

### **Environmental Statement**

Volume 2 | Map books - Part 1 of 6
CFA07 Colne Valley
CFA09 Central Chilterns
CFA10 Dunsmore, Wendover and Halton

September 2014 ES 3.2.1



### **Environmental Statement**

Volume 2 | Map books - Part 1 of 6
CFA07 Colne Valley
CFA09 Central Chilterns
CFA10 Dunsmore, Wendover and Halton

September 2014 ES 3.2.1

AP



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:

**ARUP** 

**ATKINS** 

**CAPITA** 



ineco



PARSONS BRINCKERHOFF





High Speed Two (HS2) Limited, One Canada Square, London E14 5AB

Details of how to obtain further copies are available from HS2 Ltd.

Telephone: 020 7944 4908

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.hs2.org.uk

Copyright © High Speed Two (HS2) Limited, 2014, except where otherwise stated.

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full via the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.



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

### **Contents**

Mapping explanatory notes

Data dictionary and definitions

Map series name	CT-o5 – Construction Phase	CT-o6 – Proposed Scheme	LV-01 — Photomontages	LV-03 – Construction Phase Significantly Affected Viewpoints	LV-04 — Operational Phase Significantly Affected Viewpoints	SV-05 – Operational Airborne Noise and Vibration Impacts and Likely Significant Effects
Map series description	These maps show the land potentially required during construction, the construction features, access requirements and infrastructure associated with construction of the Proposed Scheme. The maps also show the construction phase arrangements for public access using Public Rights of Way.  The base mapping is reflective	These maps show permanent features, infrastructure, restored land, and areas for landscaping, screening and ecological mitigation associated with the Proposed Scheme. The base mapping is reflective of 2013 Ordnance Survey (OS) data.	Photomontages illustrating the Proposed Scheme during construction and operation.	Maps showing the viewpoint locations from which the Proposed Scheme has been assessed to give rise to significant effects during the construction phase.	Maps showing the viewpoint locations from which the Proposed Scheme has been assessed to give rise to significant effects during the operational phase.	SV-05 presents the direct operational noise impacts and likely significant effects of the scheme.  The SV-05 figure series contains a large amount of information relating to the operational noise and vibration assessment. It is designed to communicate visually the assessment process from the prediction of impacts to the determination of likely residual significant effects. The
Community Forum Area of 2013 Ordnance Survey (OS) name data.					corresponding text is included in Vol2.	
CFA 07 – Colne Valley	✓	×	×	*	*	×
CFA o8 – The Chalfonts and Amersham	×	×	*	×	×	*
CFA og – Central Chilterns	✓	✓	*	*	×	×
CFA 10 – Dunsmore, Wendover and Halton	✓	✓	✓	×	×	*

### Mapping explanatory notes

#### **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 London-West Midlands Additional Provision Environmental Statement (AP 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 AP 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 dependant 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 on the left hand page and the AP map on the right. For the CT-05 and CT-06 map series, the AP map is annotated with a red cloud which highlights the area of change. A red outlined text box provides a brief description of the AP, and gives the AP reference number. Only maps which have been amended as a result of the AP are included within the map books.

Each volume 5 map is annotated to describe the change to a receptor or significant effect, and to give the AP reference number. For more detailed information about the AP annotation, refer to the map series legend. Only maps which have been amended as a result of the AP are included within the map book.

#### 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 seven map books which make up the AP ES, spread across volumes 2 and 5. A list of the titles is provided below for reference.

Volume number	Title		
Volume 2 Map book – Part 1 of 6	CFA o7 Colne Valley		
·	CFA og Central Chilterns		
	CFA 10 Dunsmore, Wendover and Halton		
Volume 2 Map book – Part 2 of 6	CFA 11 Stoke Mandeville and Aylesbury		
Volume 2 Map book – Part 3 of 6	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		
Volume 2 Map book — Part 4 of 6	CFA 16 Ladbroke and Southam		
	CFA 17 Offchurch and Cubbington		
	CFA 18 Stoneleigh, Kenilworth and Burton Green		
Volume 2 Map book – Part 5 of 6	CFA 19 Coleshill Junction		
	CFA 20 Curdworth to Middleton		
	CFA 21 Drayton Bassett, Hints and Weeford		
	CFA 22 Whittington to Handsacre		
Volume 2 Map book – Part 6 of 6	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		
Volume 5 Map Book	Environmental topics		



**Environmental Statement** 

Data dictionary and definitions

### Data dictionary and definitions

Legend features	Definition	Source	Copyright
Balancing pond	The proposed location and extent of balancing ponds for drainage attenuation and infiltration. Outer boundary represents the perimeter.	High Speed Two (HS2) Ltd	
Chainage	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 dependant 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 1:10,000, 1:5,000 and 1:2,500 scale chainage is shown at 1km intervals.	High Speed Two (HS2) Ltd	
	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.		
Community forum boundary	The Environmental Statement has been split into 26 sections called Community Forum Areas.	High Speed Two (HS2) Ltd	© Crown Copyright and database rights 2014 Ordnance Survey Licence Number 100049190.
Construction traffic route	Public highways which may be used for HGV construction traffic.	High Speed Two (HS2) Ltd	
County boundary	County boundaries from Ordnance Survey boundary mapping.	Ordnance Survey	© Crown Copyright and database rights 2014 Ordnance Survey Licence Number 100049190.
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 and database rights 2014 Ordnance Survey Licence Number 100049190.
Ditches – new	The proposed location and extent of drainage ditches.	High Speed Two (HS2) Ltd	
Ecological mitigation pond	Ponds whose primary function is to provide ecological mitigation. This could be a standalone pond or part of a wider wetland habitat creation plan.	High Speed Two (HS2) Ltd	
Electricity substation	Includes all auto-transformers and feeder stations.	High Speed Two (HS2) Ltd	
Engineering earthworks	Engineering (structural) earthworks which include railway slopes and crossings (roads etc.).	High Speed Two (HS2) Ltd	
Existing public right of way (PRoW)	See Public Rights of Way.	See Public Rights of Way.	See Public Rights of Way.
Existing watercourse	See Watercourse.	See Watercourse.	See Watercourse.
Grassed areas	Any other area grassed not included in landscaped earthworks or ecological habitat.	High Speed Two (HS2) Ltd	
Grassland habitat creation	Soft landscape design that can include any seeded areas for the purpose of creating grassland except for the engineering earthworks.	High Speed Two (HS2) Ltd	
Hedgerow habitat creation	Ecological mitigation to provide new hedgerow planting, connectivity enhancements to existing areas and areas for ecological management. This level does not include screening planting for visual mitigation purposes.	High Speed Two (HS2) Ltd	

Legend features	Definition	Source	Copyright
HS <sub>2</sub> Access road	Access road to HS2 infrastructure such as electricity substations, balancing ponds and maintenance access points to the railway.	High Speed Two (HS2) Ltd	
Land drainage area	Provision of land to attenuate or infiltrate overland flows at or beyond the HS2 railway boundaries; for example, where existing land drainage systems are altered by the HS2 works, where the existing landform is reshaped by landscape earthworks or where surface water from third party land is intercepted by the HS2 perimeter drainage system.	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	
Landscape earthworks	Landscape earthworks to provide permanent landscape, visual or acoustic mitigation.	High Speed Two (HS2) Ltd	
Landscape mitigation planting (scrub / woodland)	Screening planting, using woodland, for visual mitigation and landscape integration purposes.	High Speed Two (HS2) Ltd	
Main construction compound	Main Construction Compounds in which main contractors offices and welfare facilities will be located.	High Speed Two (HS2) Ltd	
Main utility works	Represents all new major utility installations (included in the hybrid Bill) and also modifications to existing utilities required to construct the scheme. Includes water, electricity, telecommunications and gas.	High Speed Two (HS2) Ltd	
New, diverted or realigned PRoW	New, realigned or diverted Public Rights of Way (PRoW).	High Speed Two (HS2) Ltd	
Noise fence barrier	Denotes fence-style barriers provided as part of the noise mitigation measures. Note that other noise barriers have also been included in the form of landscaping and engineering cuttings - see the SV map series for more detail on noise mitigation.	High Speed Two (HS2) Ltd	
Public realm	Specifically provided to show areas to be used for public realm.  This layer is mainly associated with station sites and is to be used to indicate general areas for designed soft and hard landscaping.	High Speed Two (HS2) Ltd	
Public Rights of Way	Public rights of way are highways which can be used for the following purposes: - Footpaths - pedestrians only - Bridleways - pedestrians, cyclists and equestrians - Restricted byways - as bridleways plus non-motorised vehicles - Byways open to all traffic. Definitive Map data supplied by surveying authorities (i.e. county councils, London Boroughs and metropolitan borough councils in the West Midlands).	Buckinghamshire County Council Birmingham City Council Coventry City Council City of Westminster Hertfordshire County Council London Borough of Brent London Borough of Camden London Borough of Ealing London Borough of Hammersmith & Fulham London Borough of Hillingdon Northamptonshire County Council Oxfordshire County Council Royal Borough of Kensington & Chelsea Solihull Metropolitan Borough Council Staffordshire County Council	© Crown Copyright and database rights 2014 Ordnance Survey Licence Number 100049190.  This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Buckinghamshire County Council Licence No. 100021529, 2012. Copyright Buckinghamshire County Council.  © Copyright Coventry City Council

Legend features	Definition	Source	Copyright
		Warwickshire County Council	
Rail alignment	Longitudinal geometry of the tracks consisting of a series of straights and curves.	High Speed Two (HS2) Ltd	
Rail alignment formation	The space required to accommodate the railway infrastructure which typically includes the tracks, overhead line equipment, drainage, lineside access paths and cable routes for electrification and communication systems.	High Speed Two (HS2) Ltd	
Replacement floodplain storage	Provision of storage to replace floodplain occupied by the Proposed Scheme. Equivalent storage is provided for events up to the 1 in 100 (1%) annual probability event with an allowance for climate change.	High Speed Two (HS2) Ltd	
Returned to suitable development use	Post construction land will be reinstated to enable potential future development.	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	
Satellite construction compound	Represents satellite construction compounds which serve local works for major construction elements within a main contract.	High Speed Two (HS2) Ltd	
Stopped-up PRoW	Public rights of way that will be closed due to construction of the scheme.	High Speed Two (HS2) Ltd	
Sustainable placement	Sustainable placement: the on-site placement for disposal of surplus excavated material to avoid causing environmental effects (e.g. transport) that would otherwise be associated with the off-site disposal of that material. "On-site" in this context means within the land required for the purposes of the Proposed Scheme and "off-site" means external land (or landfill site) which is not specifically required for the purposes of the Proposed Scheme.	High Speed Two (HS2) Ltd	
Temporary highway diversion / realignment	Indicative temporary highway diversion layouts during the construction phase.	High Speed Two (HS2) Ltd	
Temporary material stockpile	Represents temporary stockpiling of topsoil, subsoil and other excavated materials to be used for reinstatement purposes, and also stockpile areas for managing movement of excavated materials during construction.	High Speed Two (HS2) Ltd	
Temporary PRoW diversion / realignment	Indicative temporary diversions to public rights of way as a result of construction of the scheme. These will vary depending on construction phase and local conditions.	High Speed Two (HS2) Ltd	
Tunnel portal	The footprint of a tunnel portal.	High Speed Two (HS2) Ltd	
unnels external extent	The external excavated extent of each tunnel bore.	High Speed Two (HS2) Ltd	
Vatercourse	The Detailed River Network (DRN) is the only large-scale, accurate and fully attributed digital river centreline covering England and Wales.	Environment Agency	Contains Environment Agency information © Environment Agency and database right.
Watercourse diversion	Includes rivers, streams, ditches and other open channels, diversions to these, together with any new culverts required.	High Speed Two (HS2) Ltd	
Wetland habitat creation	Ecological mitigation area to provide new wetland habitat creation, enhancements to existing areas and areas for ecological management. This level does not include screening planting for visual mitigation purposes.	High Speed Two (HS2) Ltd	

