

# High Speed Rail (West Midlands - Crewe)

**Environmental Statement** 

Volume 5: Map book

Land Quality (LQ-01)

July 2017



ES 3.5.1.6

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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.

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







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## **Contents**

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Data dictionary and definitions

Map series name	LQ-01 - Land Quality
Map series description	This Land Quality mapping shows potential sources of existing contamination close to the route as well as historical and operational landfill sites, current and potential future mining or mineral exploitation and geo-conservation sites.
Community Area name	
CA1 Fradley to Colton	✓
CA2 Colwich to Yarlet	✓
CA <sub>3</sub> Stone and Sywnnerton	✓
CA4 Whitmore Heath to Madeley	✓
CA5 South Cheshire	✓

### 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 1:20,000, 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 different 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-00, LV-02, LV-07, LV-08, LV-17)		
Volume 2: Map book – CA3: Stone and Swynnerton	Volume 5: Map book – CA2: Colwich to Yarlet - Landscape and visual (LV-00, LV-02, LV-07, LV-08, LV-17)		
Volume 2: Map book — CA4: Whitmore Heath to Madeley	Volume 5: Map book — CA3: Stone and Swynnerton - Landscape and visual (LV-00, LV-02, LV-07, LV-08, LV-17)		
Volume 2: Map book – CA5: South Cheshire	Volume 5: Map book – CA4: Whitmore Heath to Madeley - Landscape and visual (LV-00, LV-02, LV-07, LV-08, LV-17)		
Volume 4: Map book – Off-route effects	Volume 5: Map book — CA5: South Cheshire - Landscape and visual (LV-00, LV-02, LV-07, LV-08, LV-17)		
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-o1)	Volume 5: Map book – Sound, Noise and Vibration (SV-01, SV-02, SV-03 & SV-04)		
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, WR-05, WR-06)		

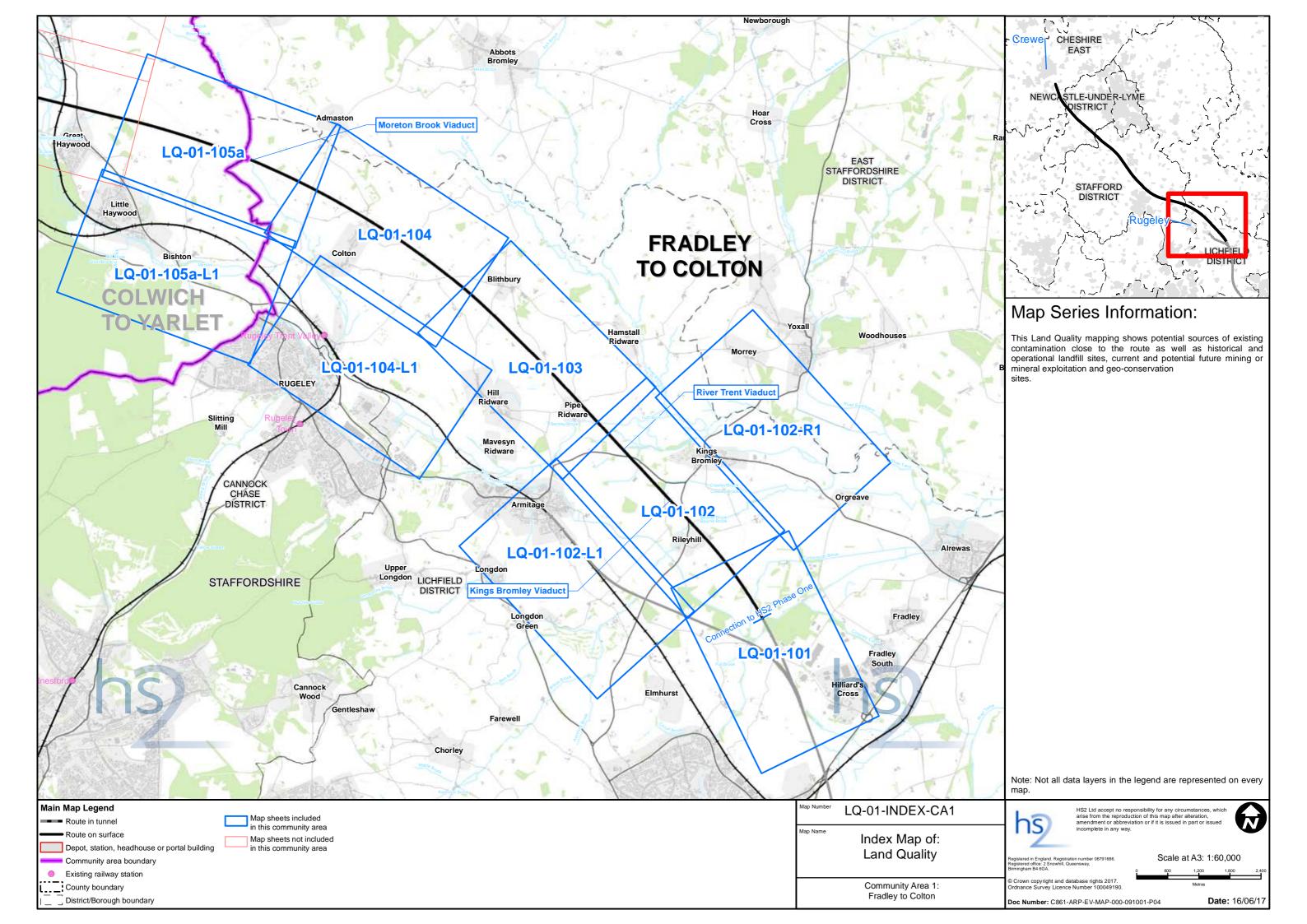
High Speed Rail (West Midlands-Crewe)
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Data dictionary and definitions

