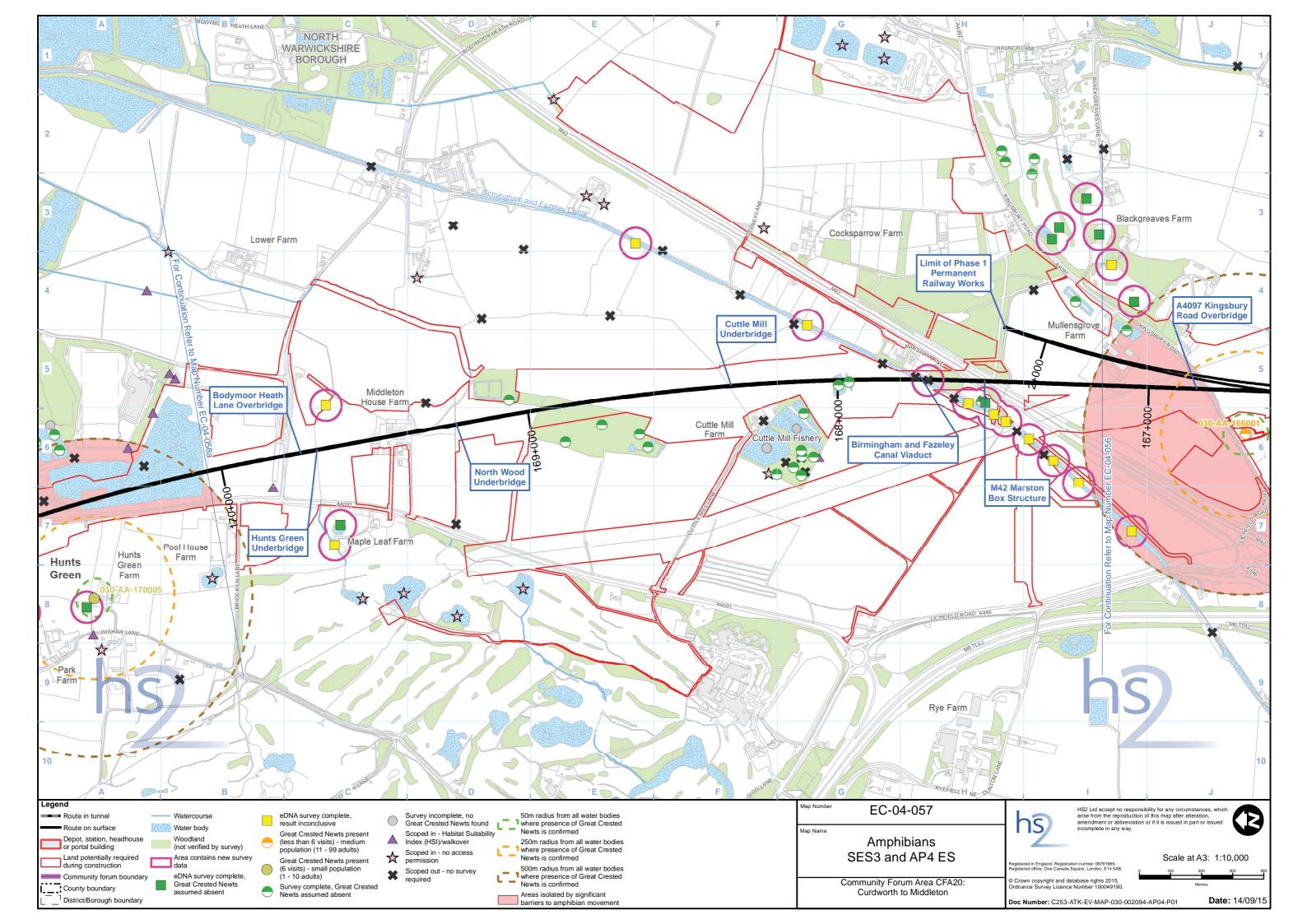
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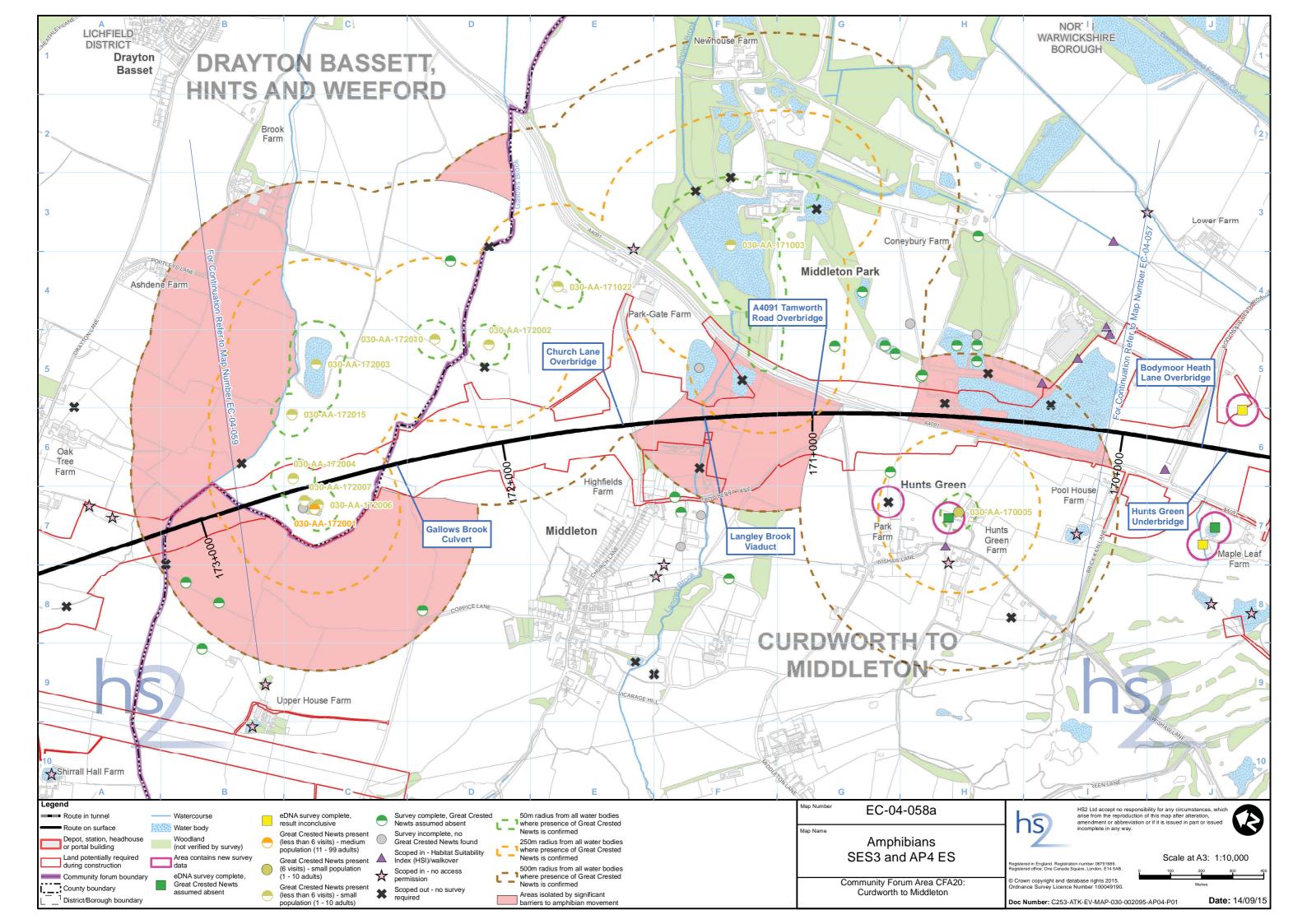
Volume 5 | CFA20 Curdworth to Middleton EC-04 – Amphibians