Legend features	Definition	Source	Copyright
Woodland habitat creation	Ecological mitigation area to provide new woodland planting, connectivity enhancements to existing areas and areas for ecological management. This level does not include screening planting for visual mitigation purposes.	High Speed Two (HS2) Ltd	



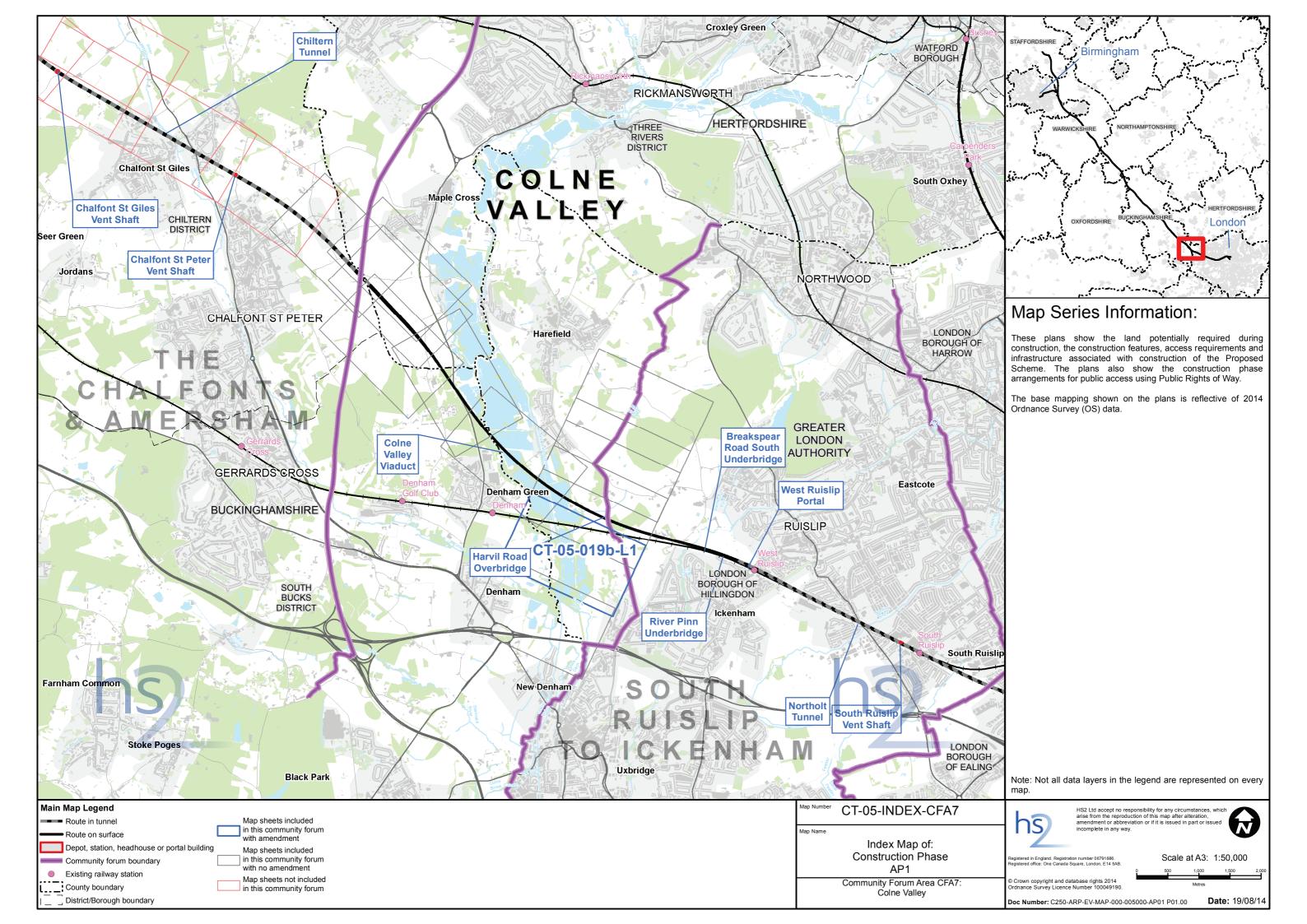
**Environmental Statement** 

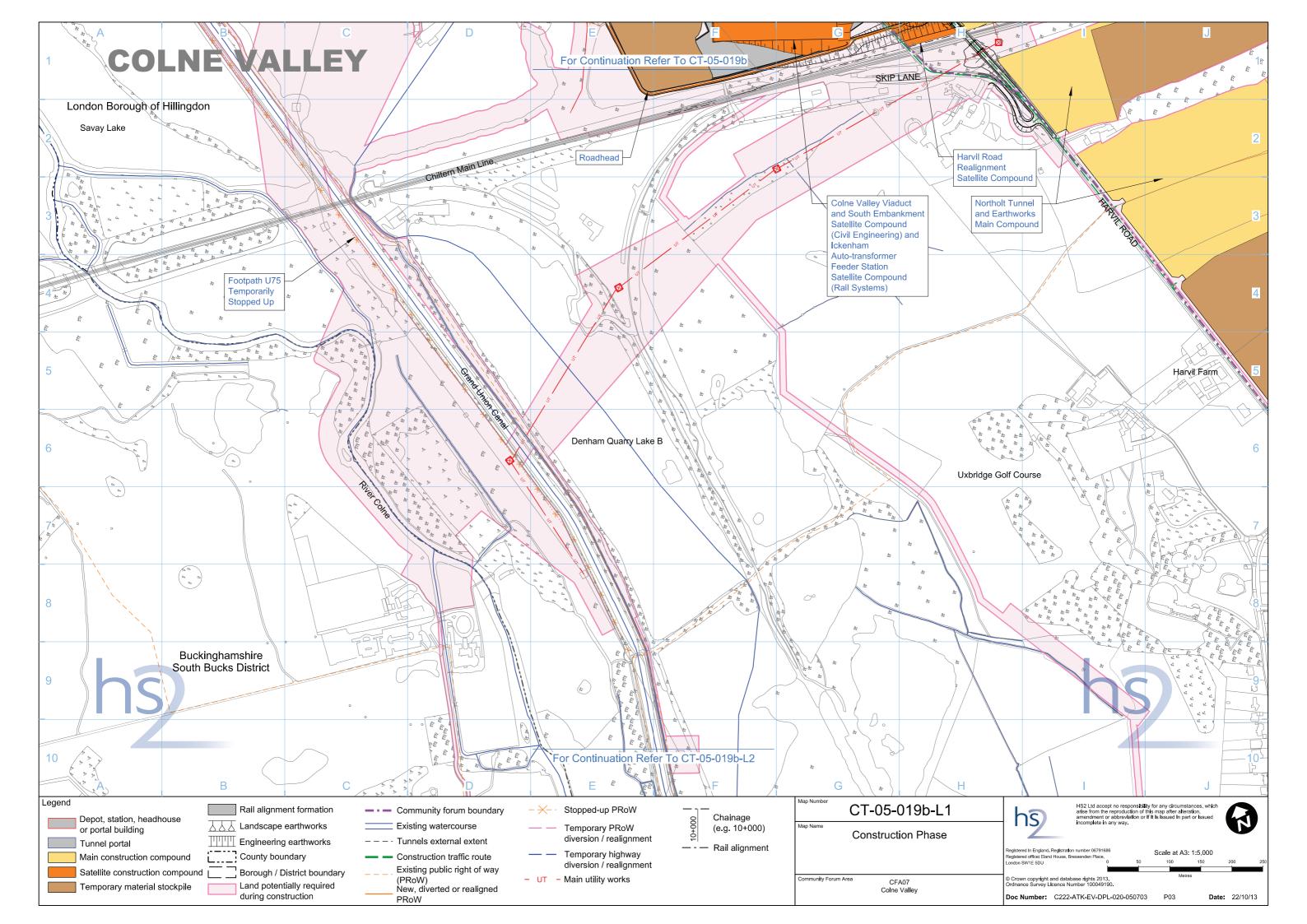
Volume 2 | CFA07 Colne Valley

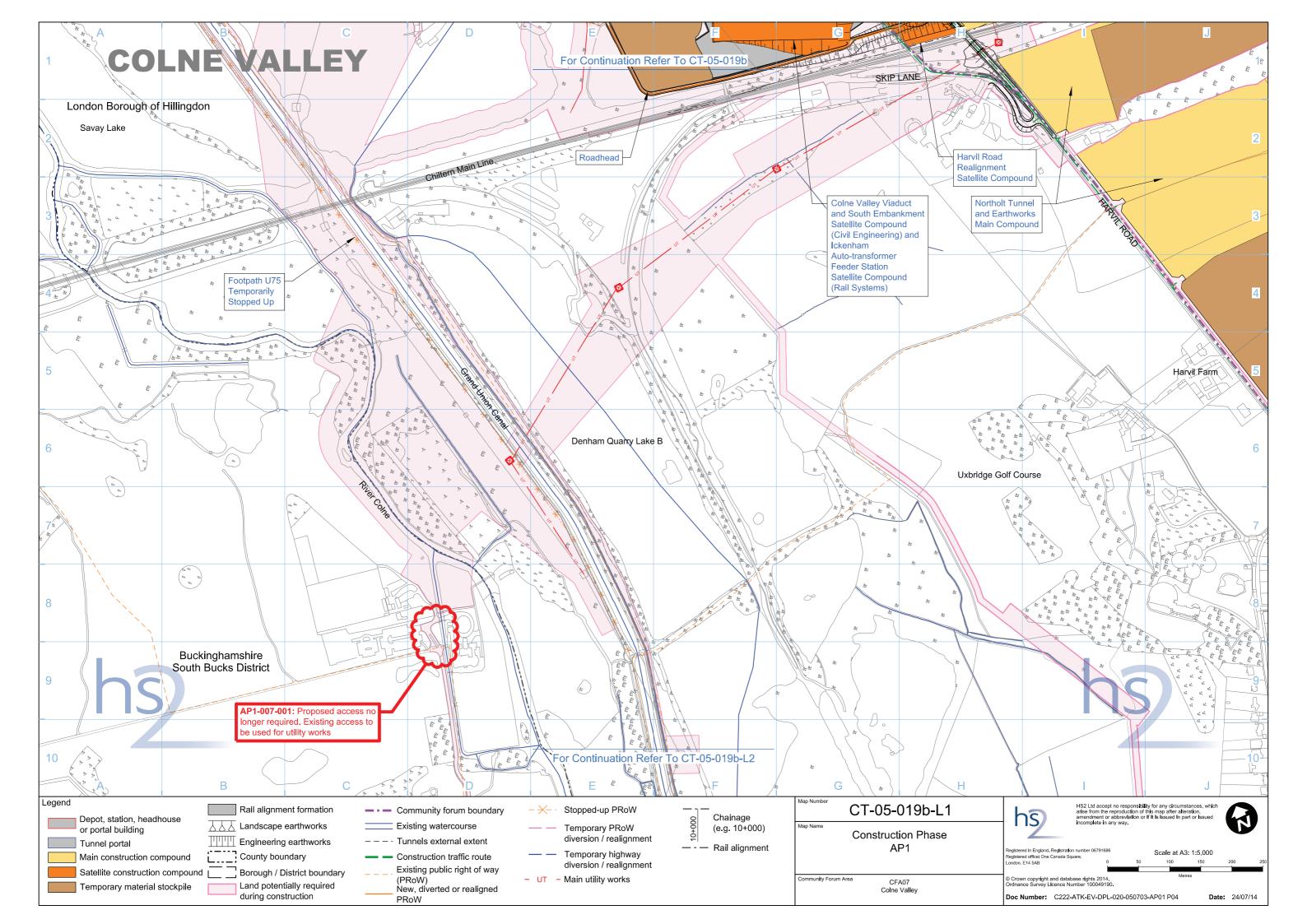


**Environmental Statement** 

CT-o5 - Construction Phase