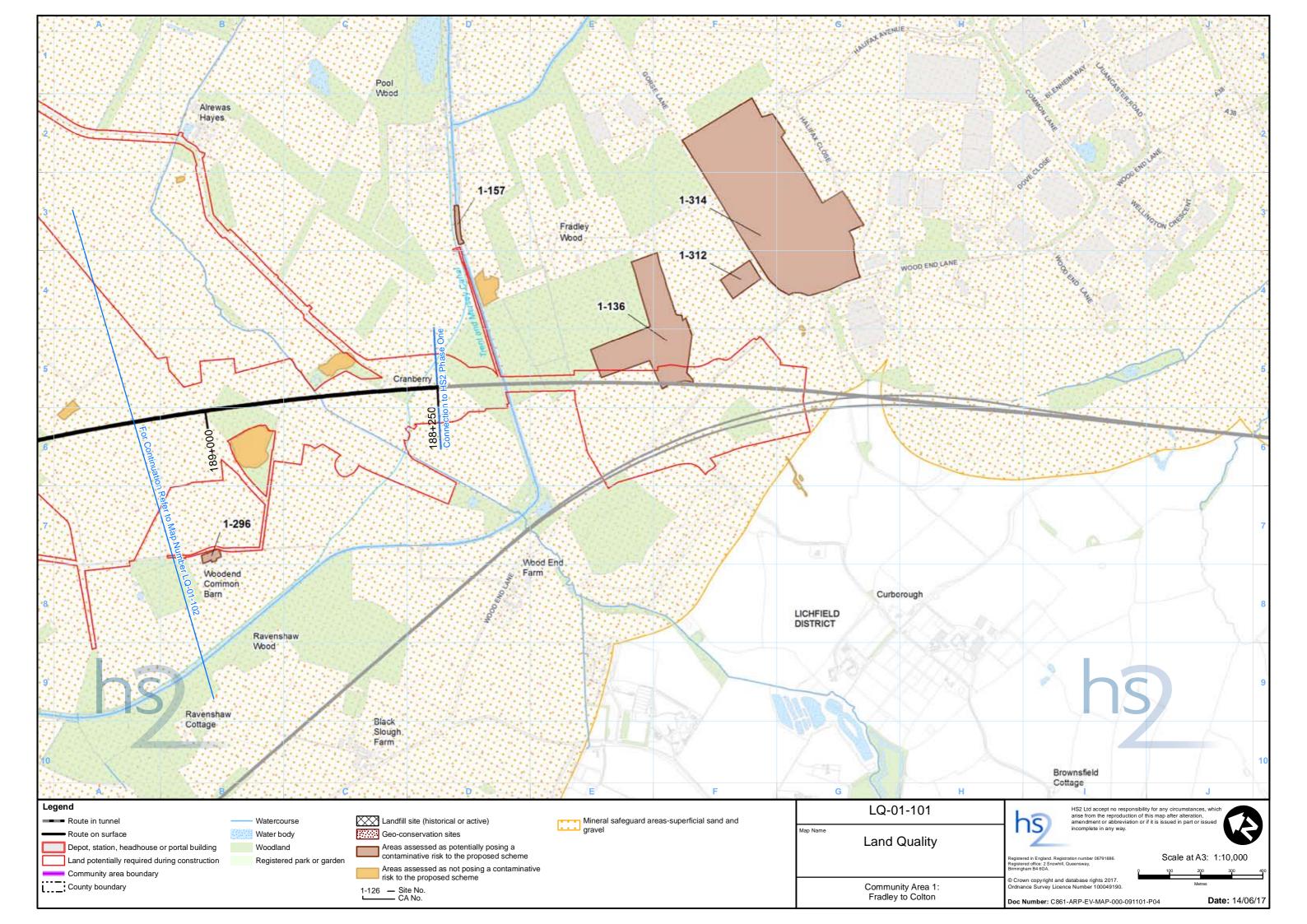
# Data dictionary and definitions

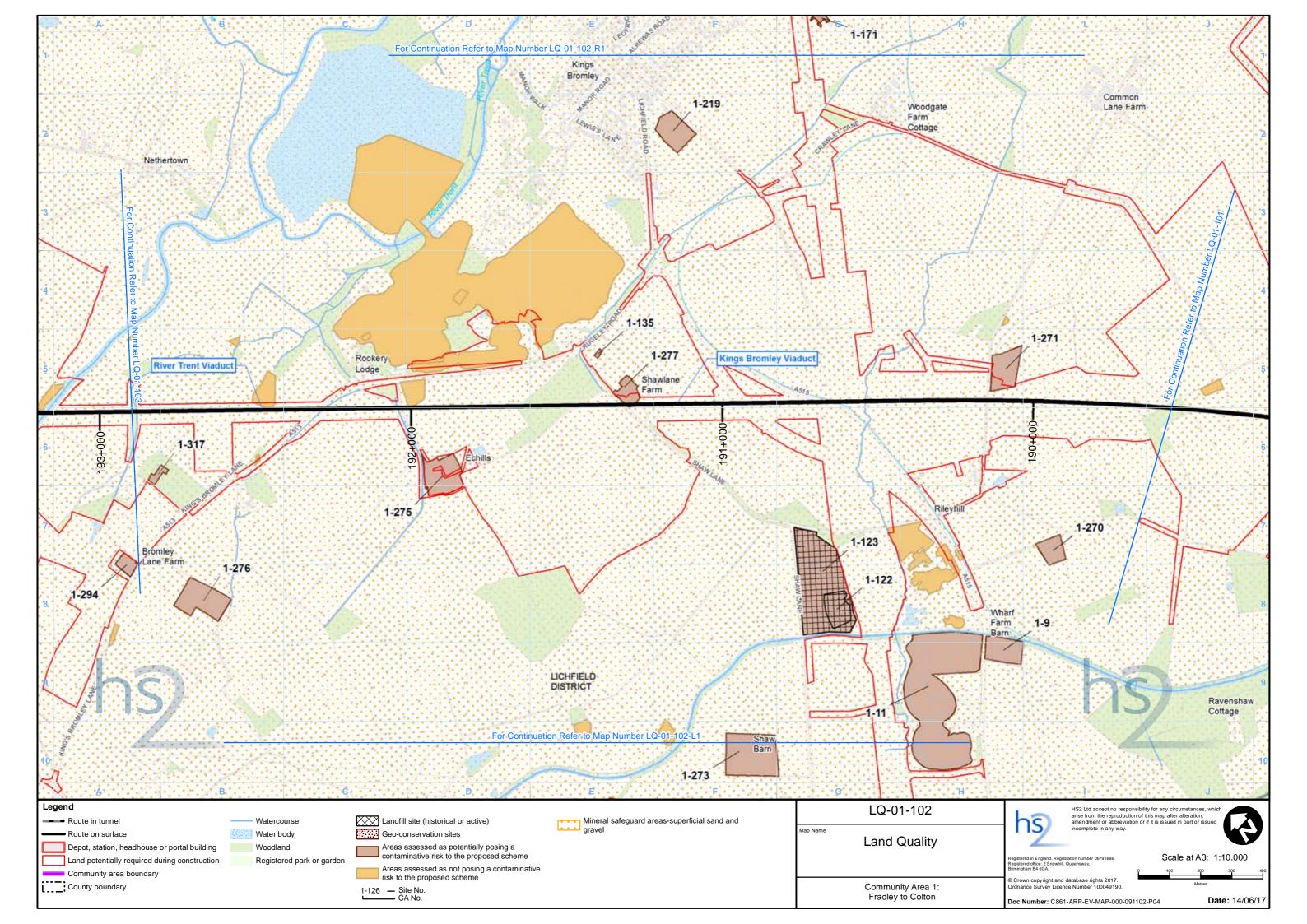
Legend features	Definition	Source	Copyright
Areas assessed as not posing a contaminative risk to the proposed scheme	Areas of land that have been inferred from existing information such as historical use maps, borehole records and testing not to be at risk of containing concentrations of contaminants above background levels.	High Speed Two (HS2) Ltd	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2017.
Areas assessed as potentially posing a contaminative risk to the proposed scheme	Areas of land that have been inferred from existing information such as historical use maps, borehole records and testing to be at risk of containing concentrations of contaminants above background levels, and combined with features that may allow exposure of those contaminants to a viable environmental receptor (which may include humans and buildings). These sites do not automatically equate to identify 'potentially contaminated land' as defined by EPA 1990.	