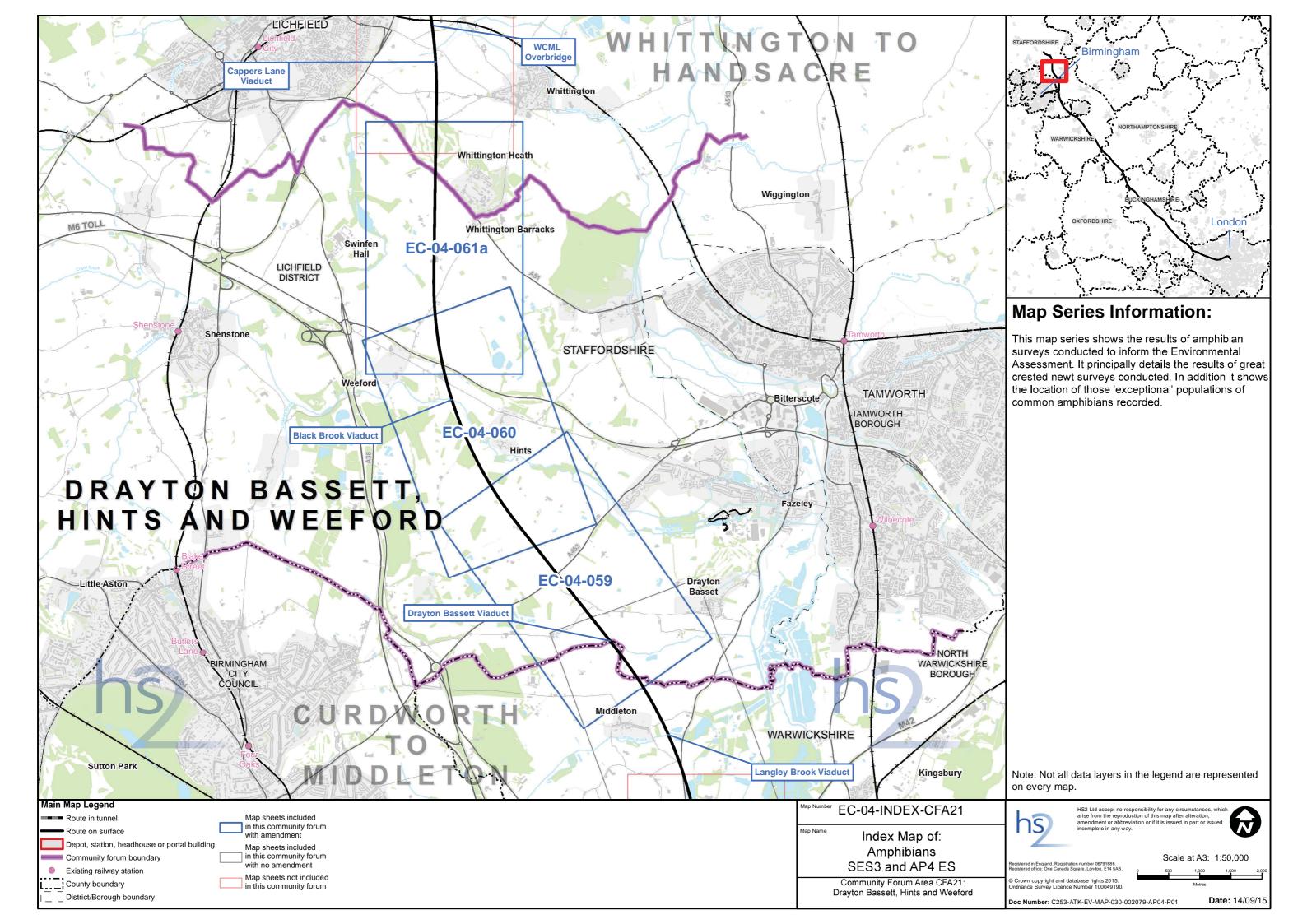


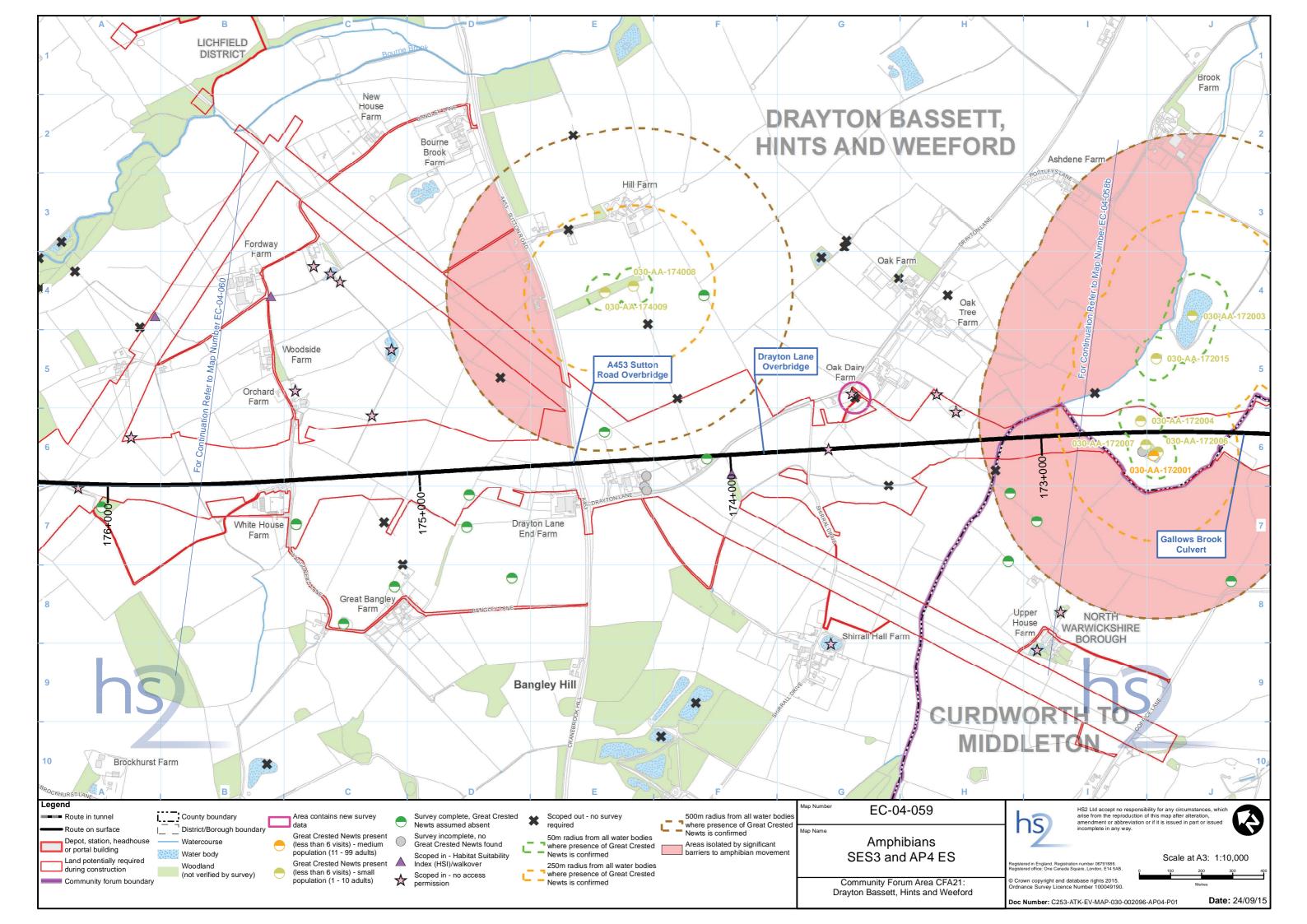


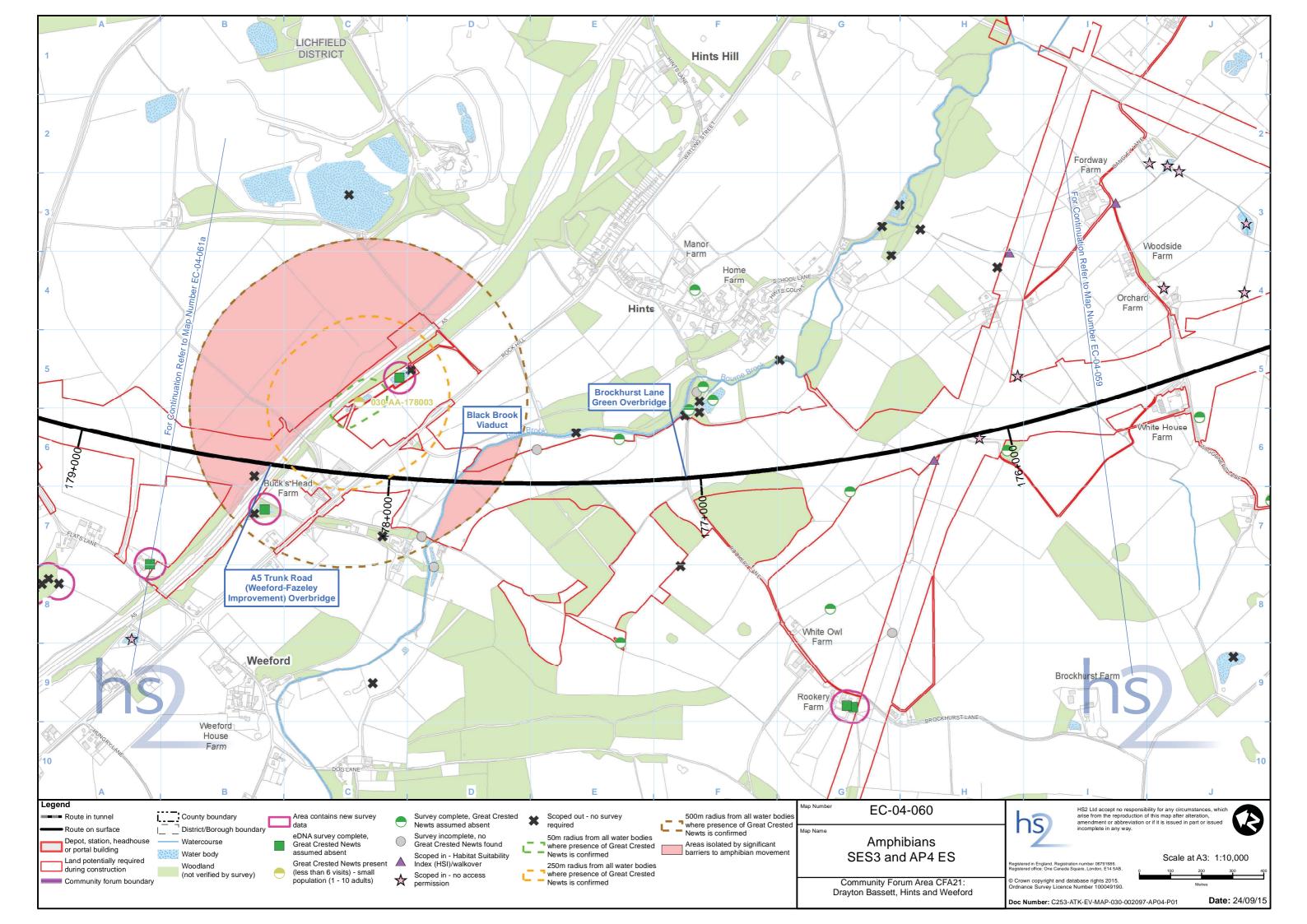


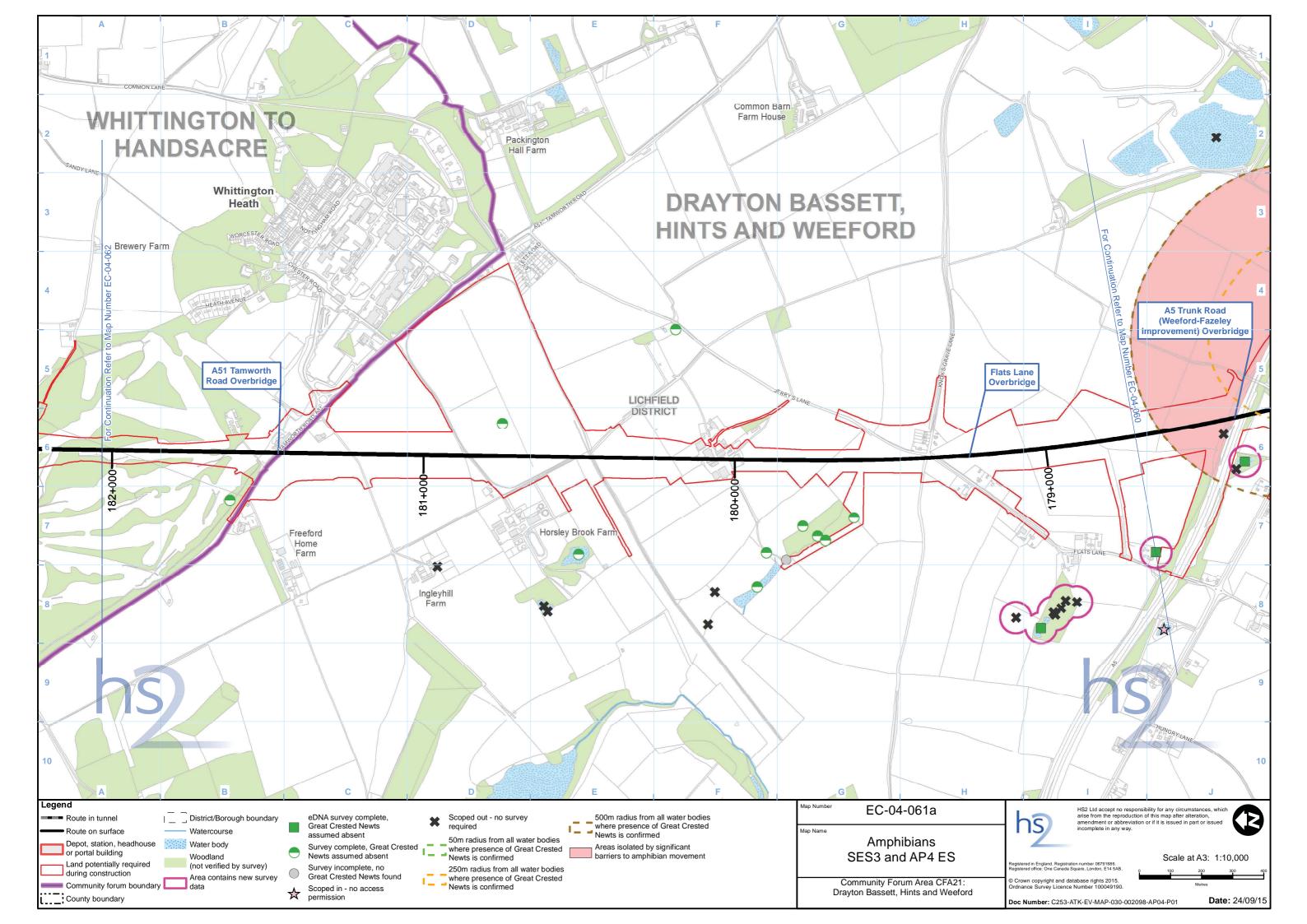
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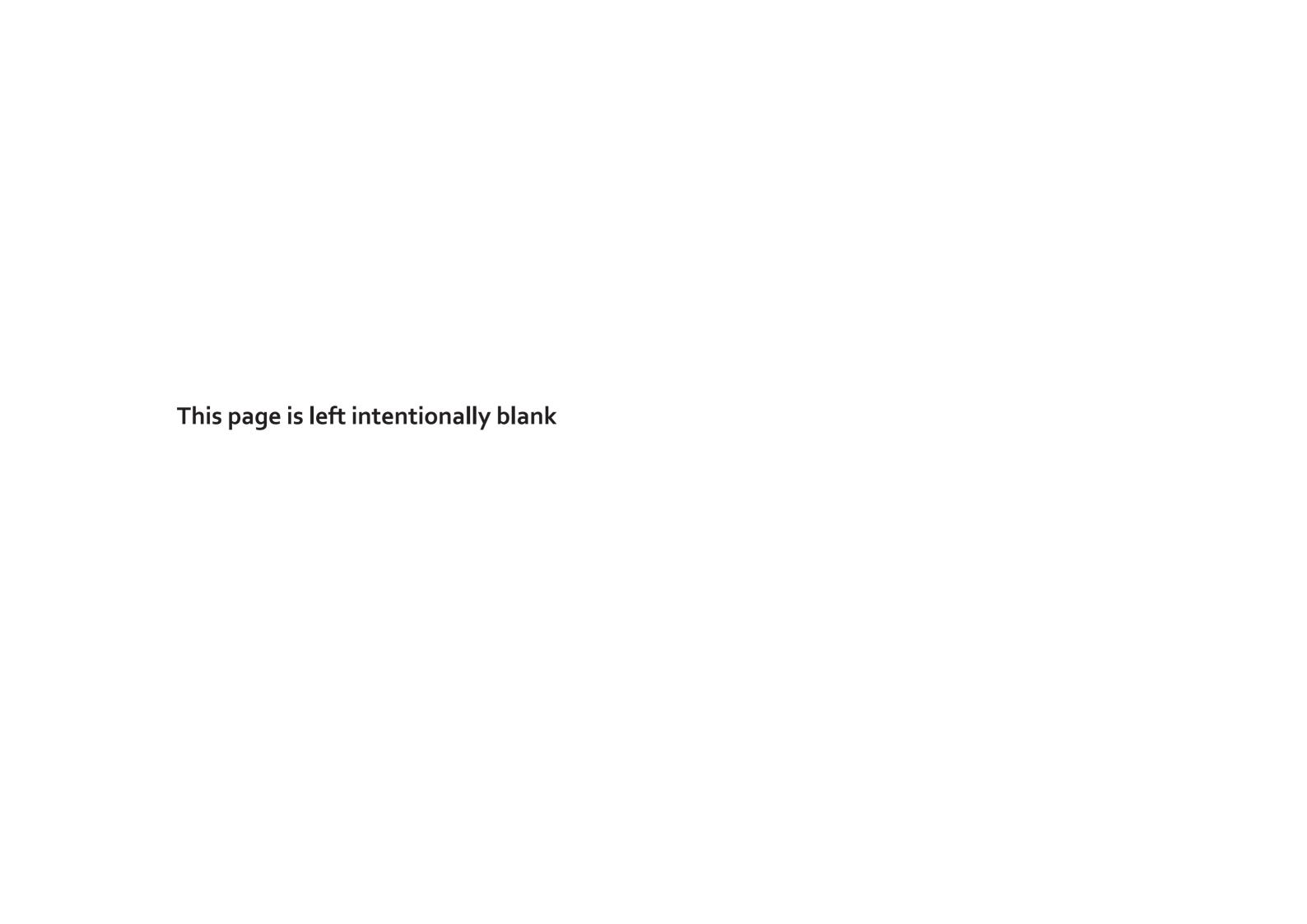
Volume 5 | CFA21 Drayton Bassett, Hints and Weeford EC-04 – Amphibians