**Environmental Statement** 

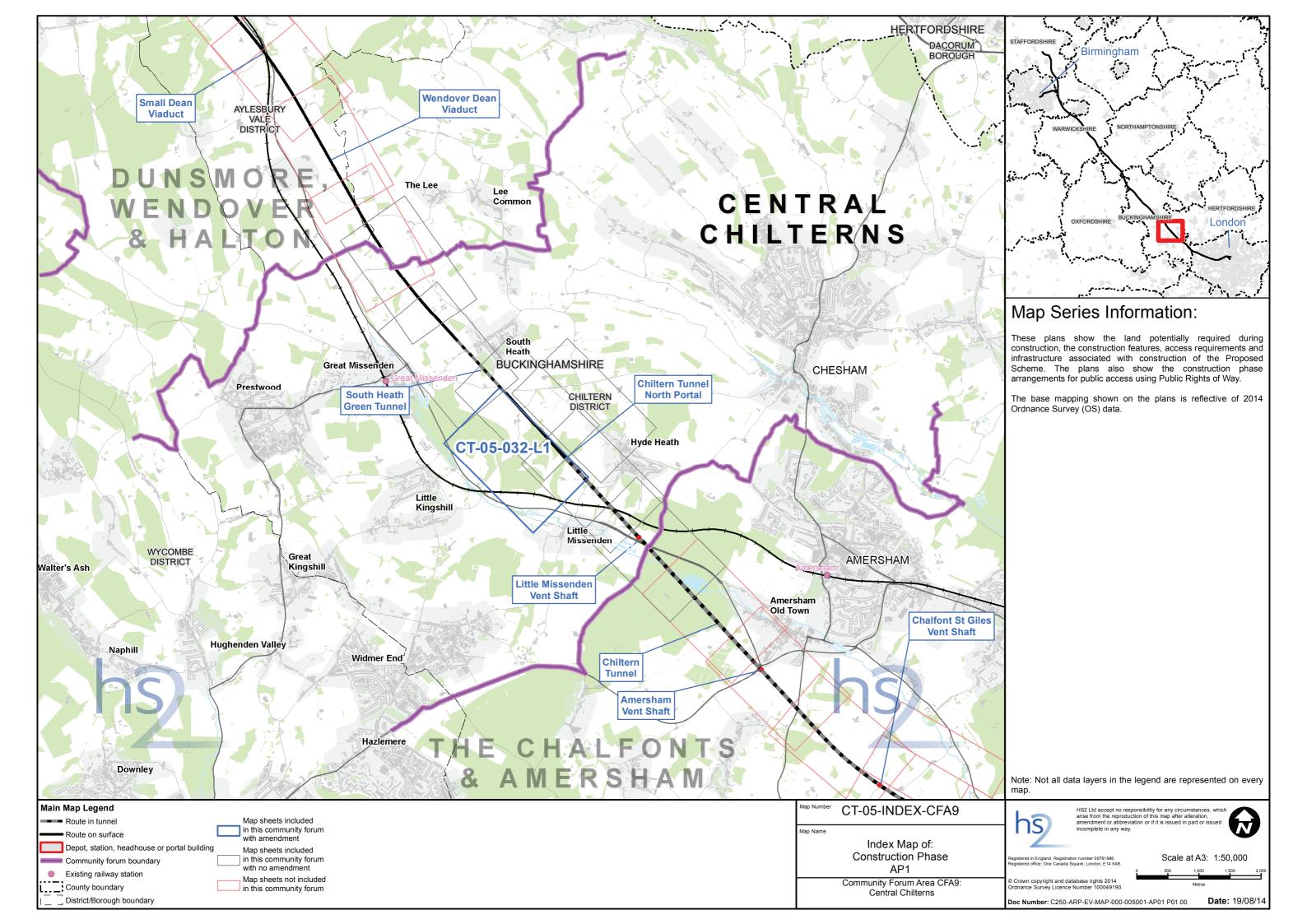
Volume 2 | CFAo9 Central Chilterns

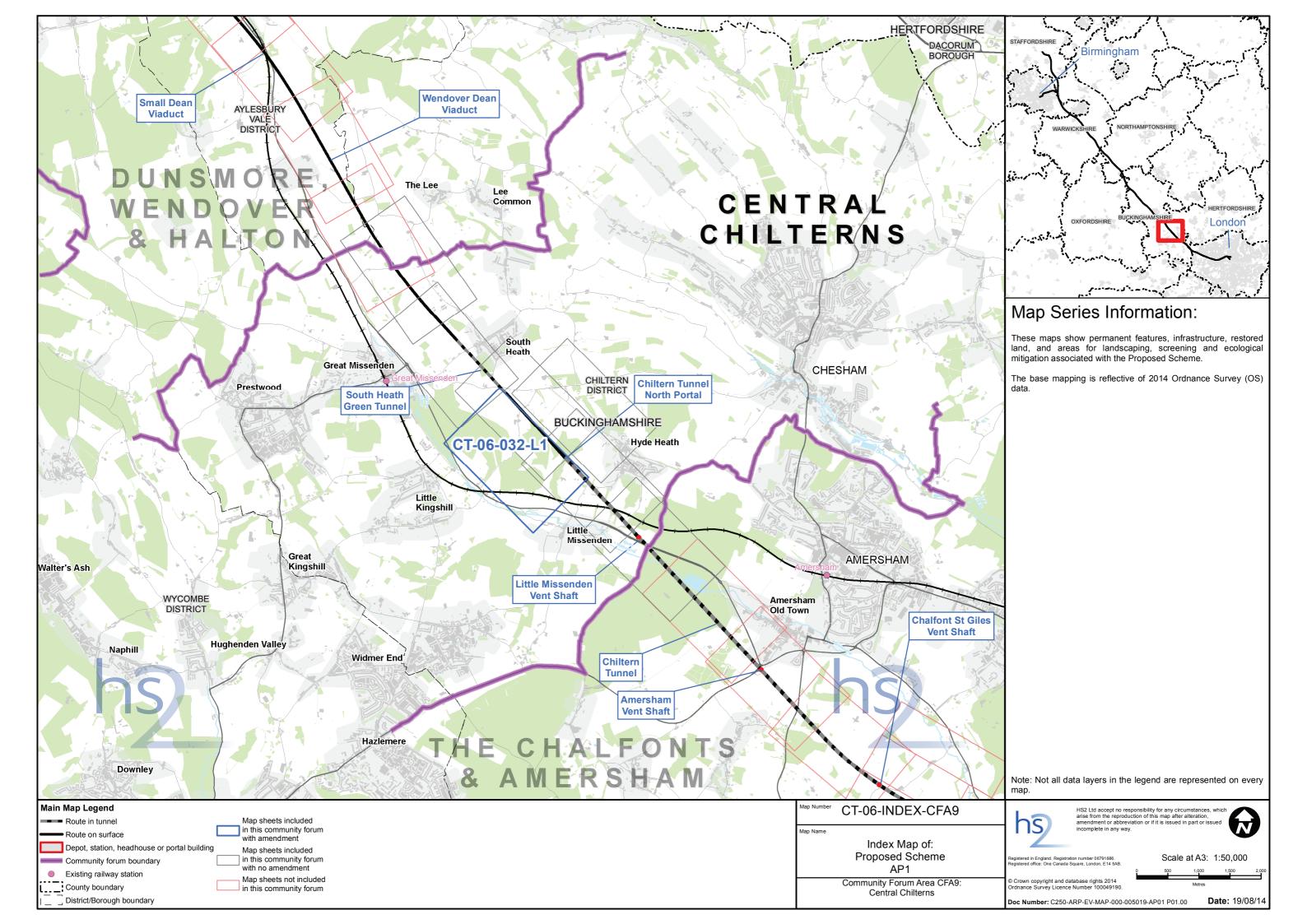


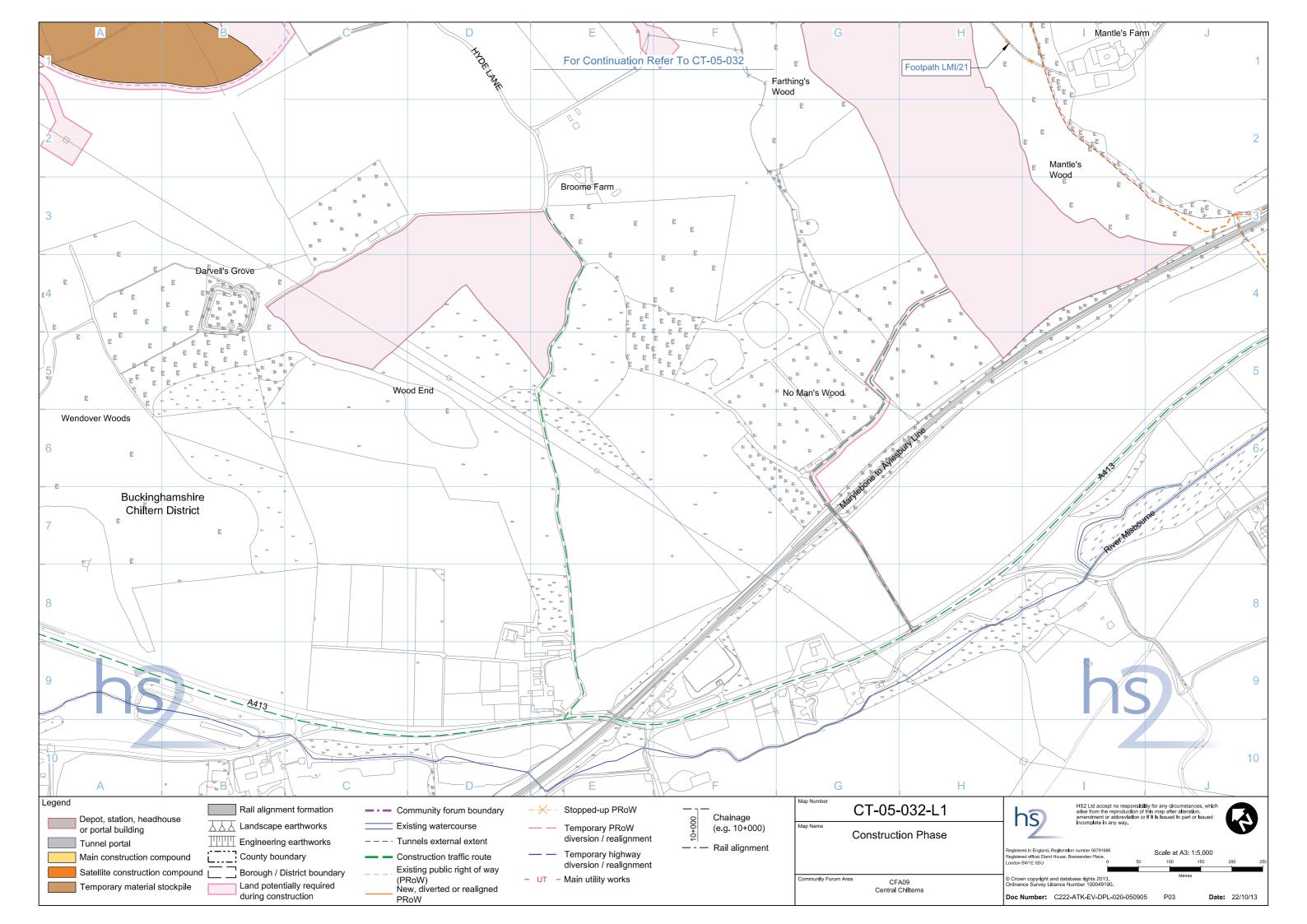
**Environmental Statement** 

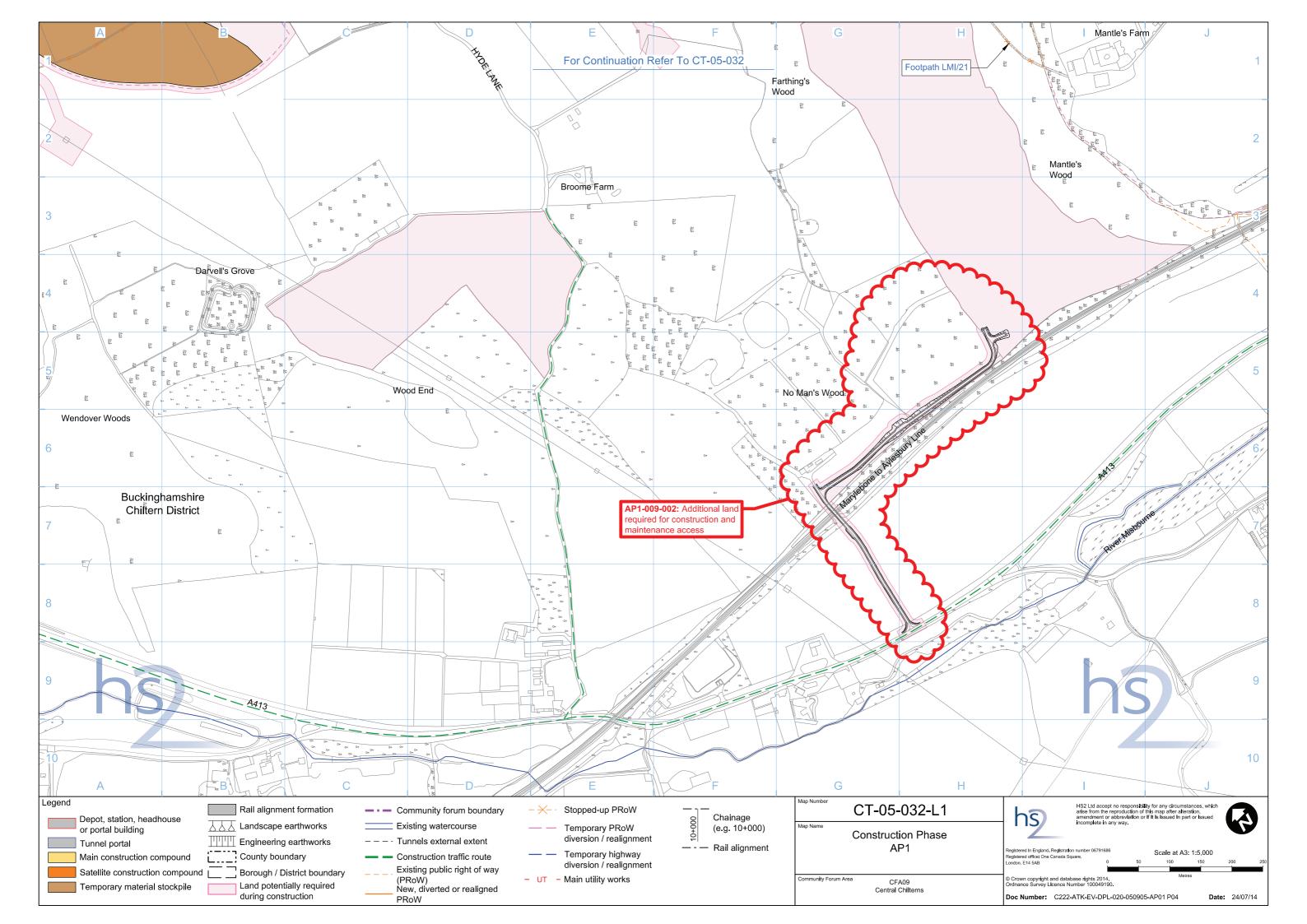