High Speed Two (HS2) Ltd	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2017.
Community area boundary	The Environmental Statement has been split into 5 sections called Community Areas.	High Speed Two (HS2) Ltd	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2017.
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 2017.
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 2017.
Geo-conservation sites	Identified and managed site of geological or geomorphological or mineral interest, which can include natural processes such as coastal erosion, and where consideration of their importance becomes integral to the planning process.	Cheshire Historic Environment Record  British Geological Survey (BGS)	© Cheshire Historic Environment Record  Reproduced with the permission of the British Geological Survey ©NERC. All rights Reserved
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	
Landfill site (historical or active)	A historical (closed) landfill site is one where there is no PPC permit or waste management licence currently in force.  The local authority recorded landfill sites dataset contains landfill records sourced from individual local authorities that were able to provide information on sites operating prior to the introduction of the Control Pollution Act (COPA) in 1974.	Environment Agency	© Environment Agency copyright and/or database right 2017. All rights reserved.
Mineral safeguard areas	Mineral safeguarding areas are areas of known mineral resources that are of sufficient economic or conservation value (such as building stones) to warrant protection for generations to come. The level of information used to prove the existence of a mineral resource can vary from geological mapping to more in depth	British Geological Survey (BGS)	Reproduced with the permission of the British Geological Survey ©NERC. All rights Reserved