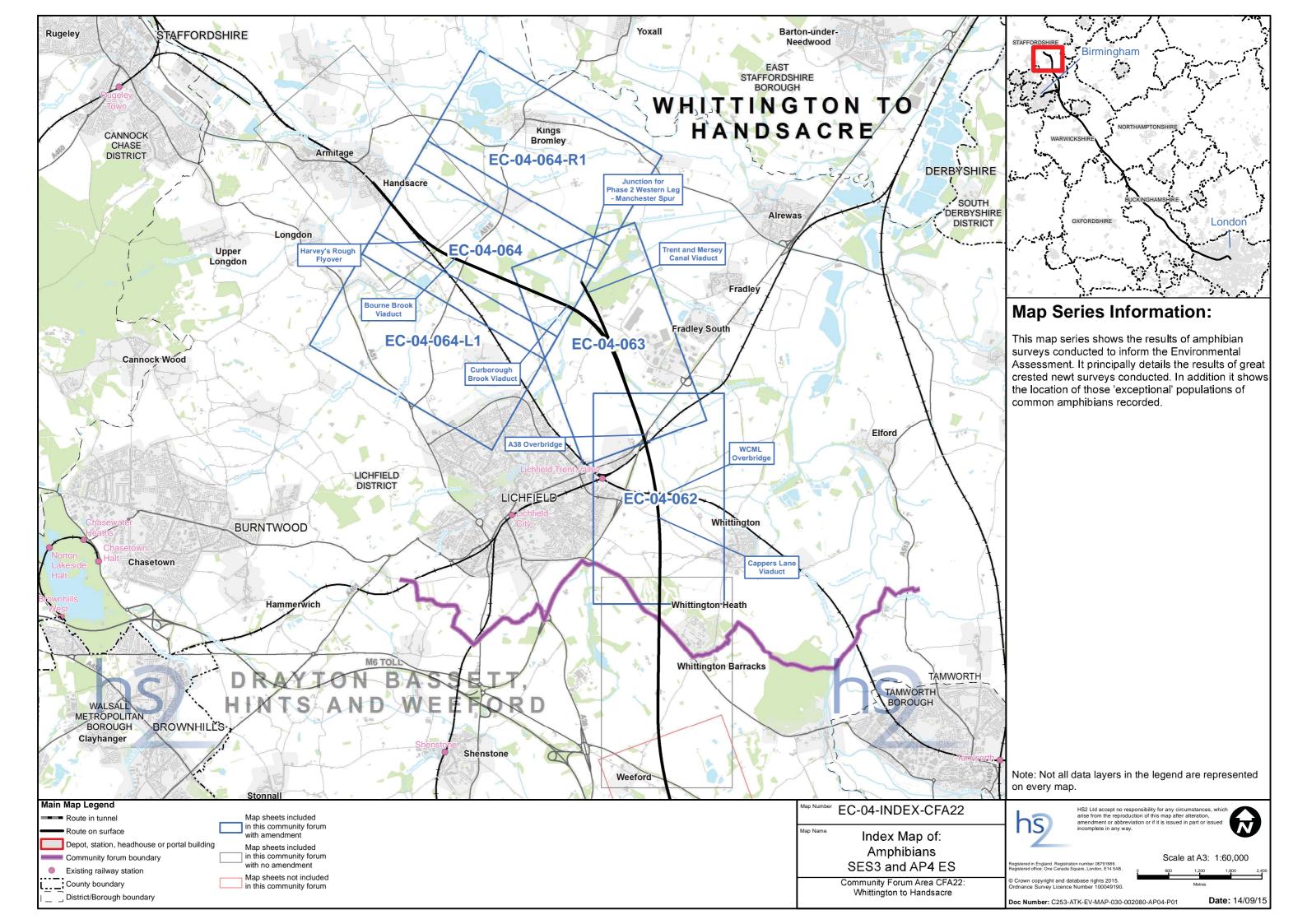


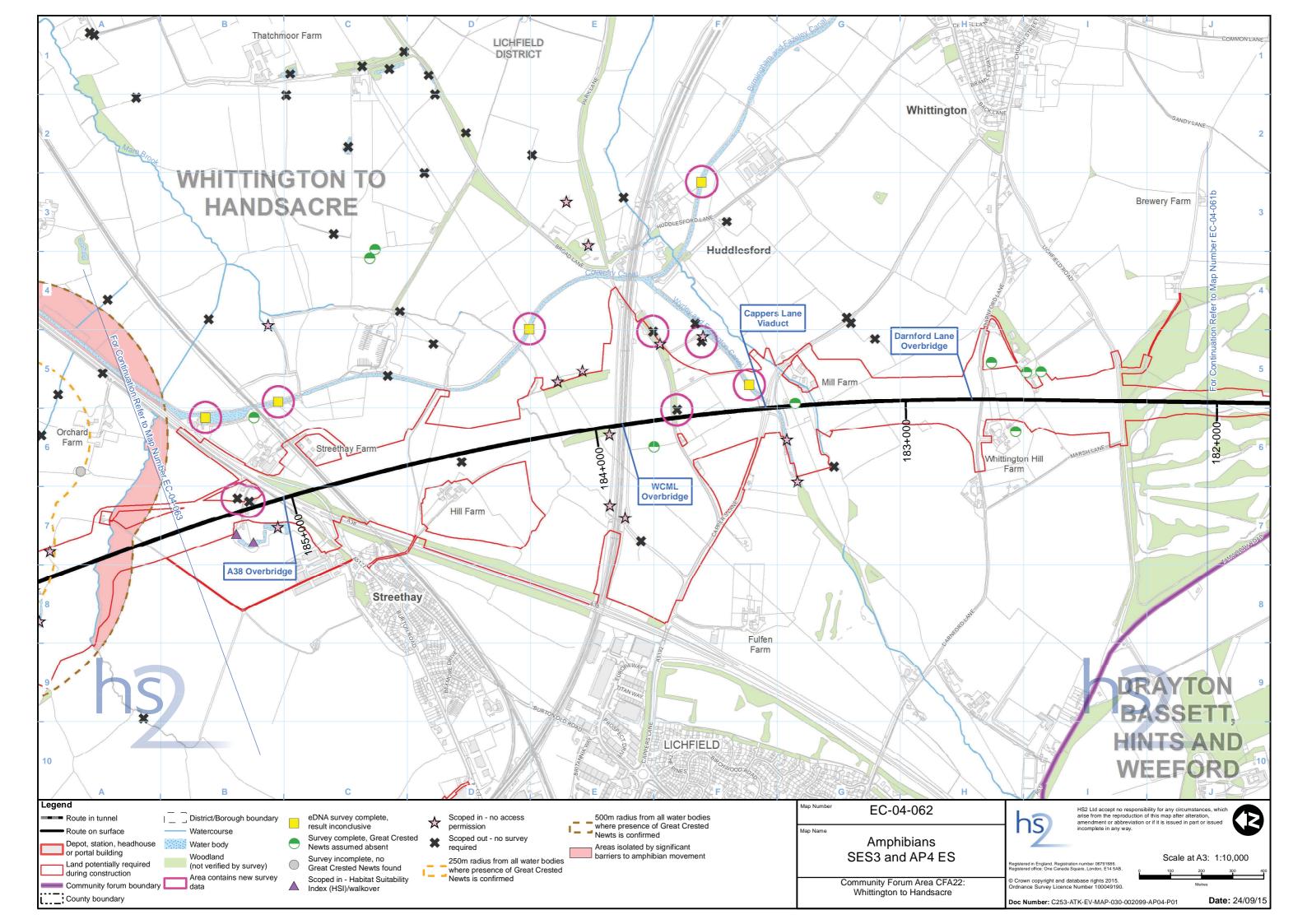


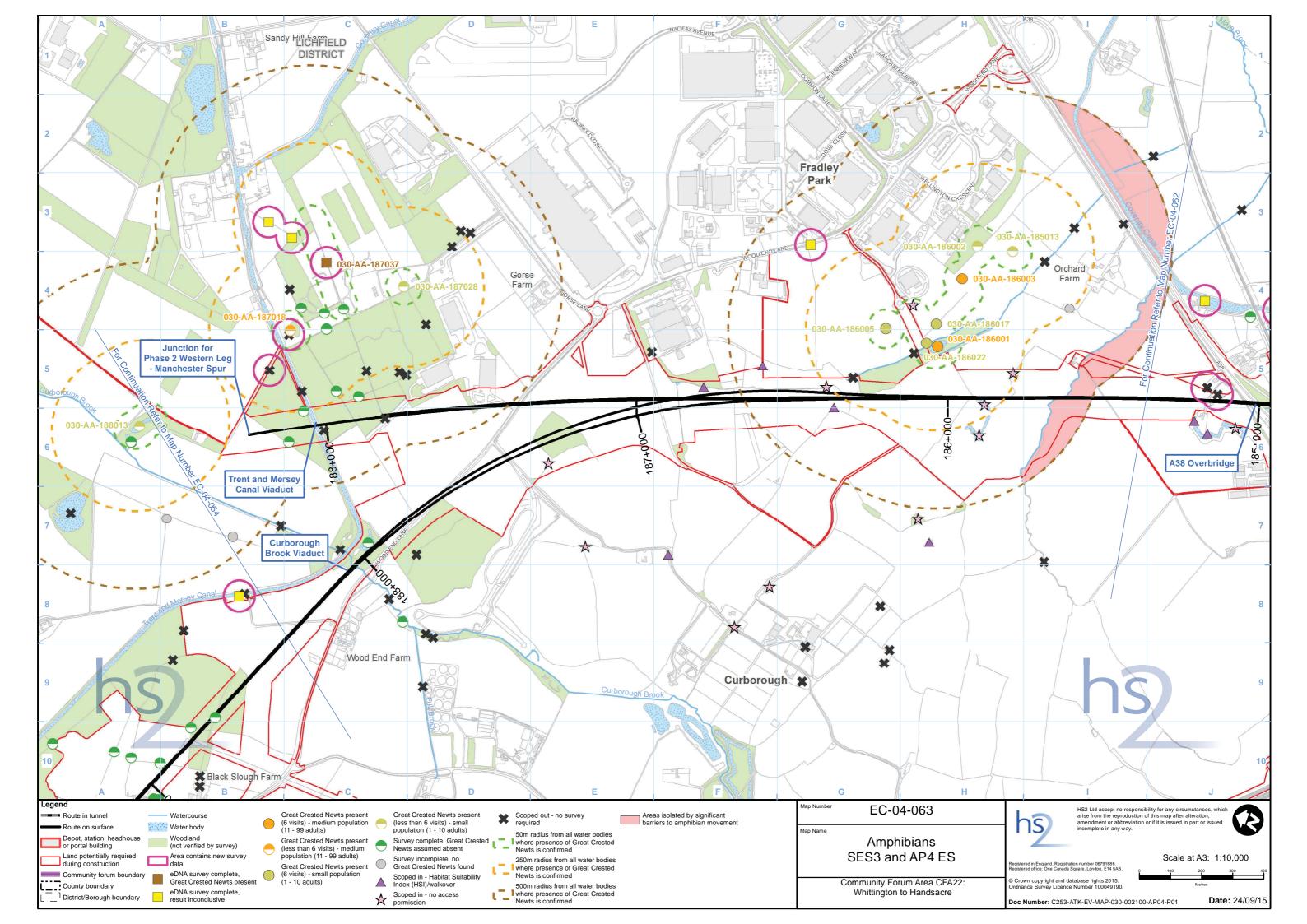


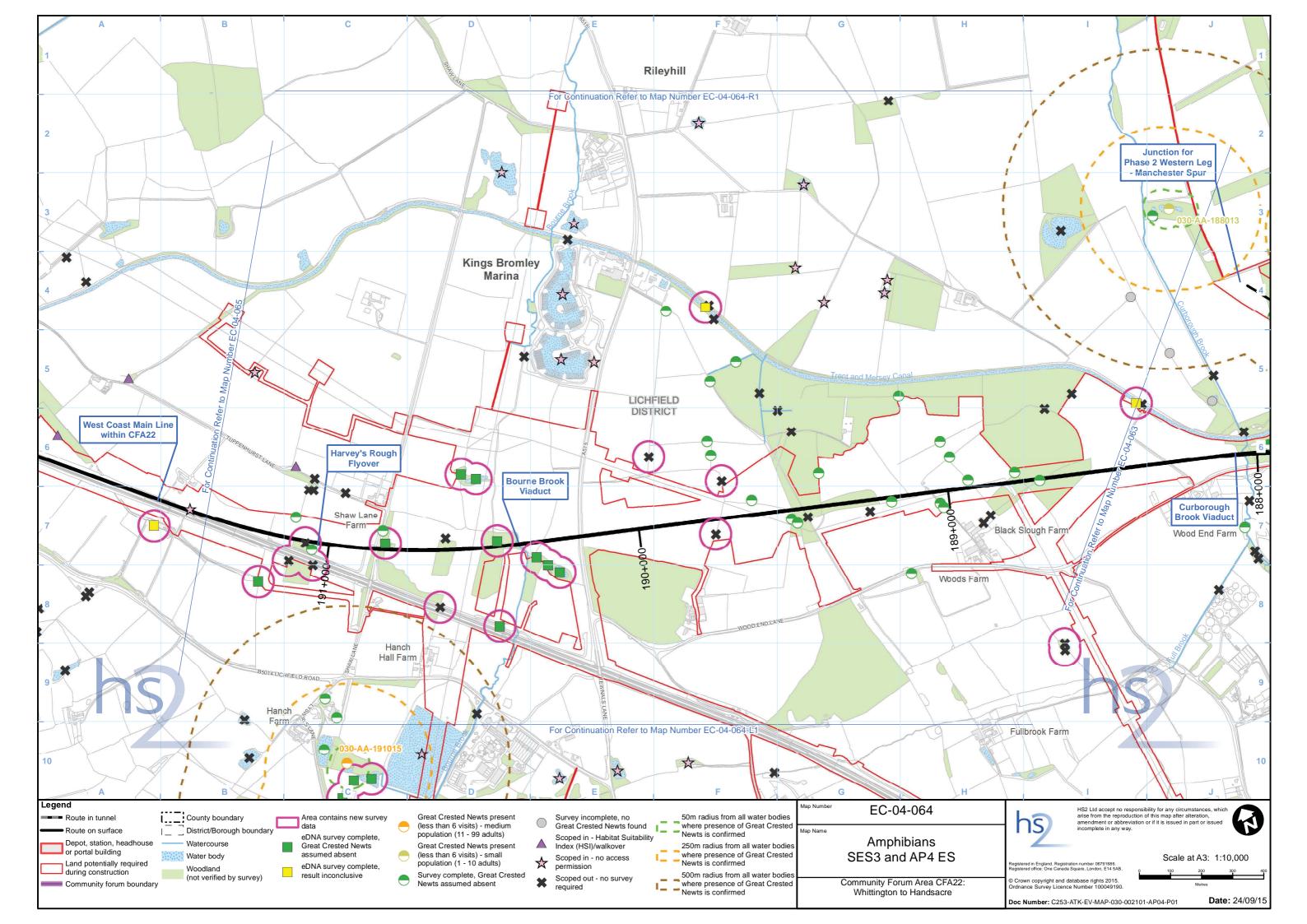
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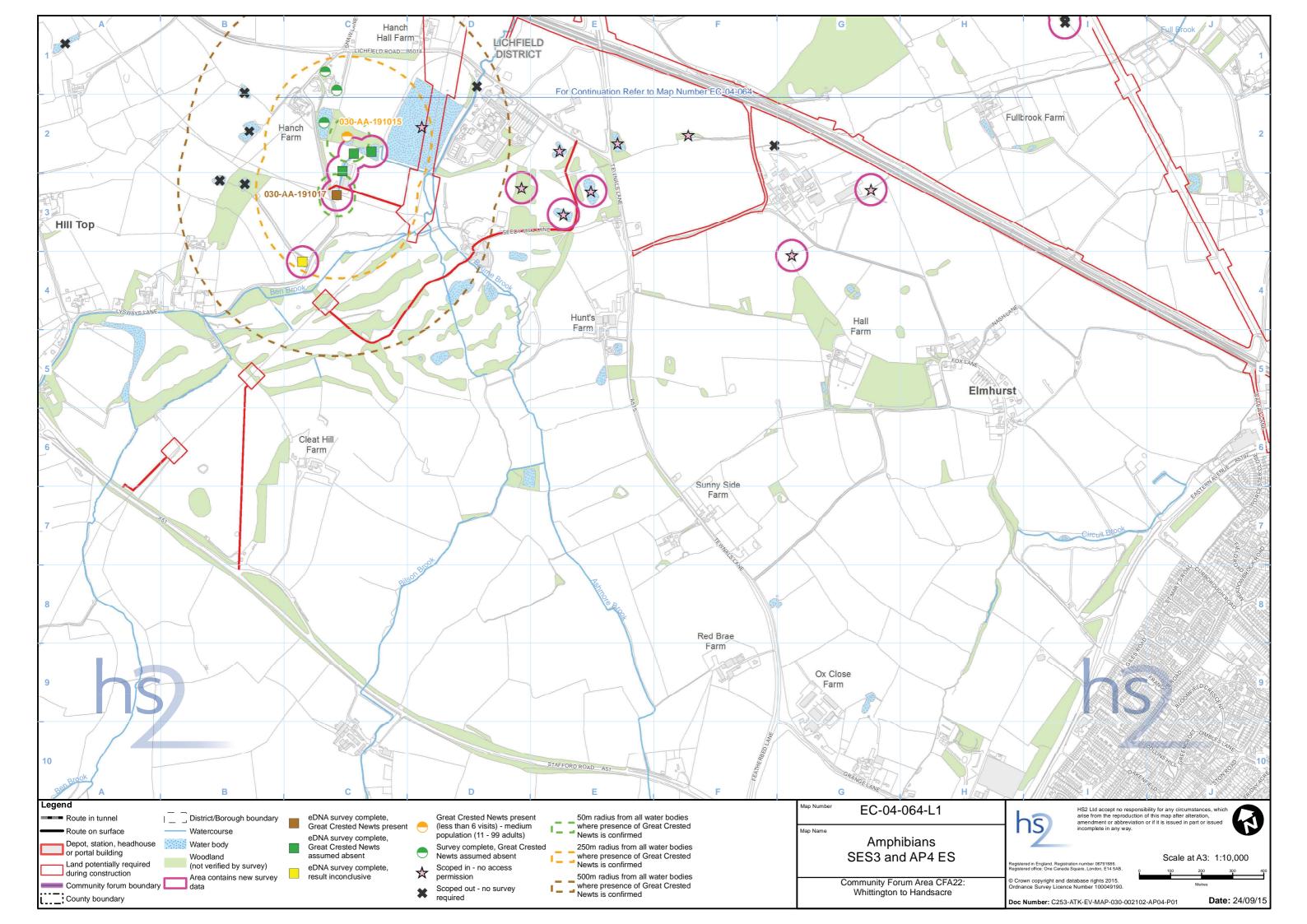
Volume 5 | CFA22 Whittington to Handsacre EC-04 – Amphibians