CT-o5 - Construction Phase

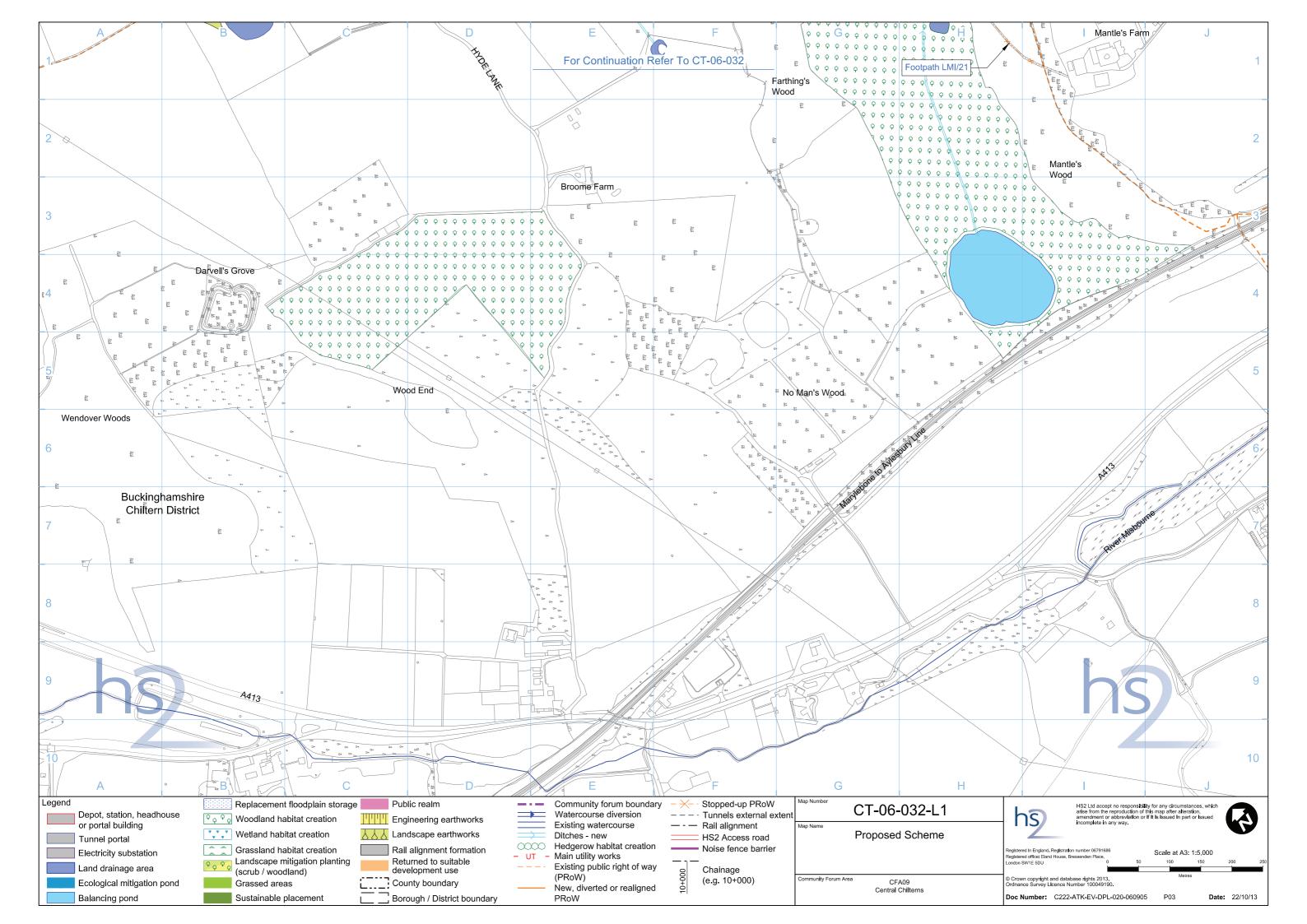
CT-o6 - Proposed Scheme

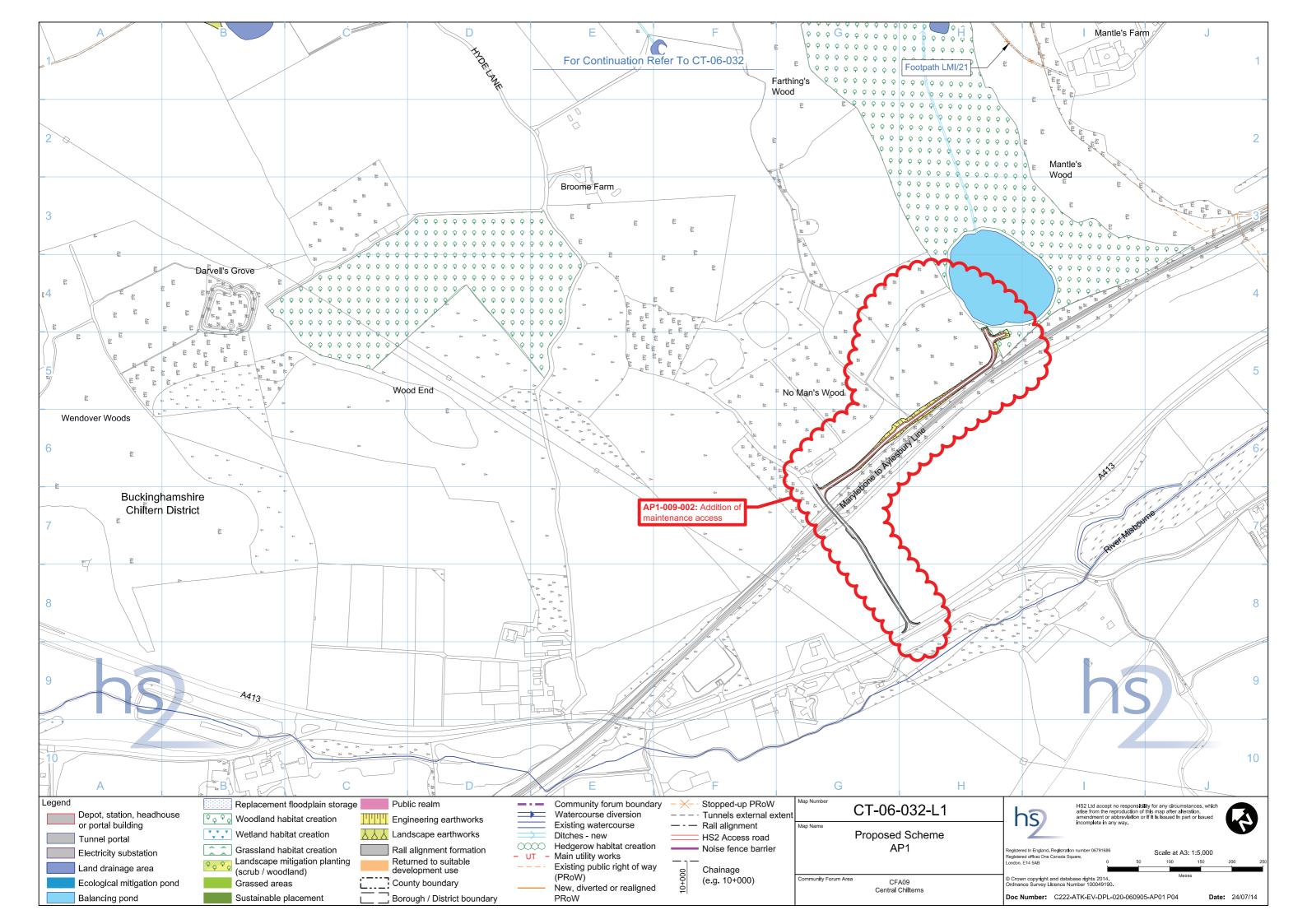














**Environmental Statement** 

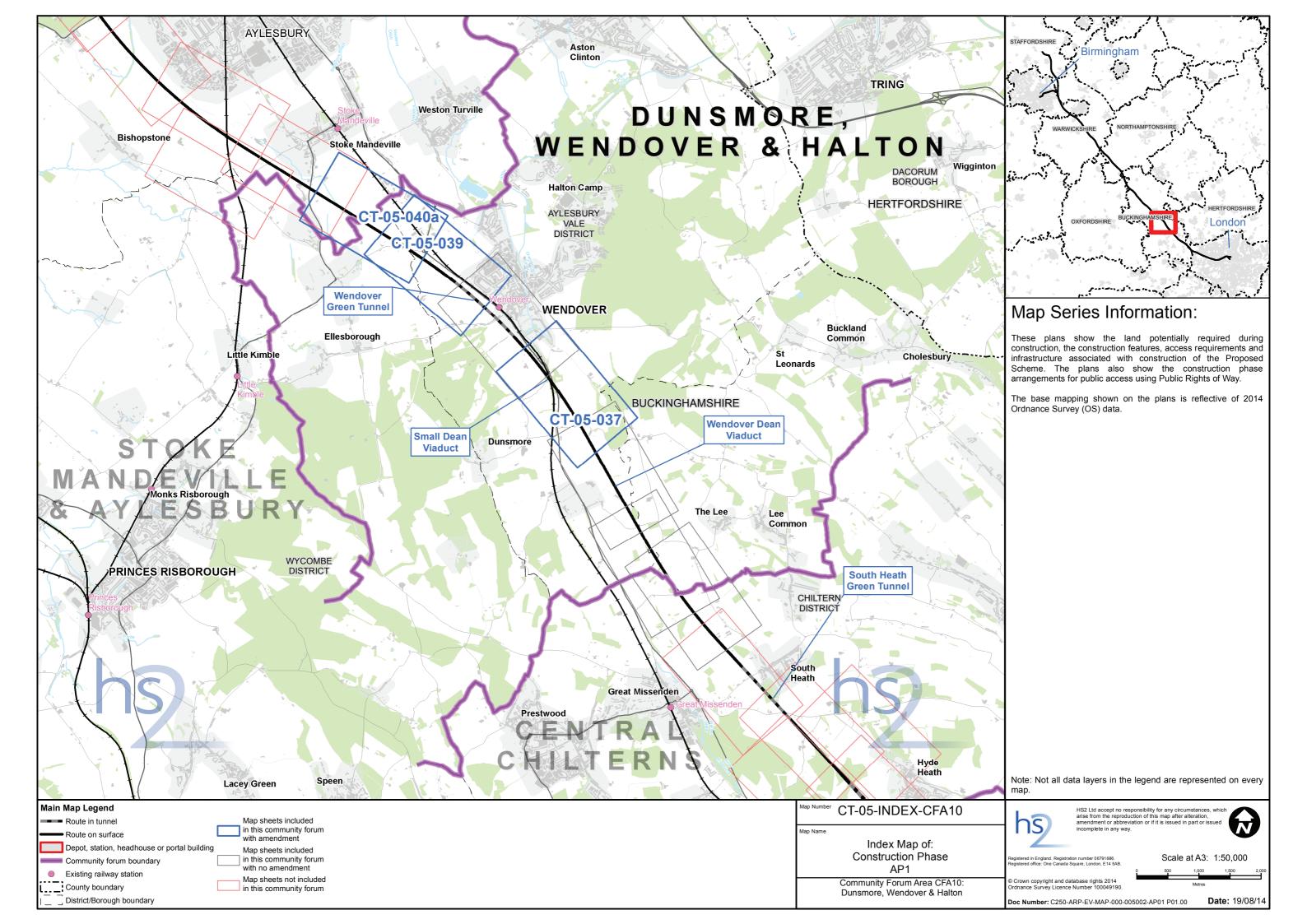
Volume 2 | CFA10 Dunsmore, Wendover and Halton