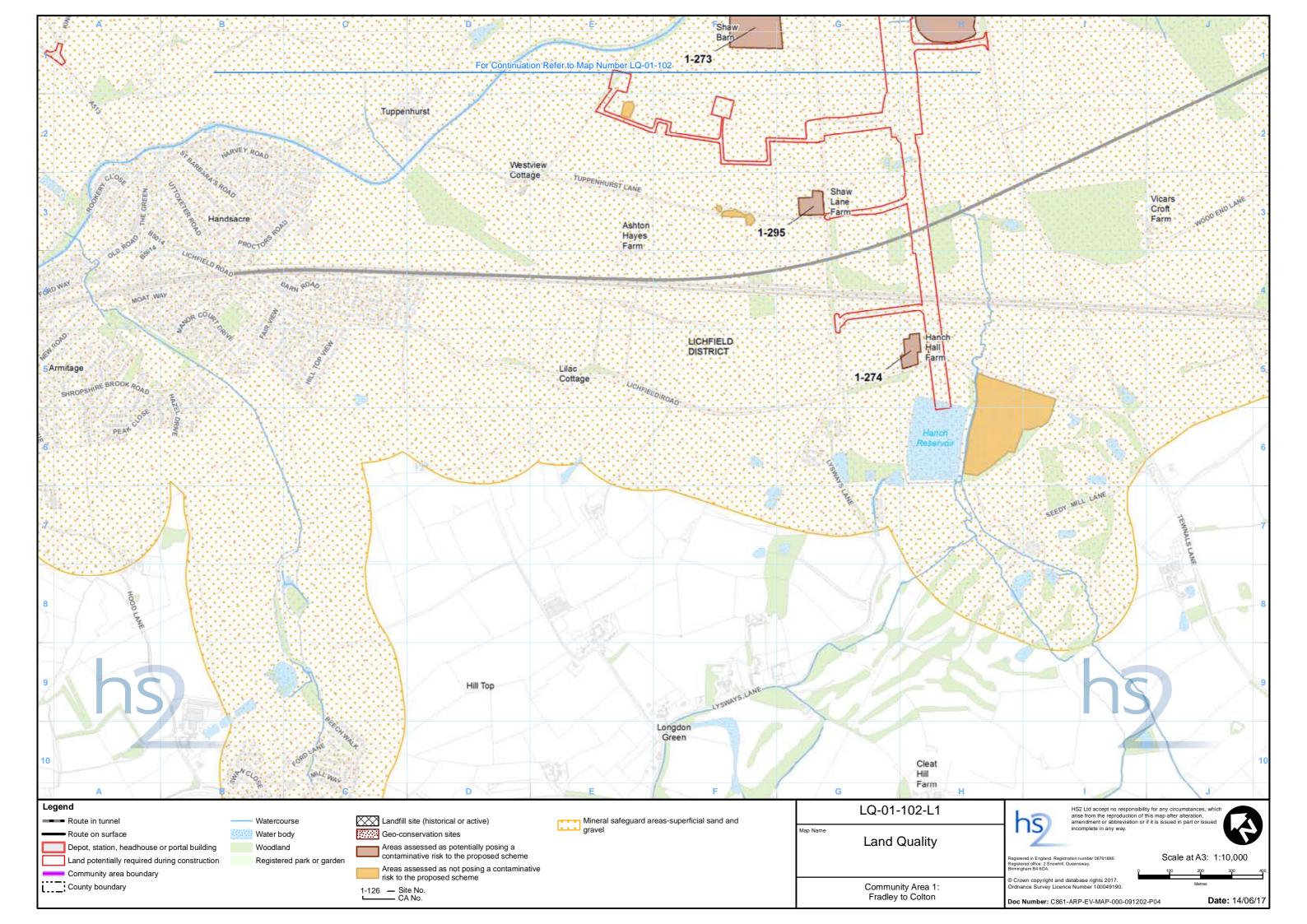
Legend features Definition		Source	Copyright
	geological investigations.		
	Parks and Gardens of special historic interest.		© Historic England 2017. Contains Ordnance Survey data © Crown copyright and database right 2017
Registered park or garden	Supplied by Historic England. Of the 1,590 Registered Parks and Gardens, over 91% were captured against the 1:10,000 Ordnance Survey Raster product. 135 records are potentially subject to movement under Positional Accuracy Improvement (PAI) improvements.	Historic England	The Historic England GIS Data contained in this material was obtained on 25 January 2017. The most publicly available up to date Historic England GIS Data can be obtained from HistoricEngland.org.uk.
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	Any mass of water having definite hydrological, physical, chemical and biological characteristics.	Ordnance Survey	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2017.
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	© Environment Agency copyright and/or database right 2017. All rights reserved.
Woodland	Woodland areas derived from Ordnance Survey MasterMap data.	Ordnance Survey	© Crown copyright. Reproduced by permission of Ordnance Survey Licence Number 100049190. Year of Publication 2017.