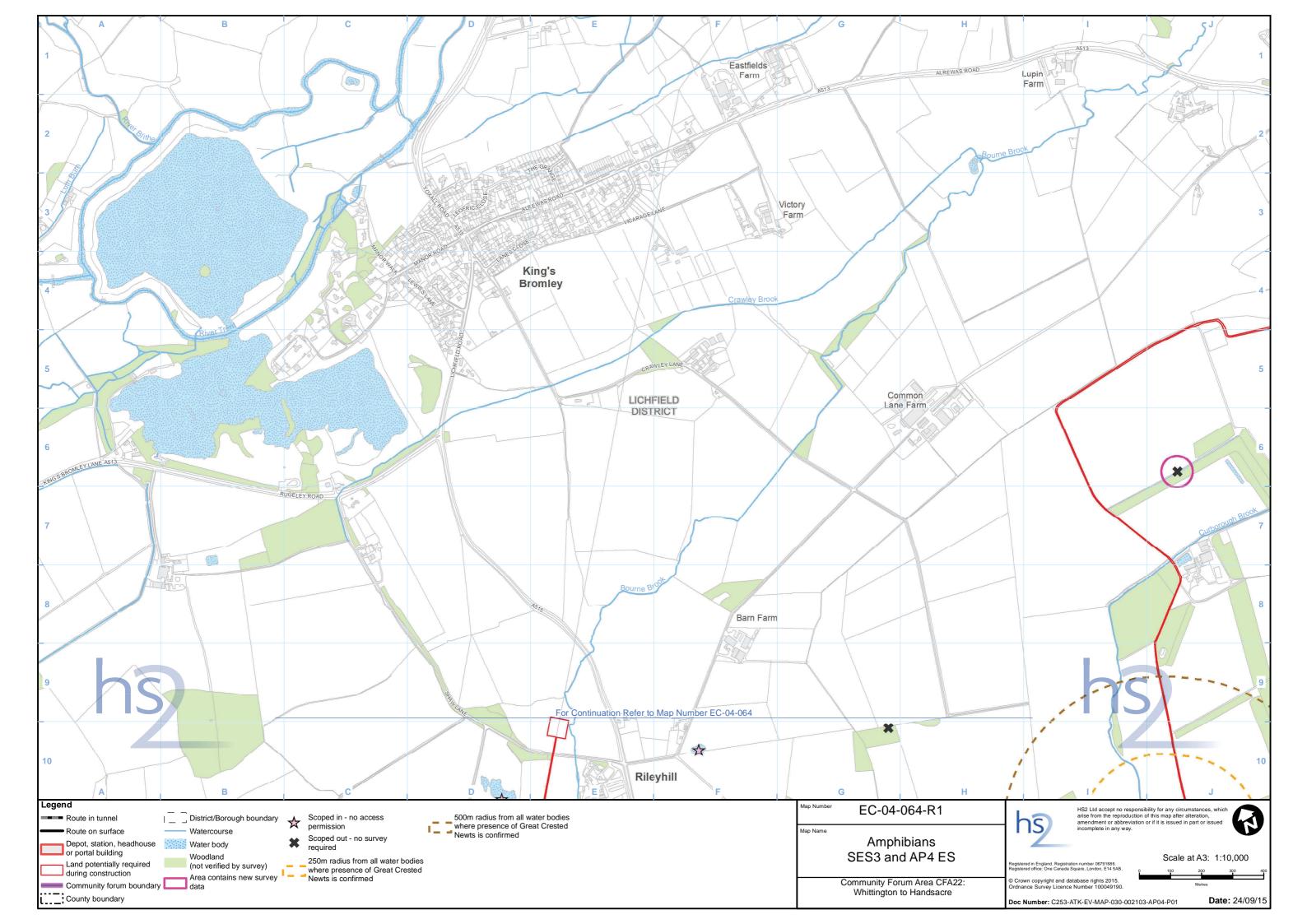


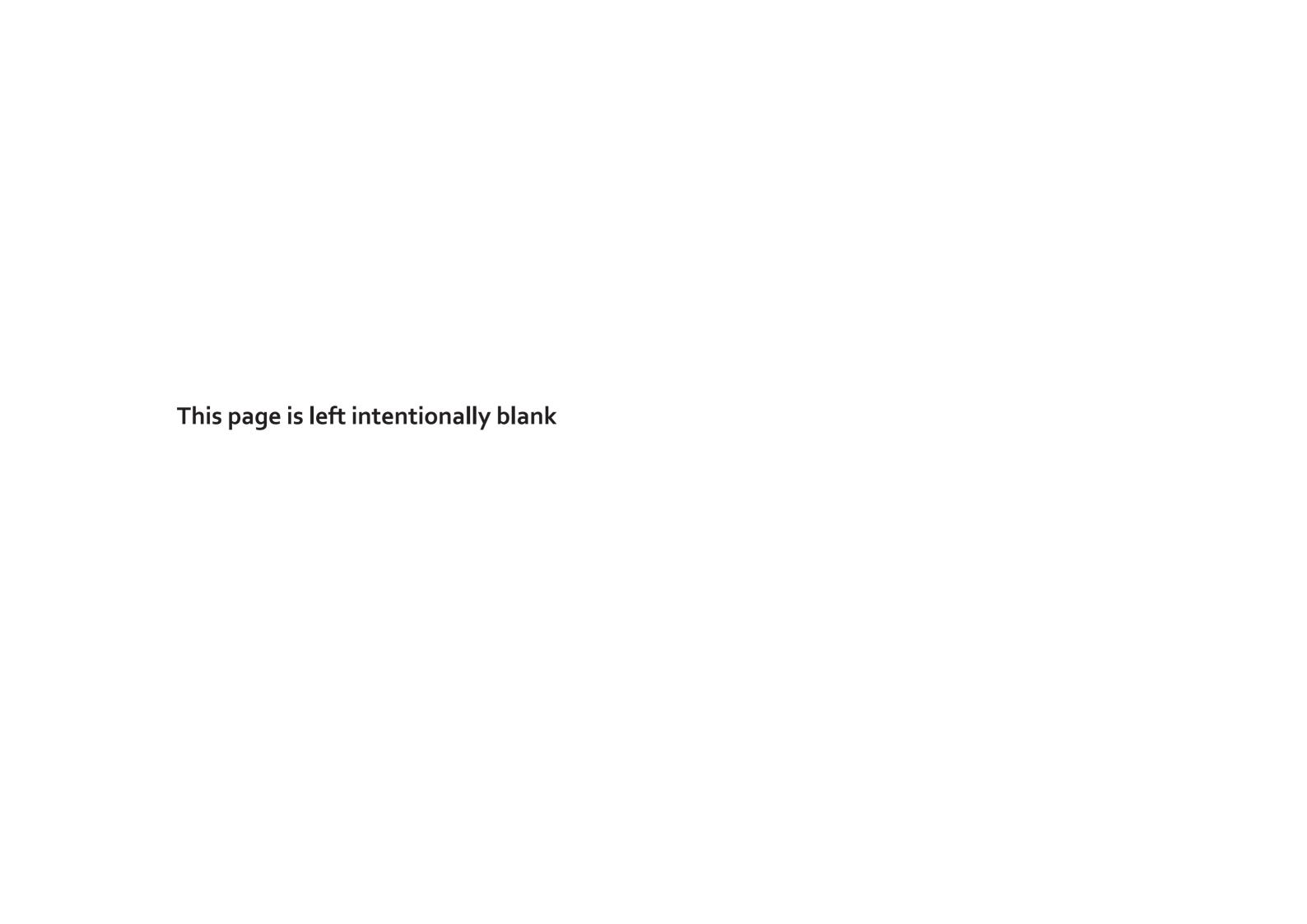








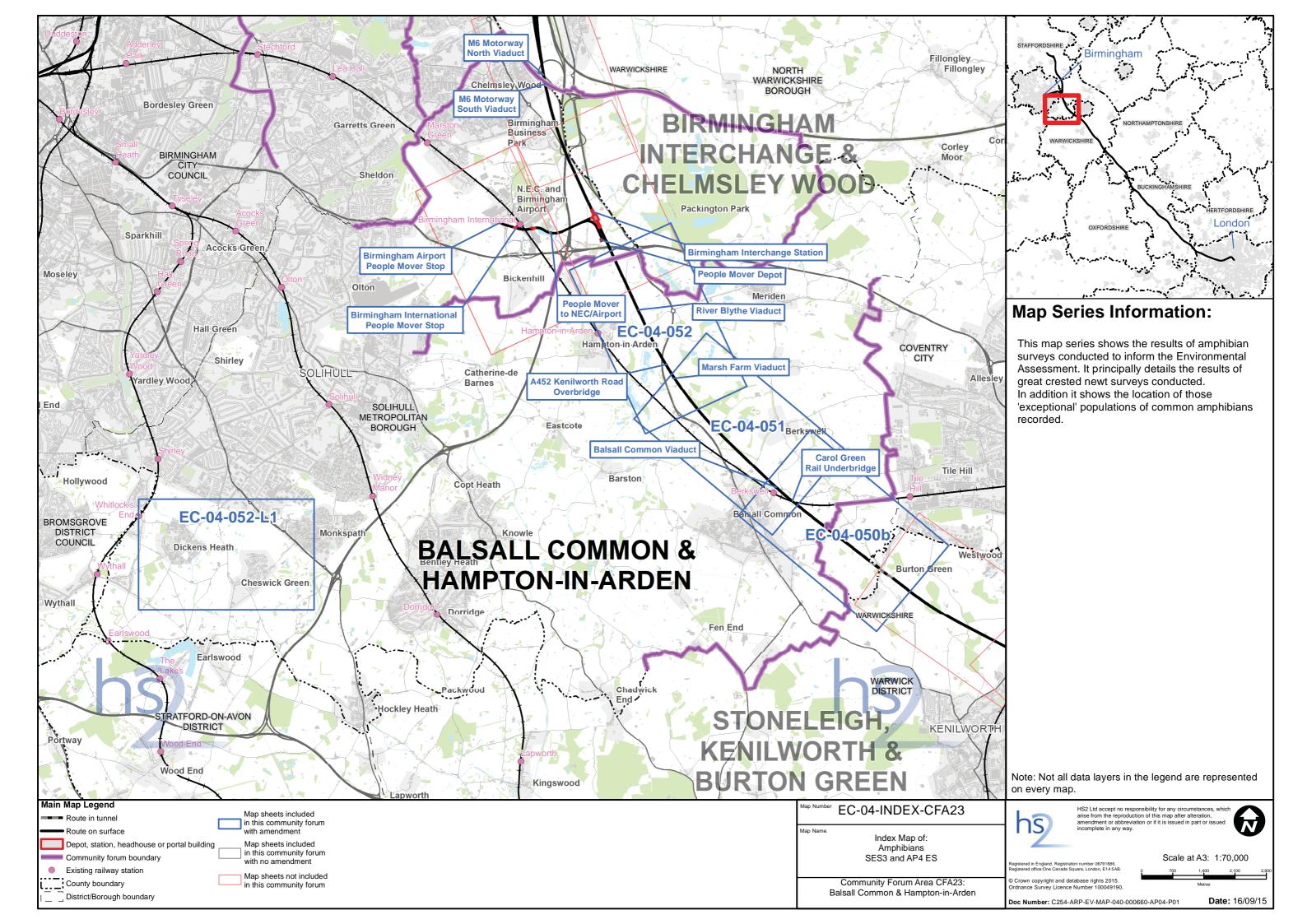


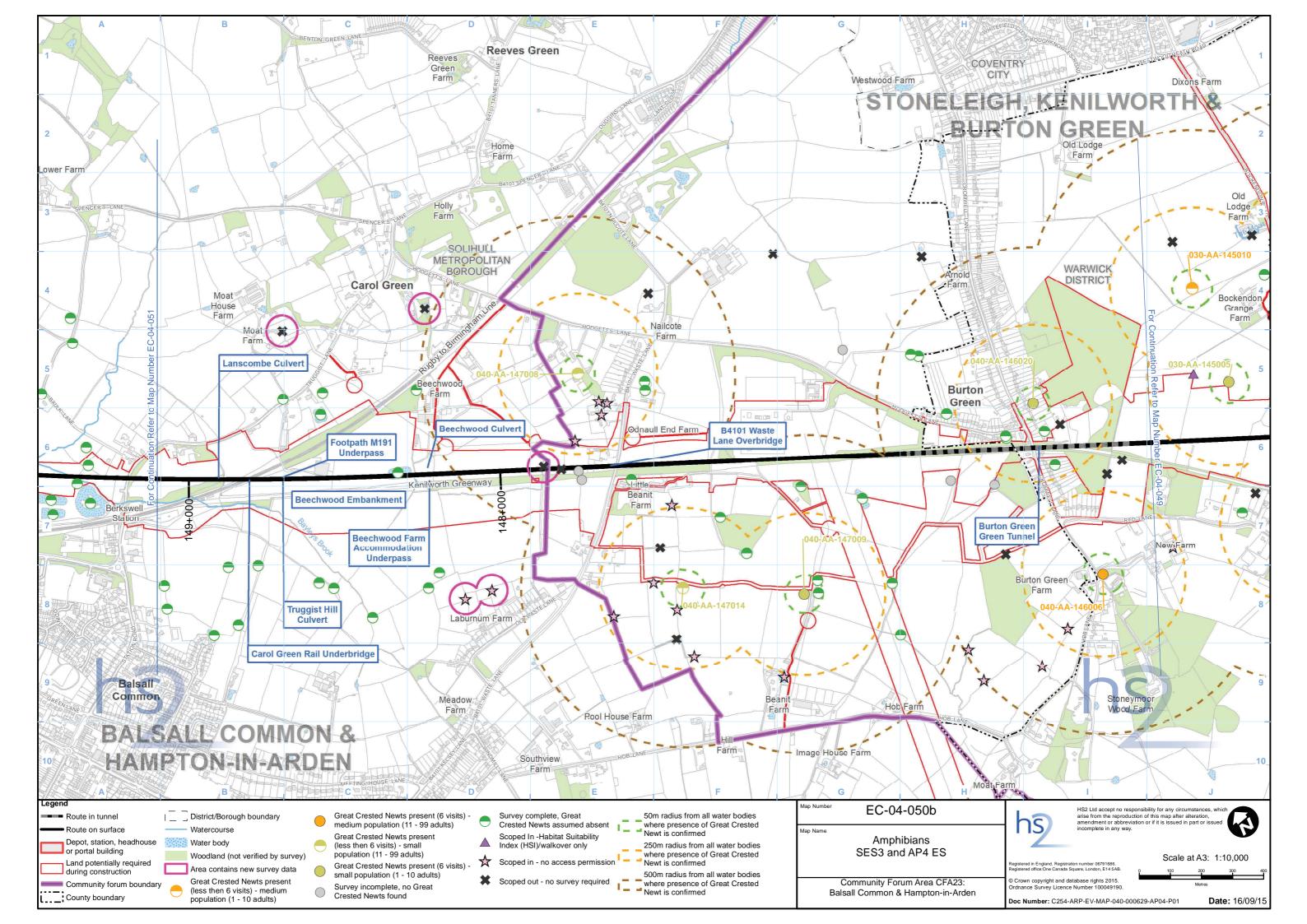


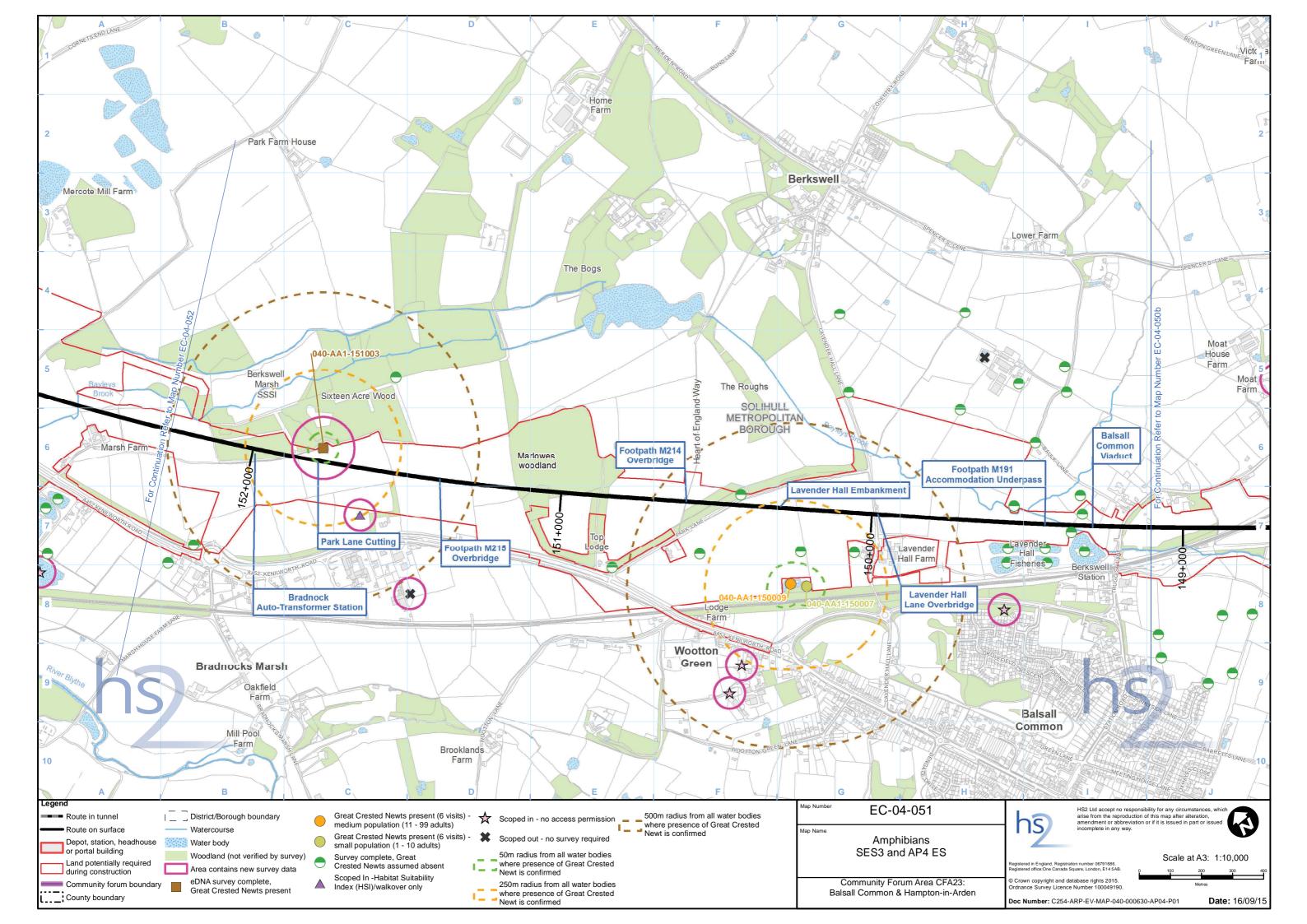