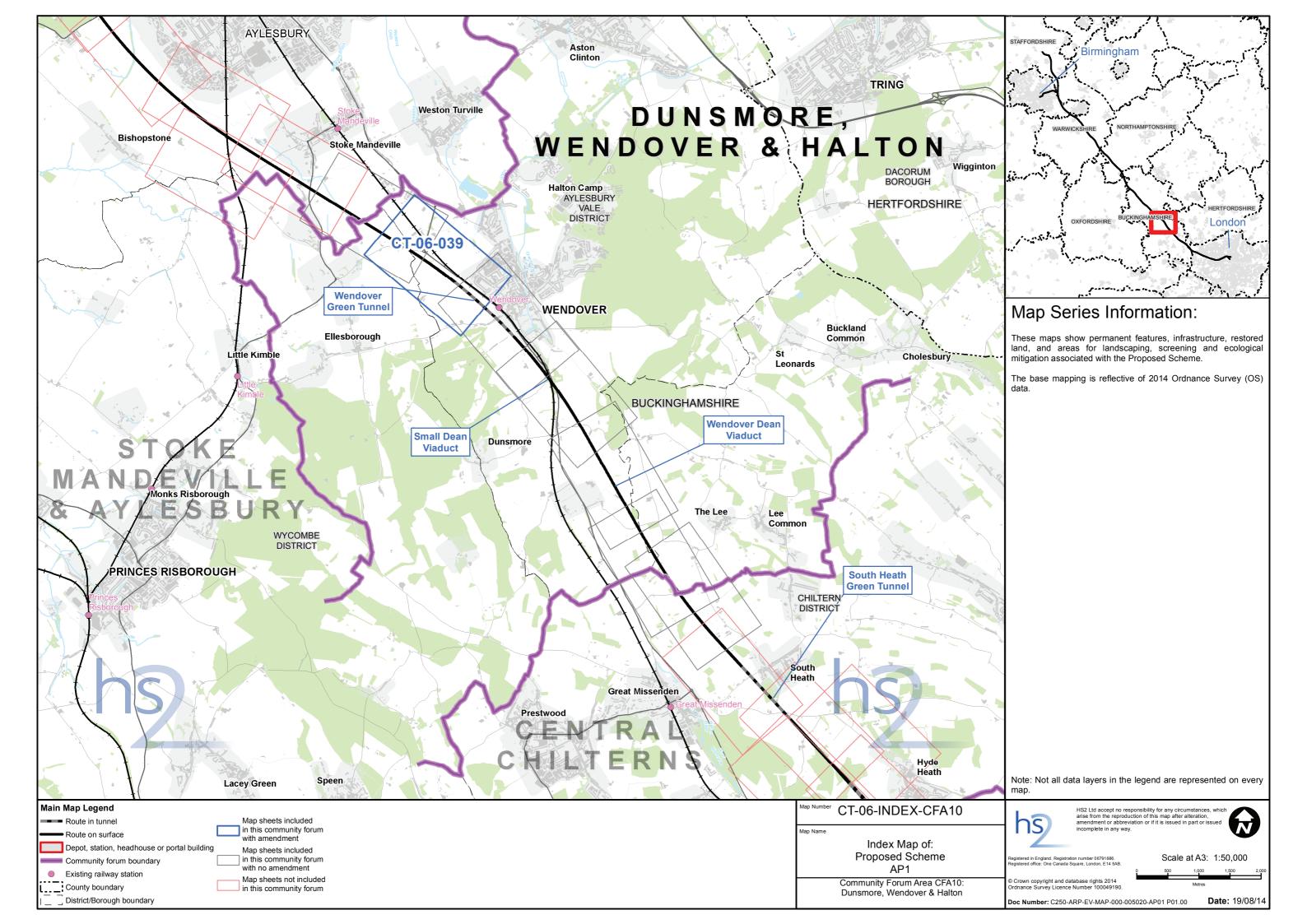


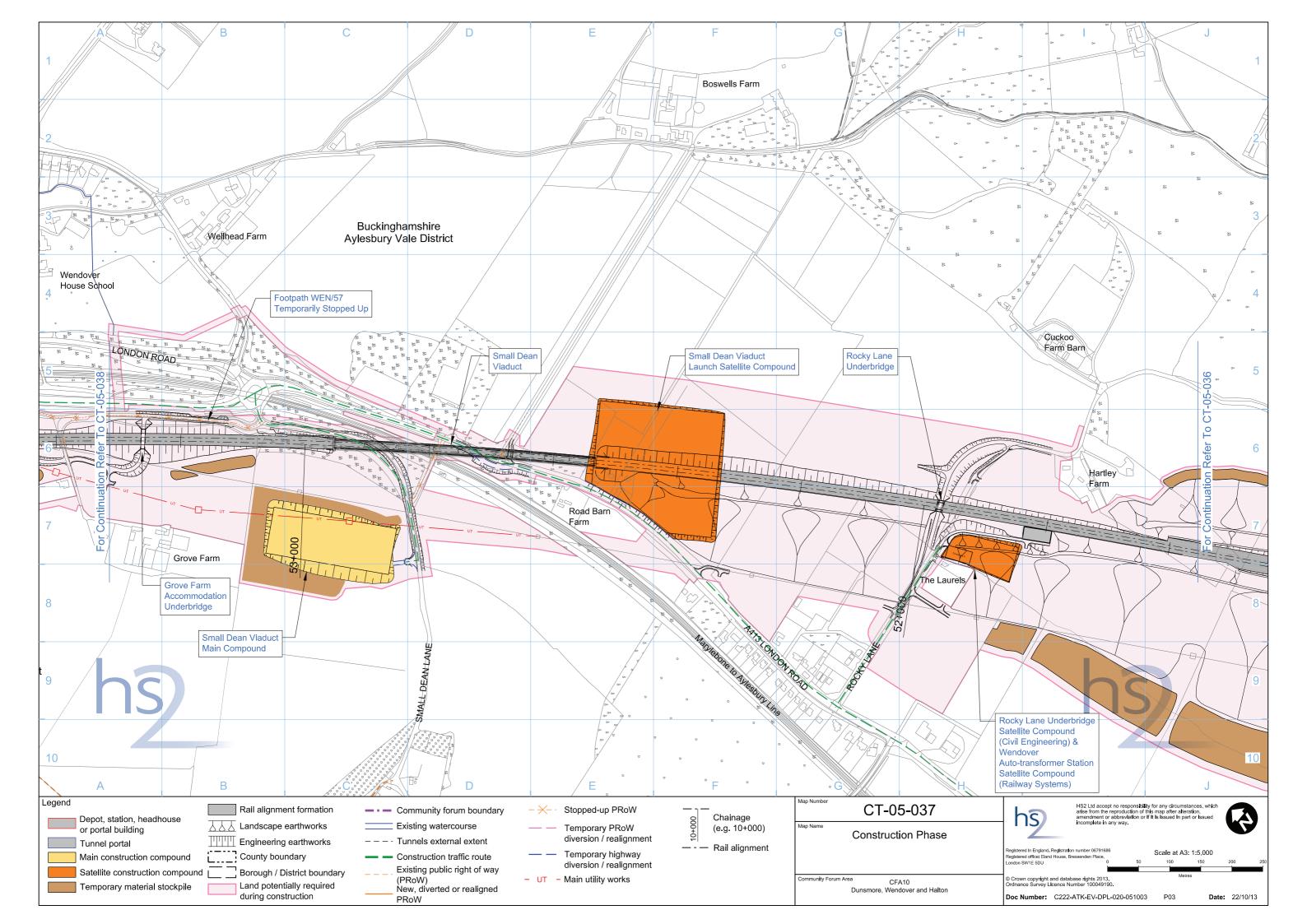
**Environmental Statement** 

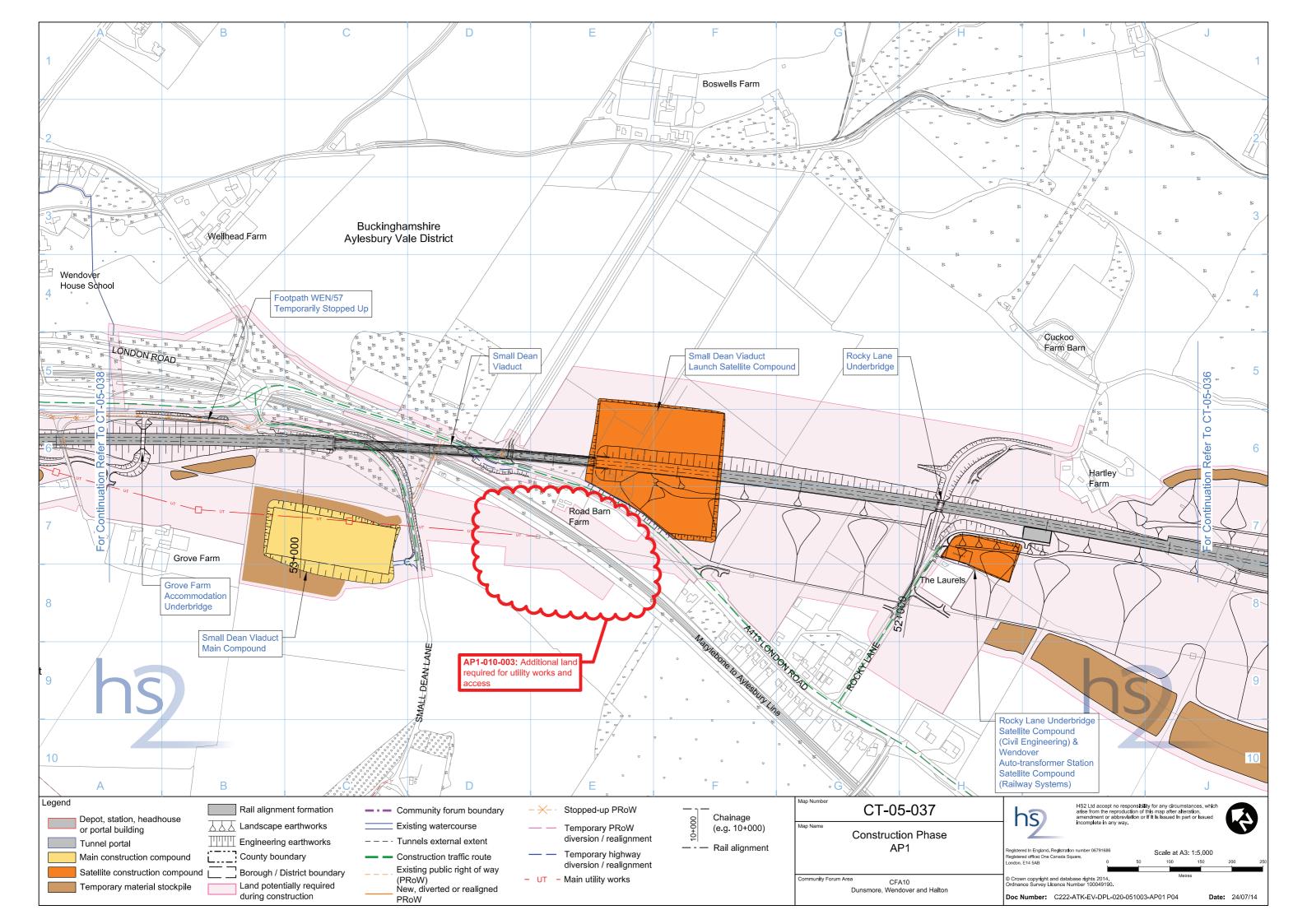
CT-o5 - Construction Phase

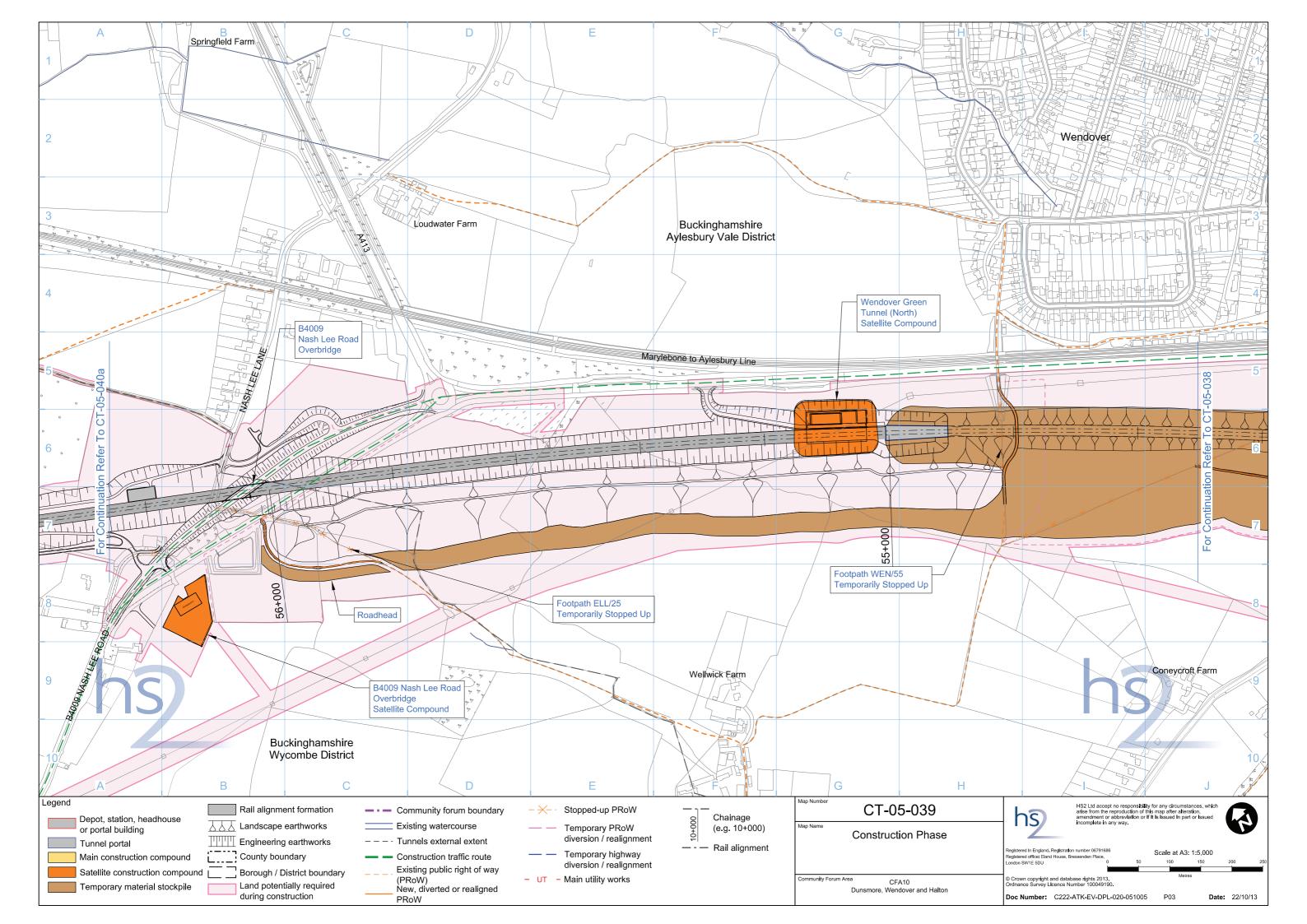
CT-o6 - Proposed Scheme

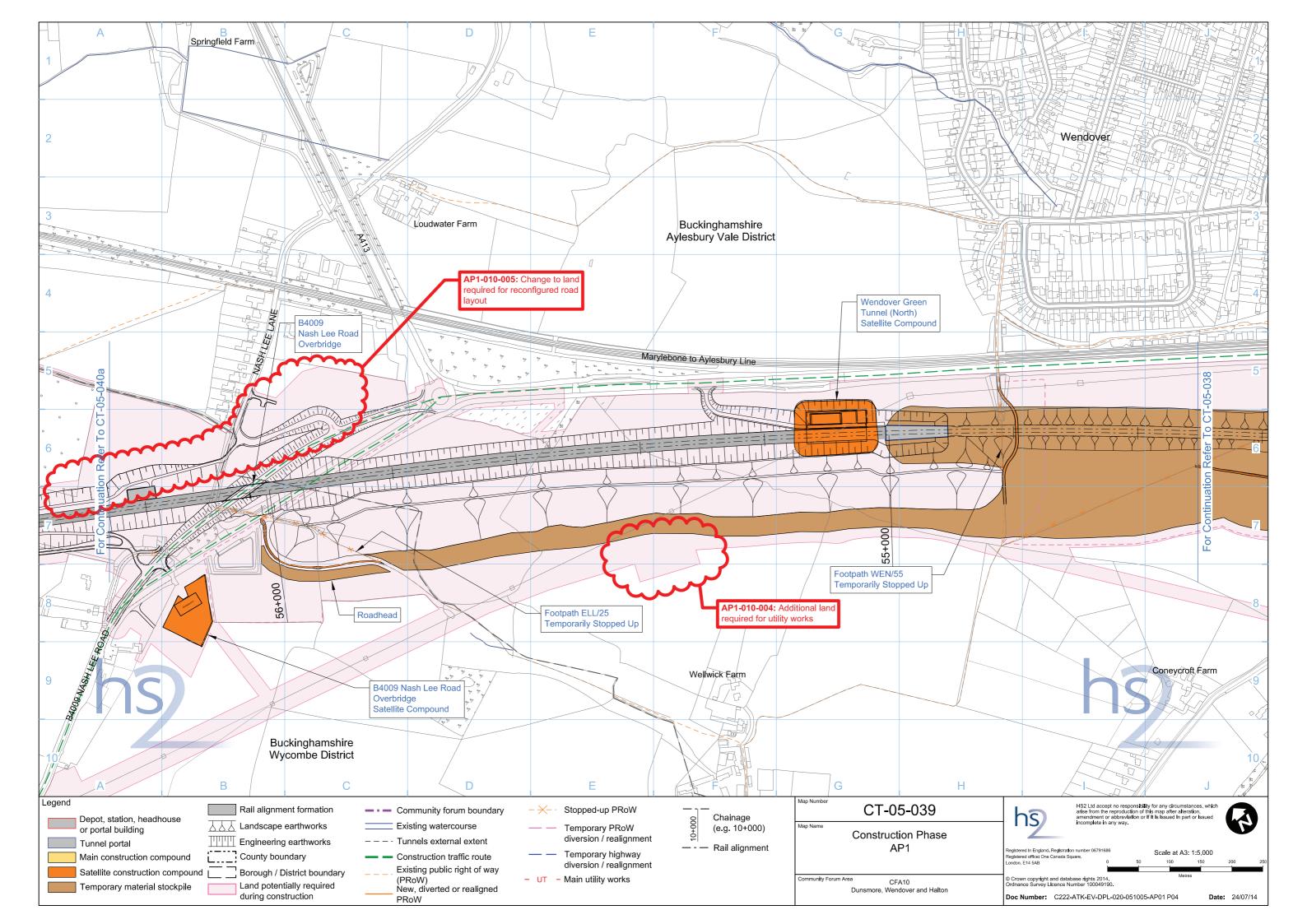


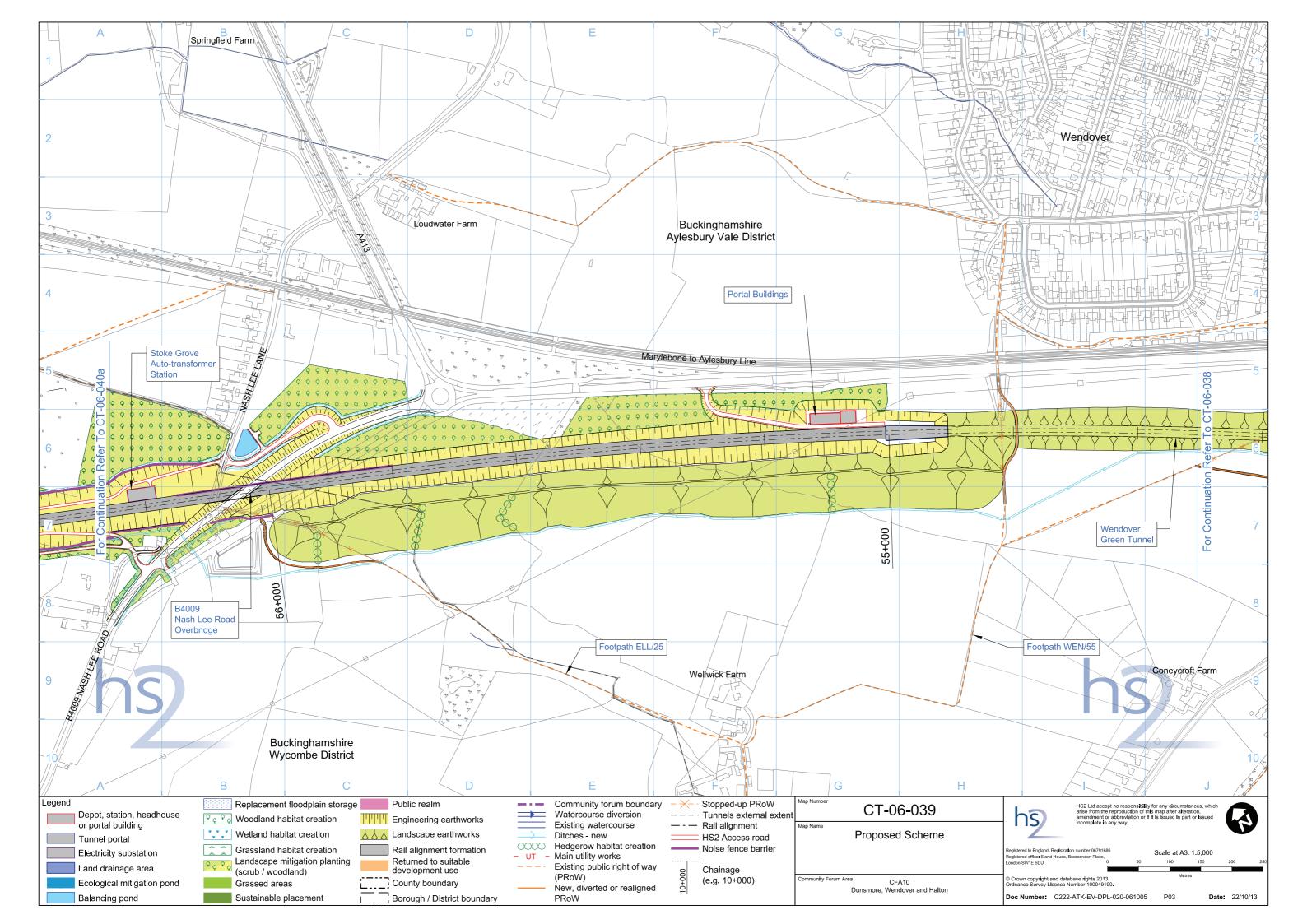


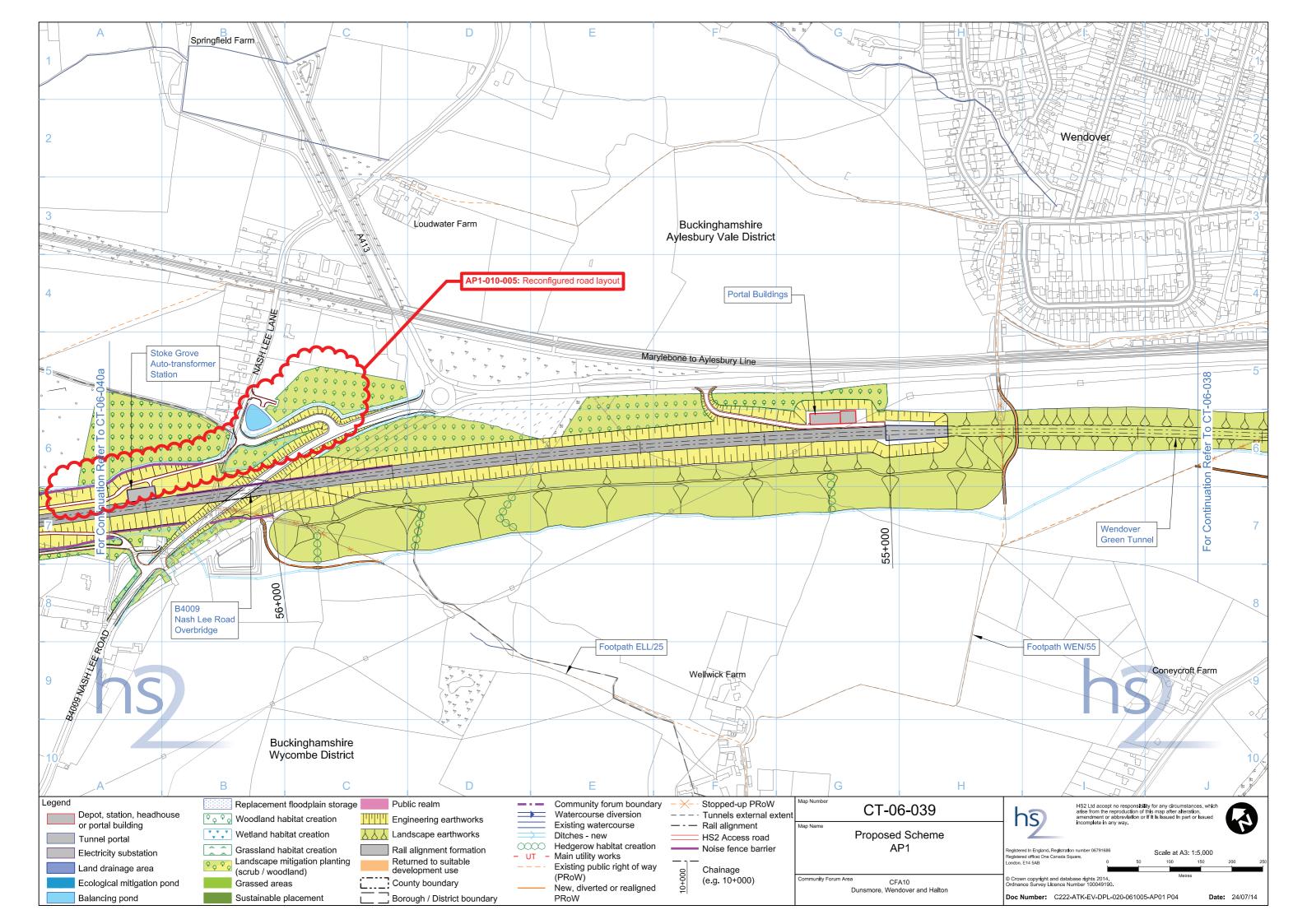


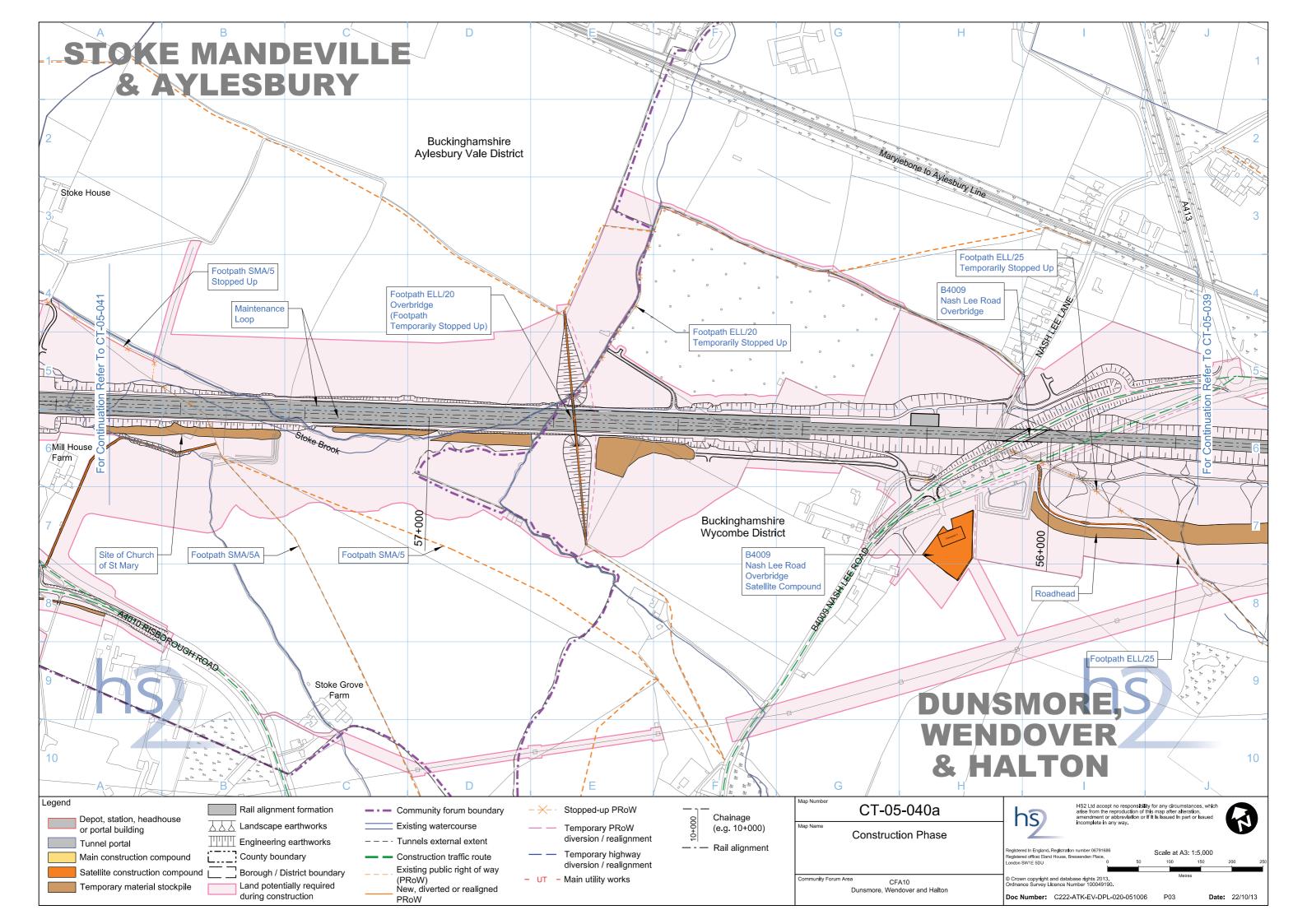


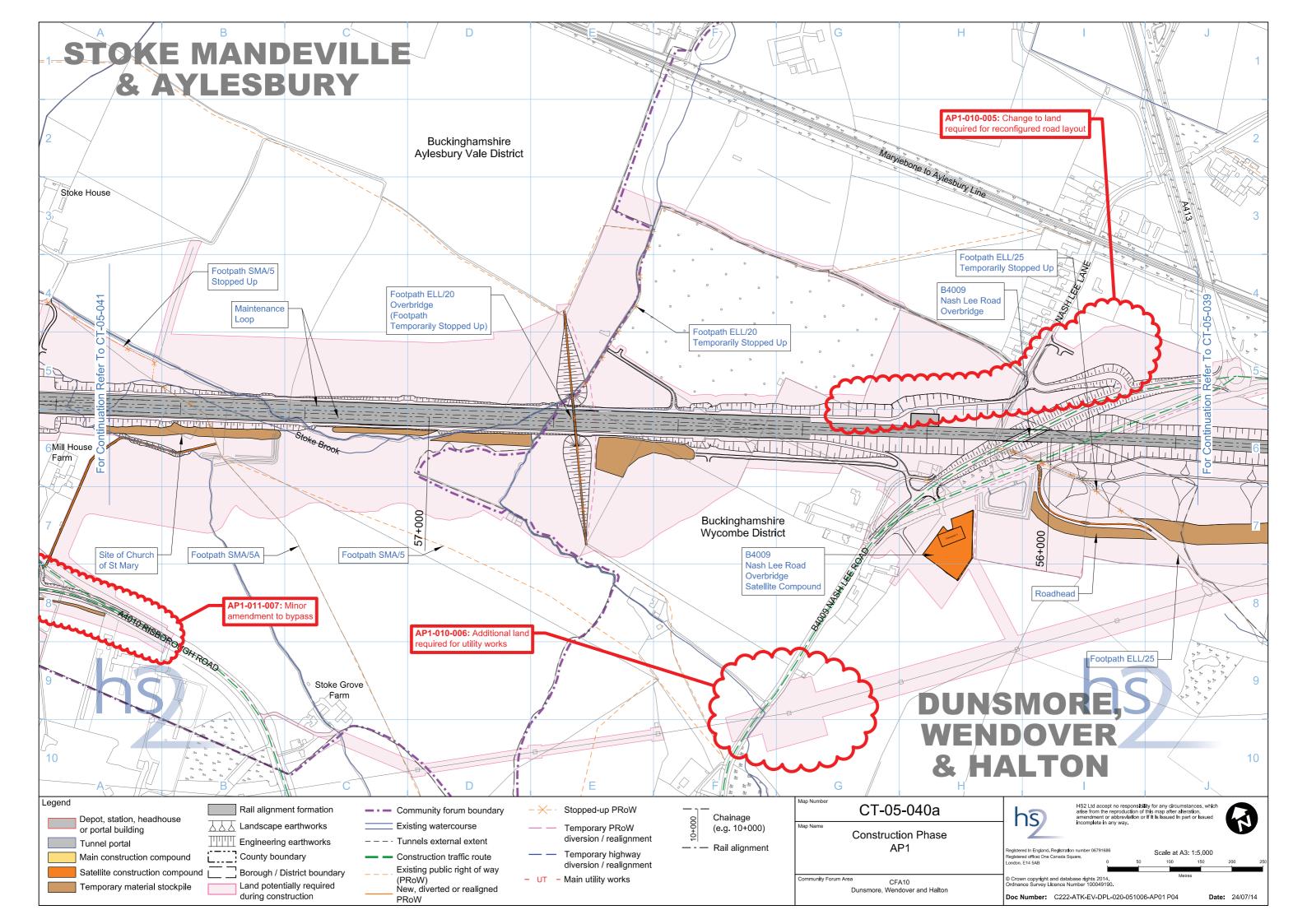












This page is left intentionally blank



# HIGH SPEED RAIL (LONDON - WEST MIDLANDS) ADDITIONAL PROVISION

**Environmental Statement** 

LV-01 - Photomontages

September 2014

# Current baseline (2013)



# Operation Year 1 (2026) - Winter verifiable photomontage



Technical Information
Location: Viewpoint 108-2-001: View south-west from dwellings on Nash Lee Lane, Wendover.

Date taken: 28/03/13 Time taken: 13:24 Focal length: 57.296mm

Viewpoint location shown on Map LV-04-038a. For key plan legend refer to map series LV-04.