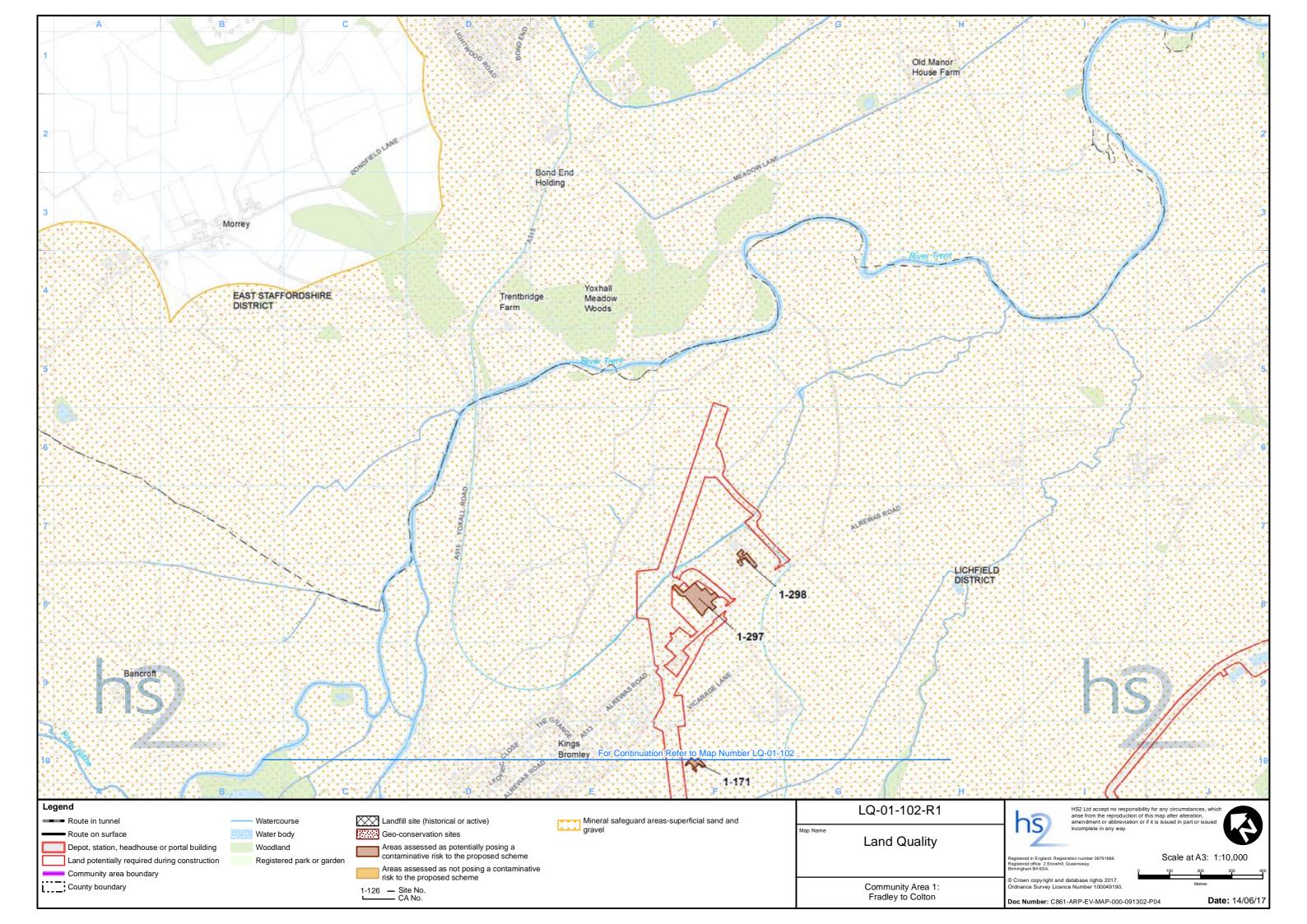
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CA1 Fradley to Colton