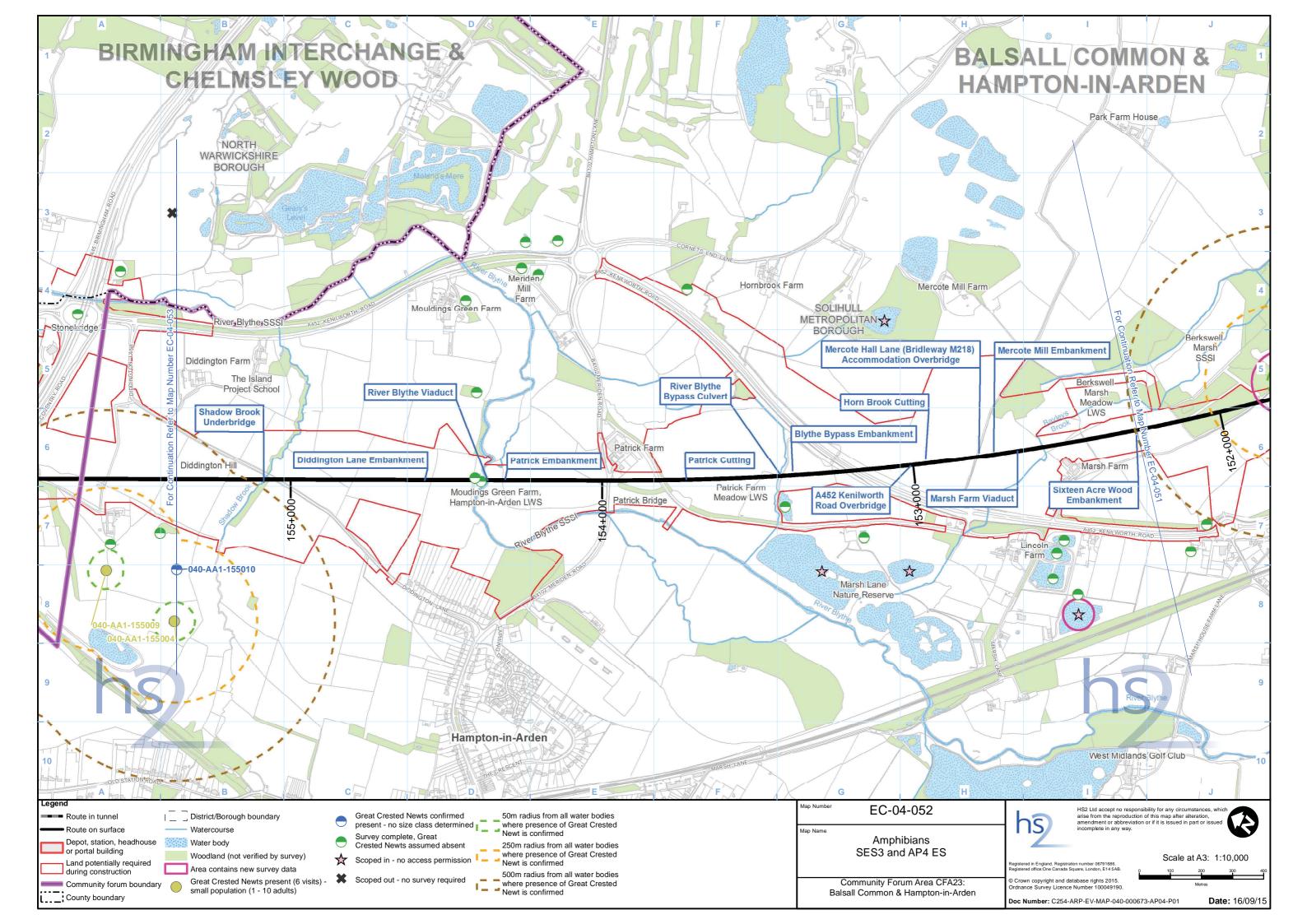
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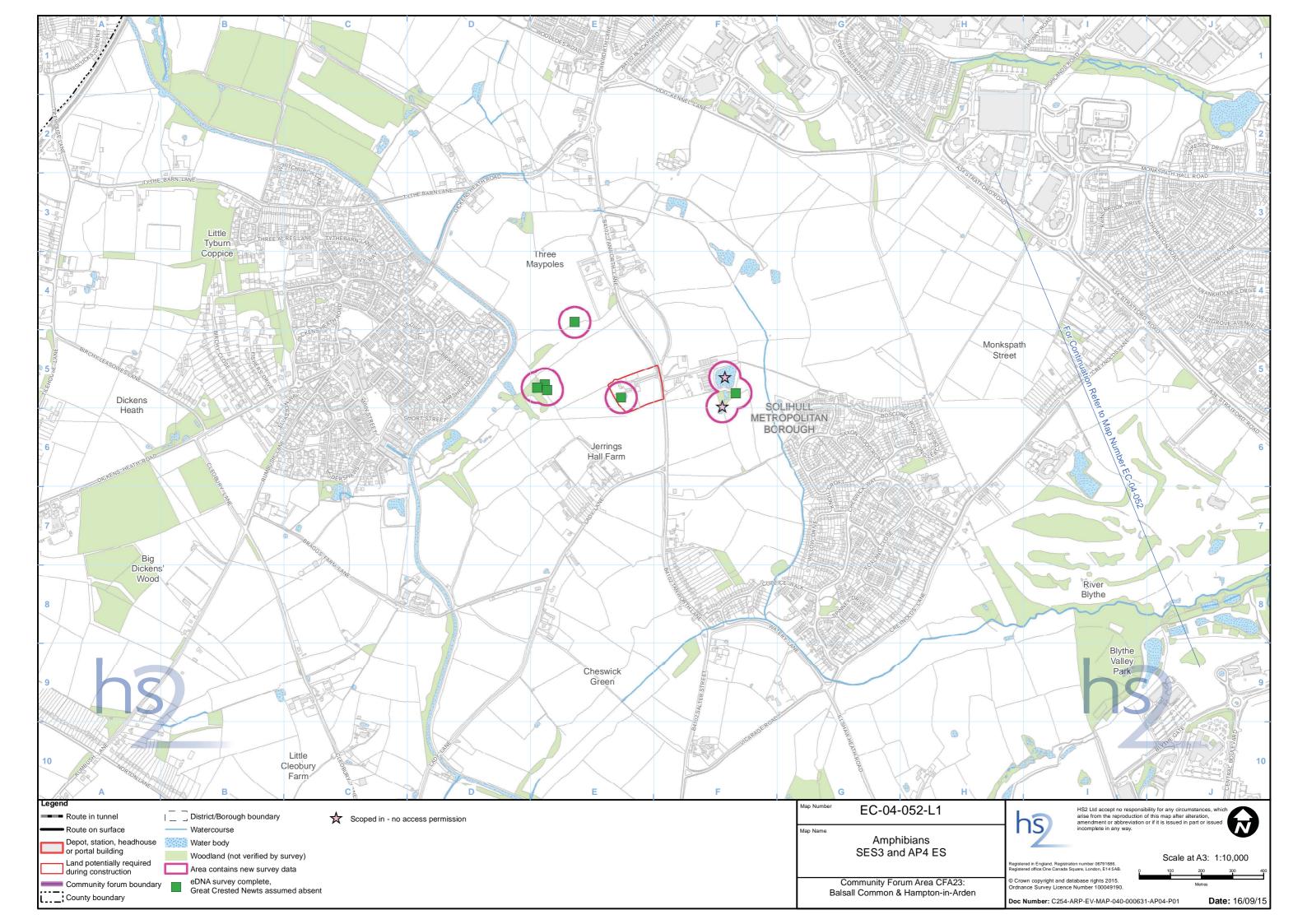
Volume 5 | CFA23 Balsall Common and Hampton-in-Arden EC-04 – Amphibians