This verifiable photomontage provides an illustration of how the Proposed Scheme may look in 2026 (the opening year). The design of the Proposed Scheme may be subject to design development in response to consultation. Design development will not result in any significant adverse change in the environmental effects detailed in the photomontages of the Proposed Scheme. Where new planting is proposed, it has been shown as immature plants which would mature over time to further integrate the Proposed Scheme into the landscape.

LV-01-058

Verifiable Photomontage Operation Year 1 (2026) - Winter Viewpoint 108-2-001

> Community Forum Area CFA10: Dunsmore, Wendover and Halton

HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued

**Doc Number:** C250-ARP-EV-PHO-000-001057-P01

Date: 17/10/13

# Current baseline (2013)



## Operation Year 1 (2026) - Winter verifiable photomontage



Technical Information Location: Viewpoint 108-2-001: View south-west from dwellings on Nash Lee Lane, Wendover.

Date taken: 28/03/13 Time taken: 13:24 Focal length: 57.296mm

Viewpoint location shown on Map LV-04-038a. For key plan legend refer to map series LV-04.

This verifiable photomontage provides an illustration of how the Proposed Scheme may look in 2026 (the opening year). The design of the Proposed Scheme may be subject to design development in response to consultation. Design development will not result in any significant adverse change in the environmental effects detailed in the photomontages of the Proposed Scheme. Where new planting is proposed, it has been shown as immature plants which would mature over time to further integrate the Proposed Scheme into the landscape.



LV-01-058

Verifiable Photomontage Operation Year 1 (2026) - Winter Viewpoint 108-2-001

AP1-010-005

Community Forum Area CFA10: Dunsmore, Wendover and Halton

HS2 Ltd accept no responsibility for any circumstances, which arise from the reproduction of this map after alteration, amendment or abbreviation or if it is issued in part or issued

Registered in England. Registration number 06791686. Registered office: One Canada Square, London, E14 5AB. © Crown copyright and database rights 2014 Ordnance Survey Licence Number 100049190 **Doc Number:** C250-ARP-EV-PHO-000-001057-P01

Date: 25/07/14

This page is left intentionally blank



**High Speed Two (HS2) Limited** One Canada Square London E14 5AB

T 020 7944 4908 E hs2enquiries@hs2.org.uk

AP

U6