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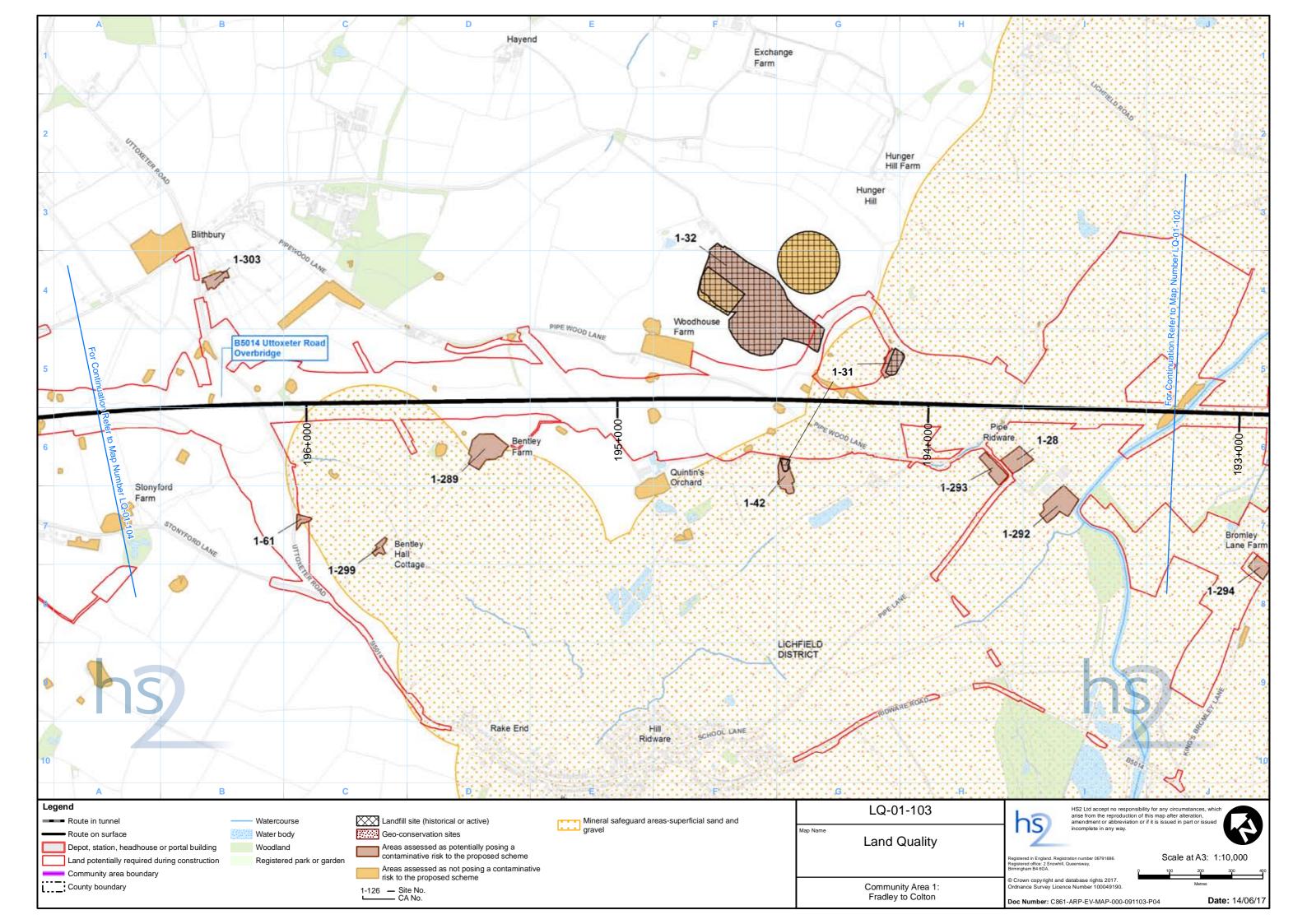