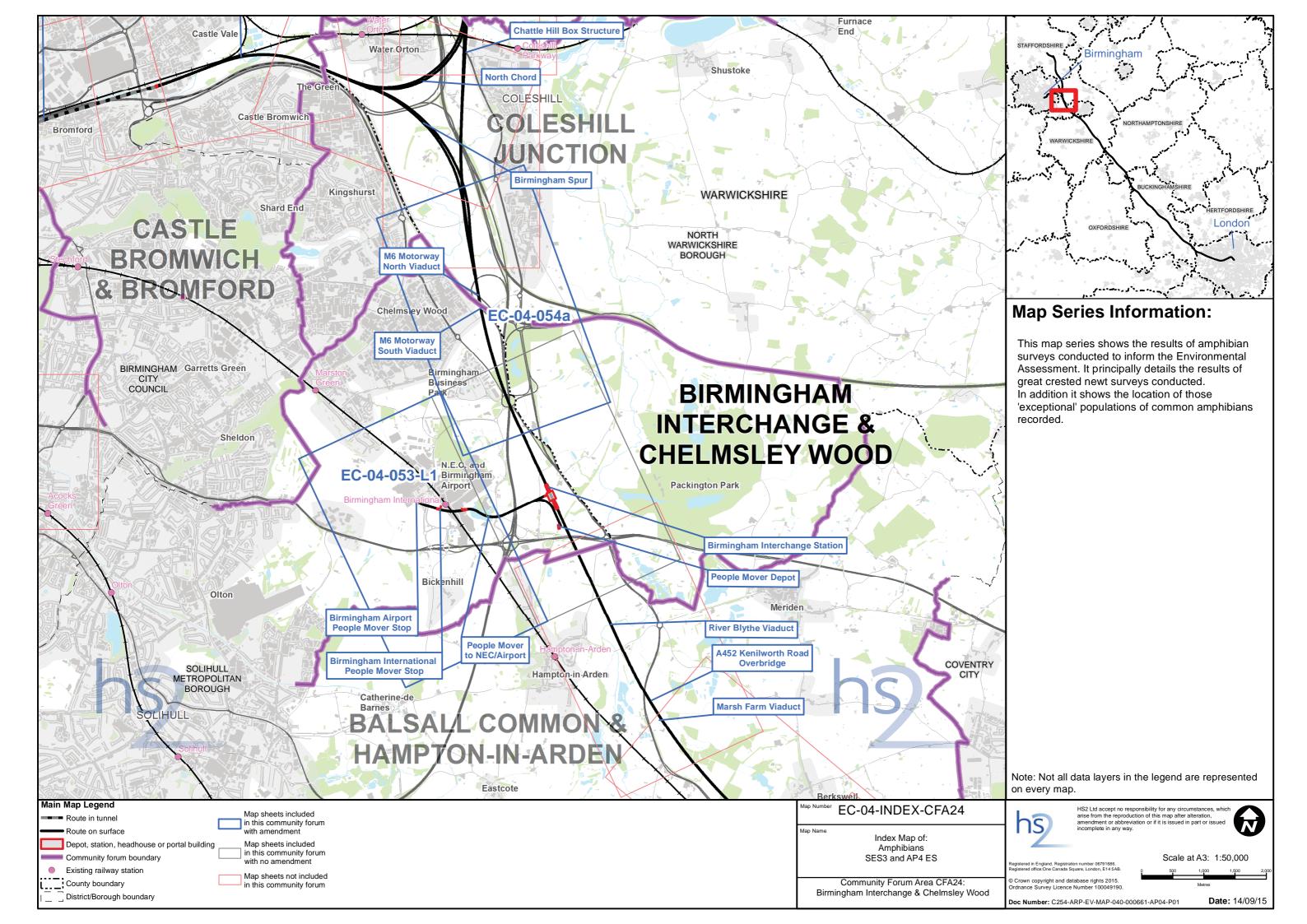


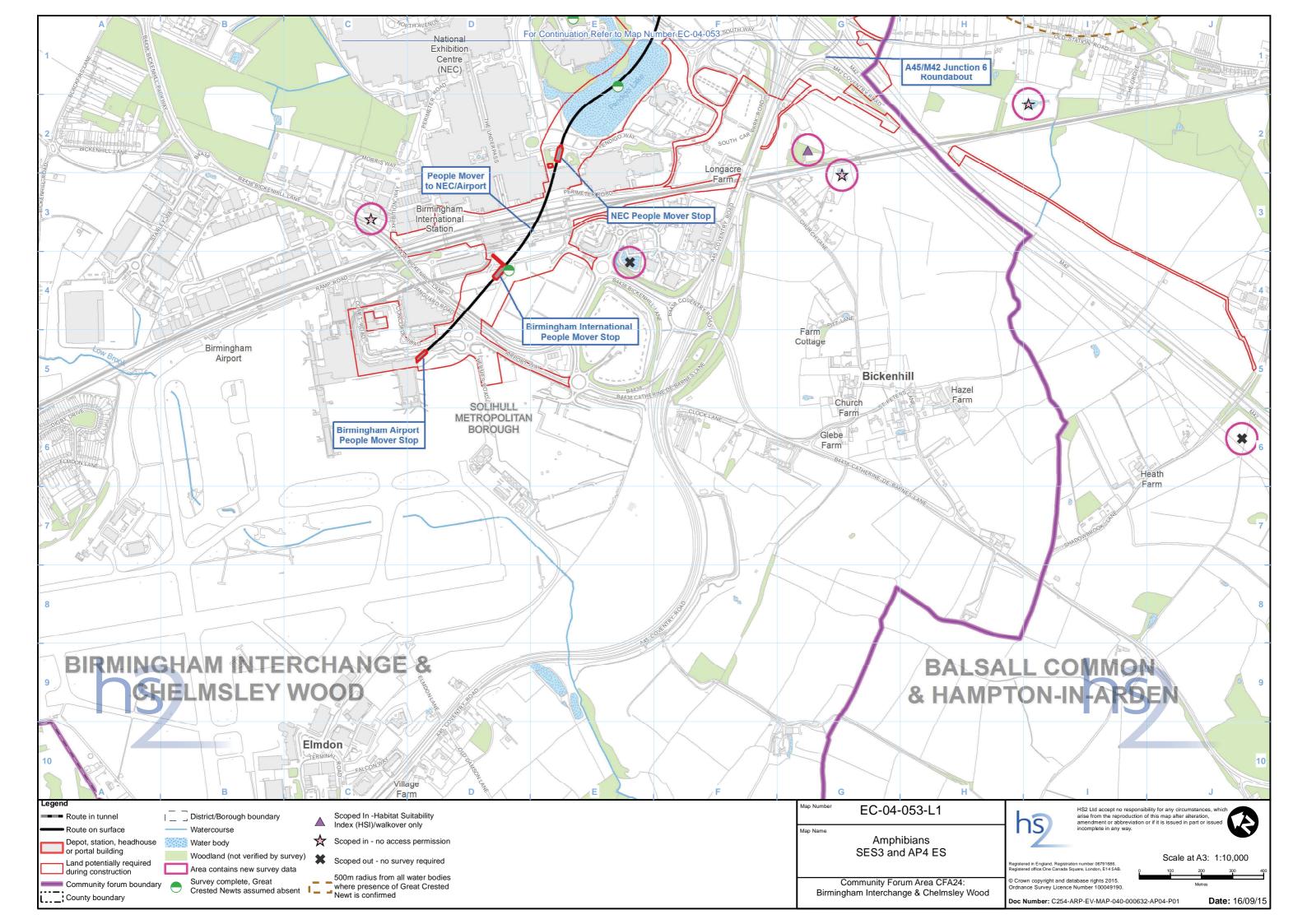


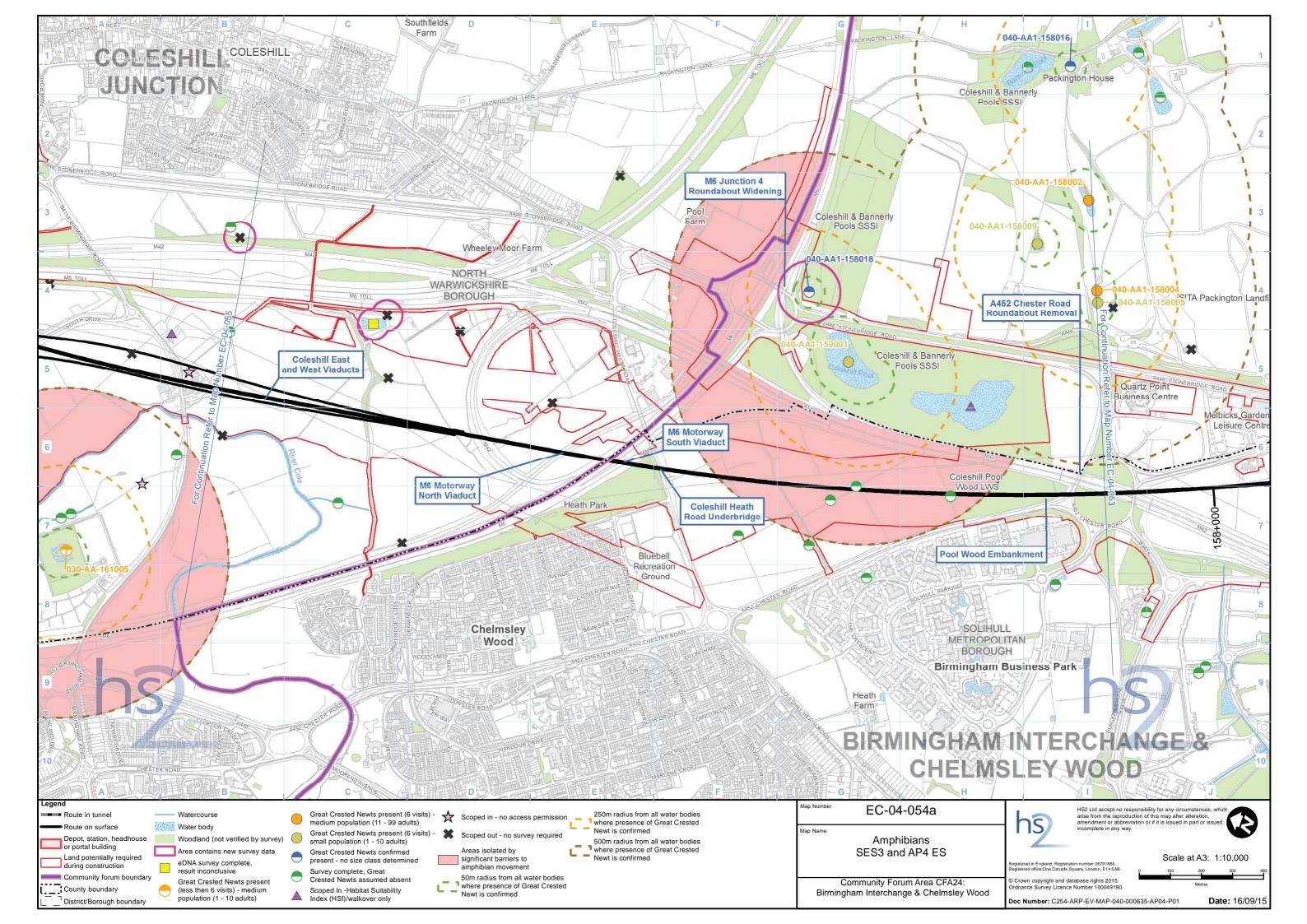


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Volume 5 | CFA24 Birmingham Interchange and Chelmsley Wood EC-04 – Amphibians



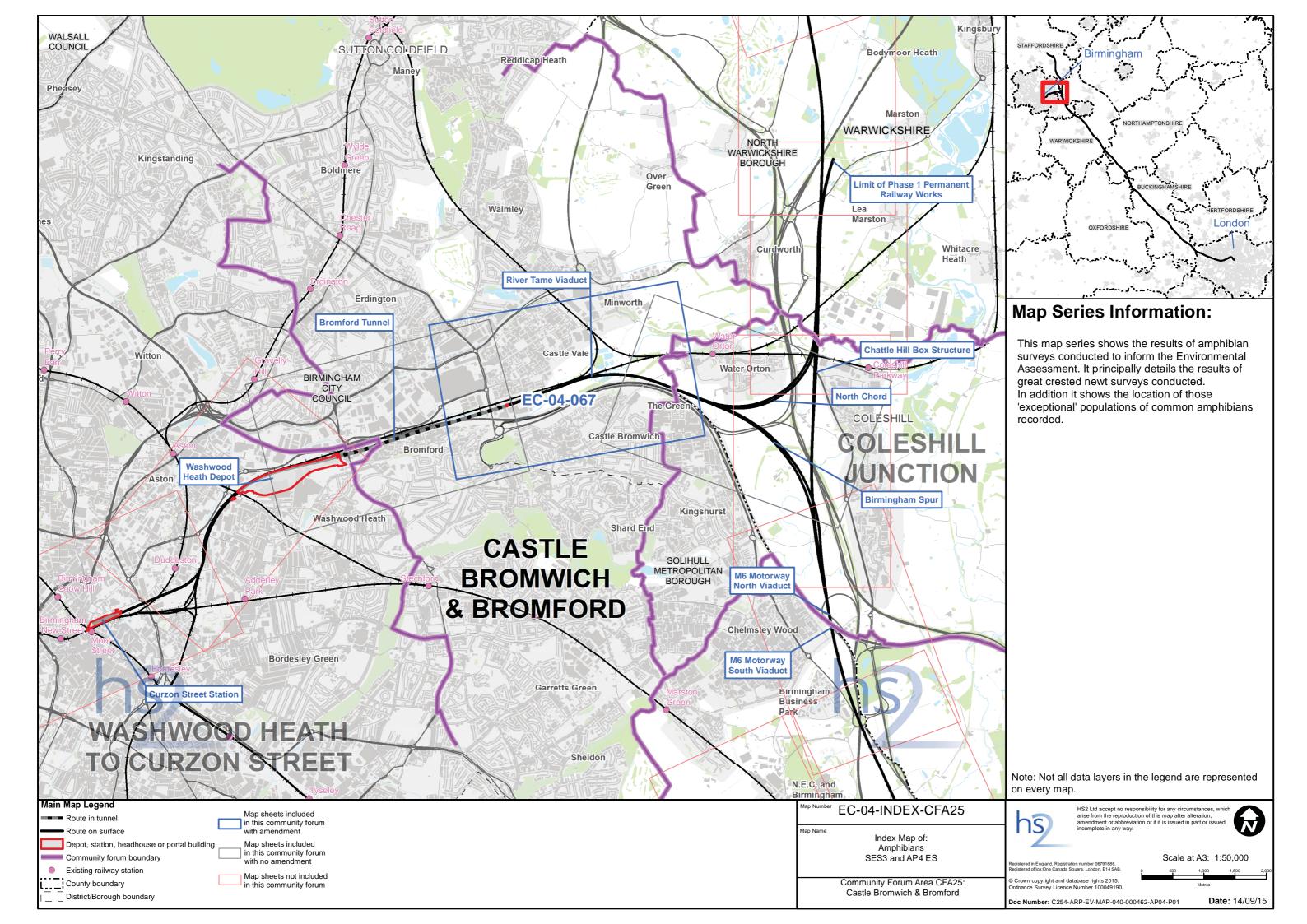


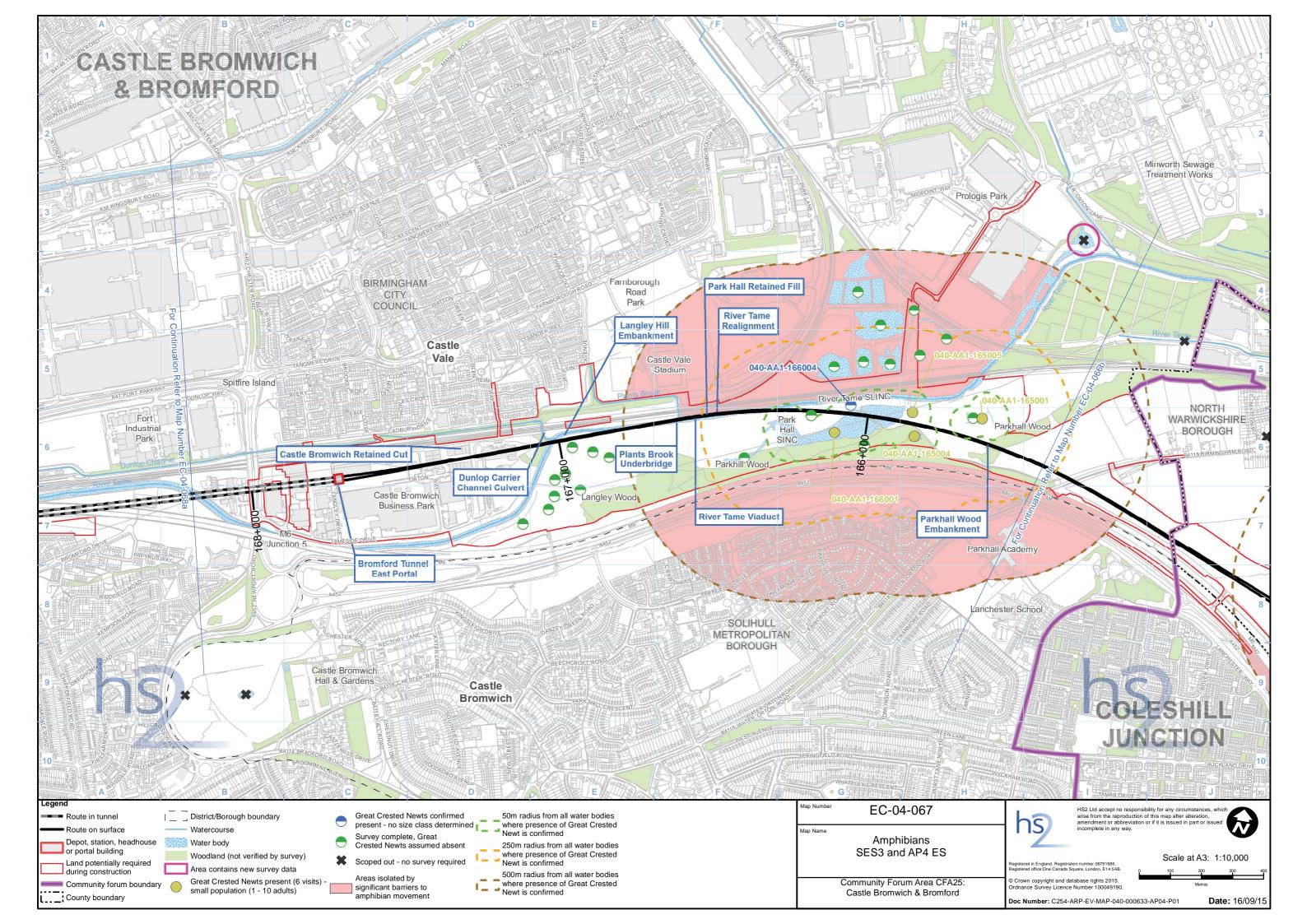


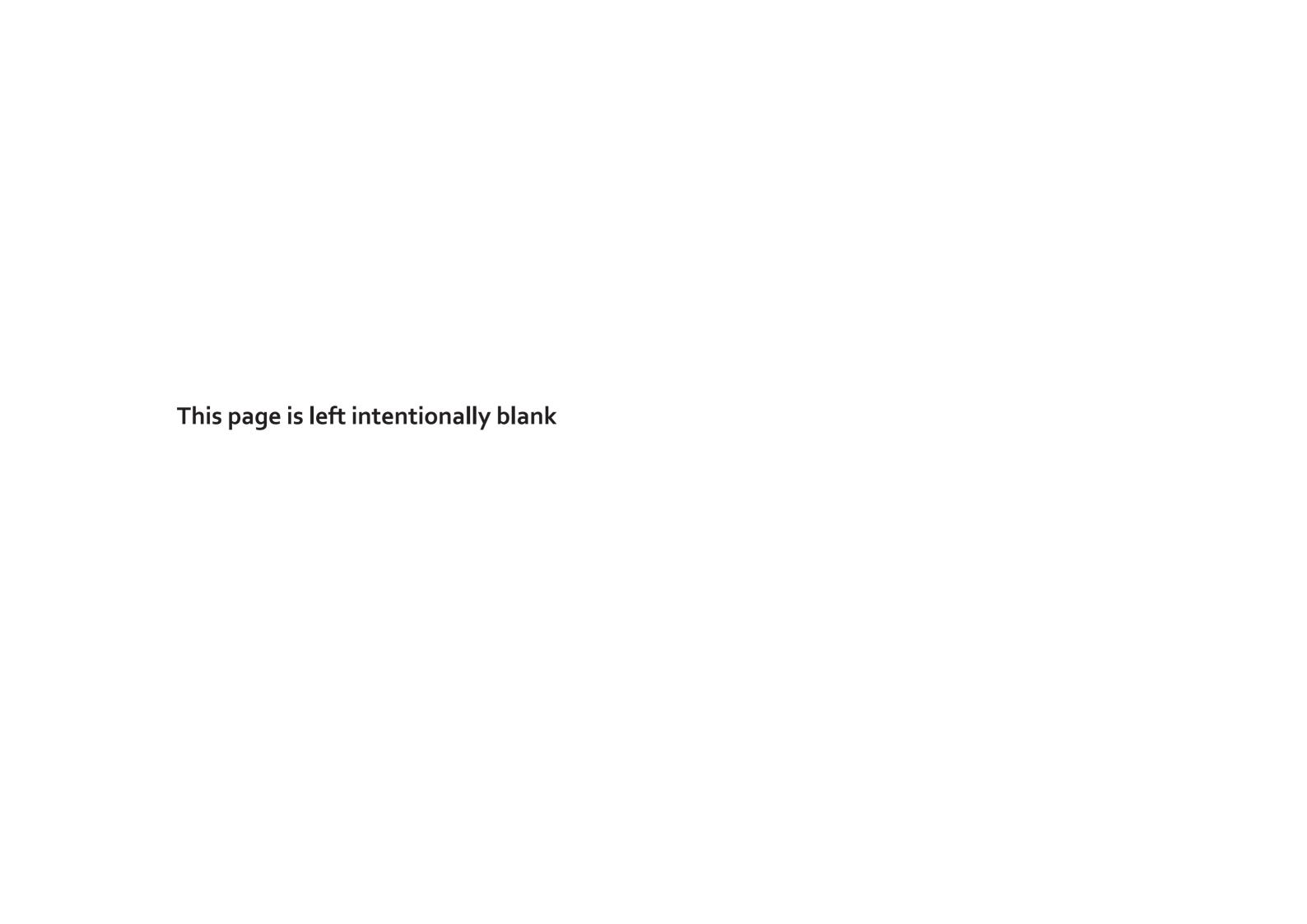


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Volume 5 | CFA25 Castle Bromwich and Bromford EC-04 – Amphibians



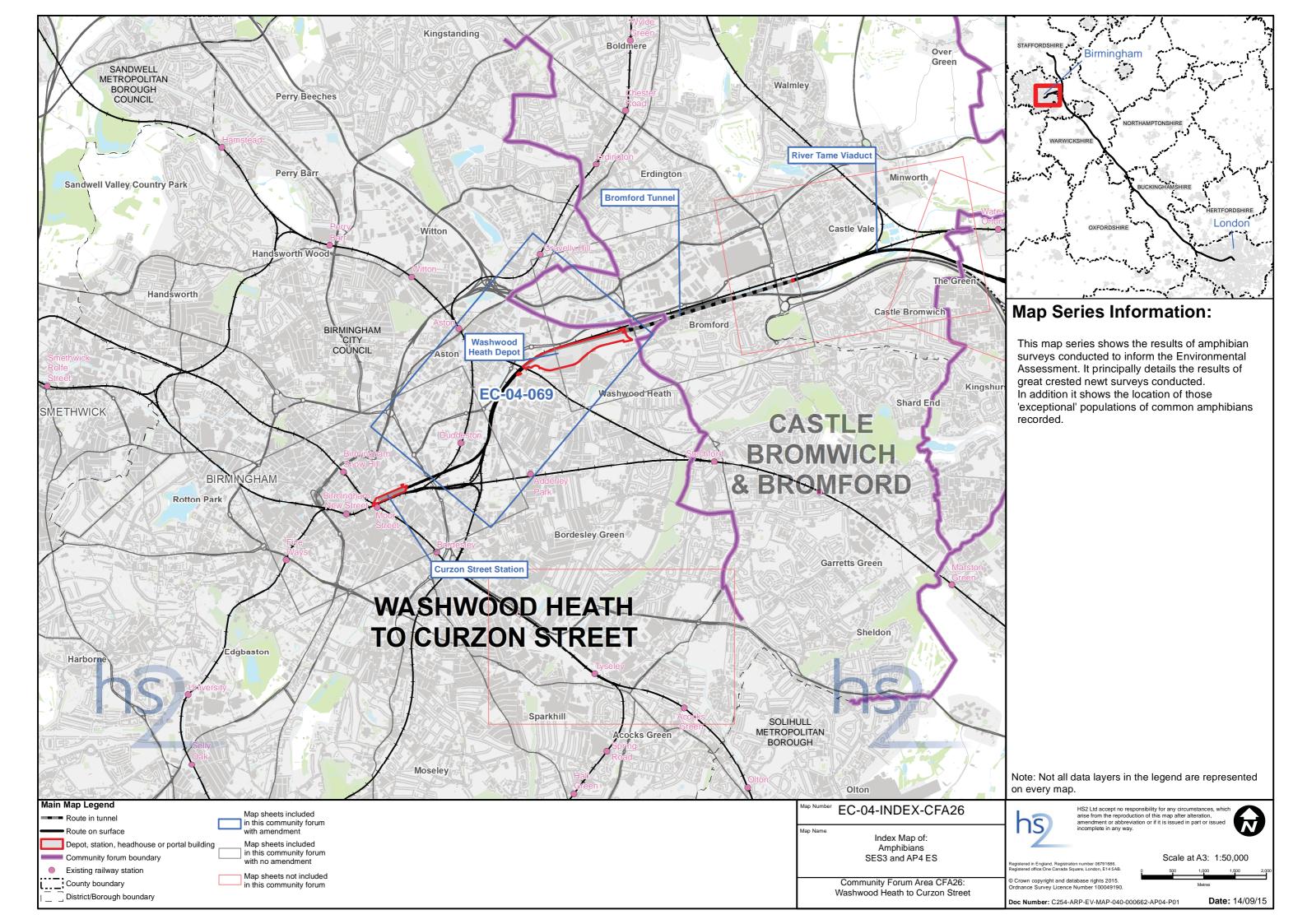


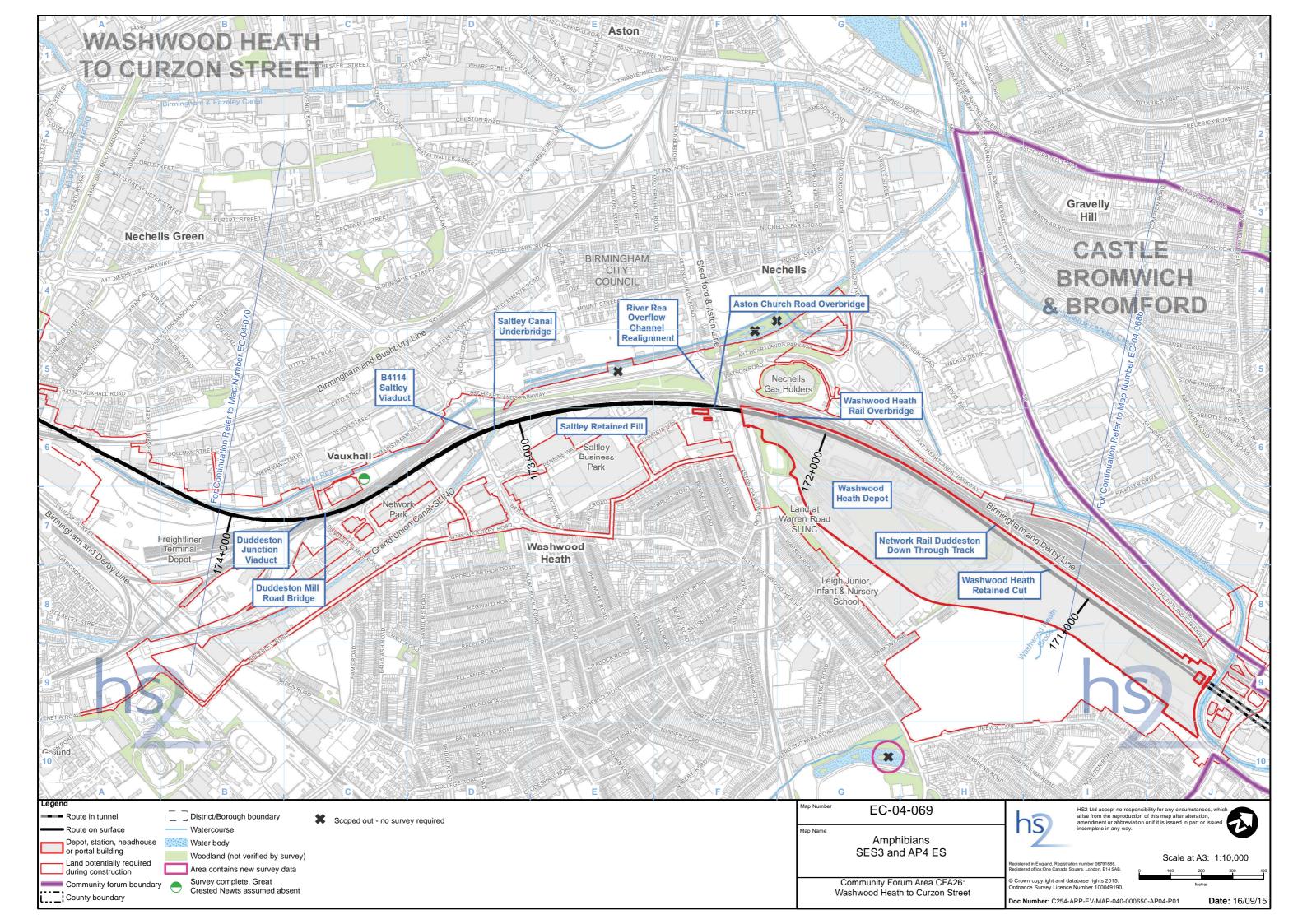


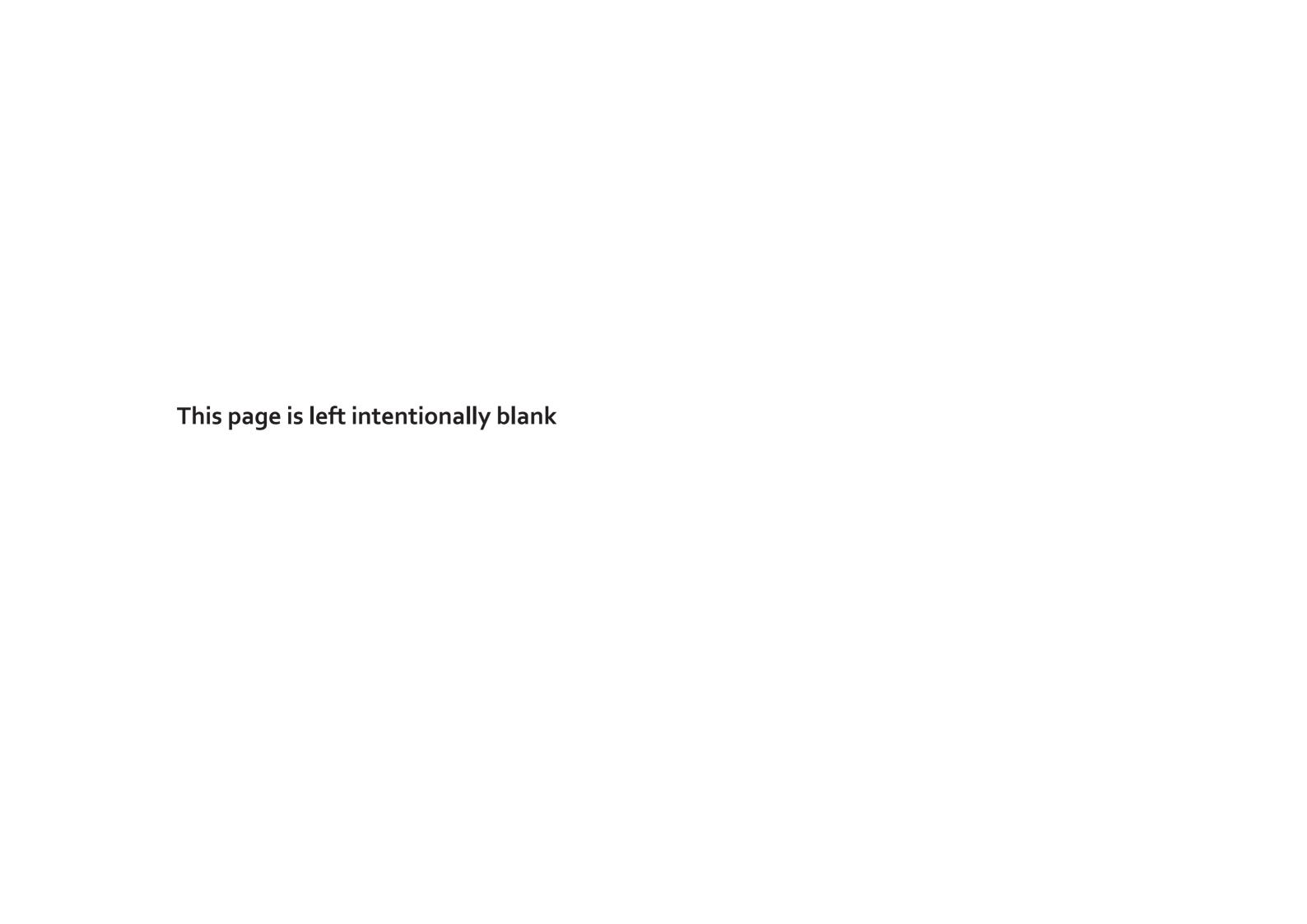


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Volume 5 | CFA26 Washwood Heath to Curzon Street EC-04 – Amphibians









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