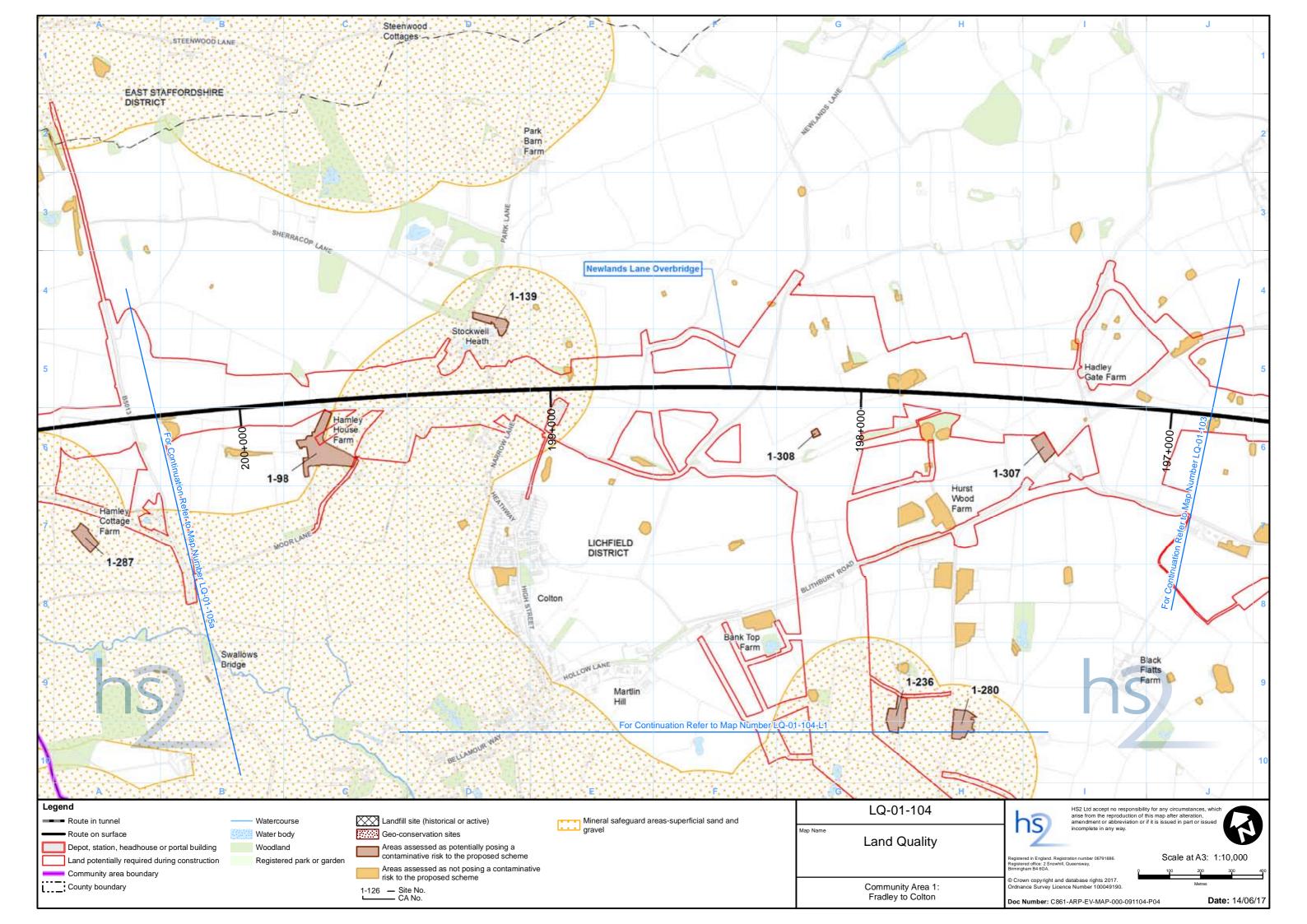


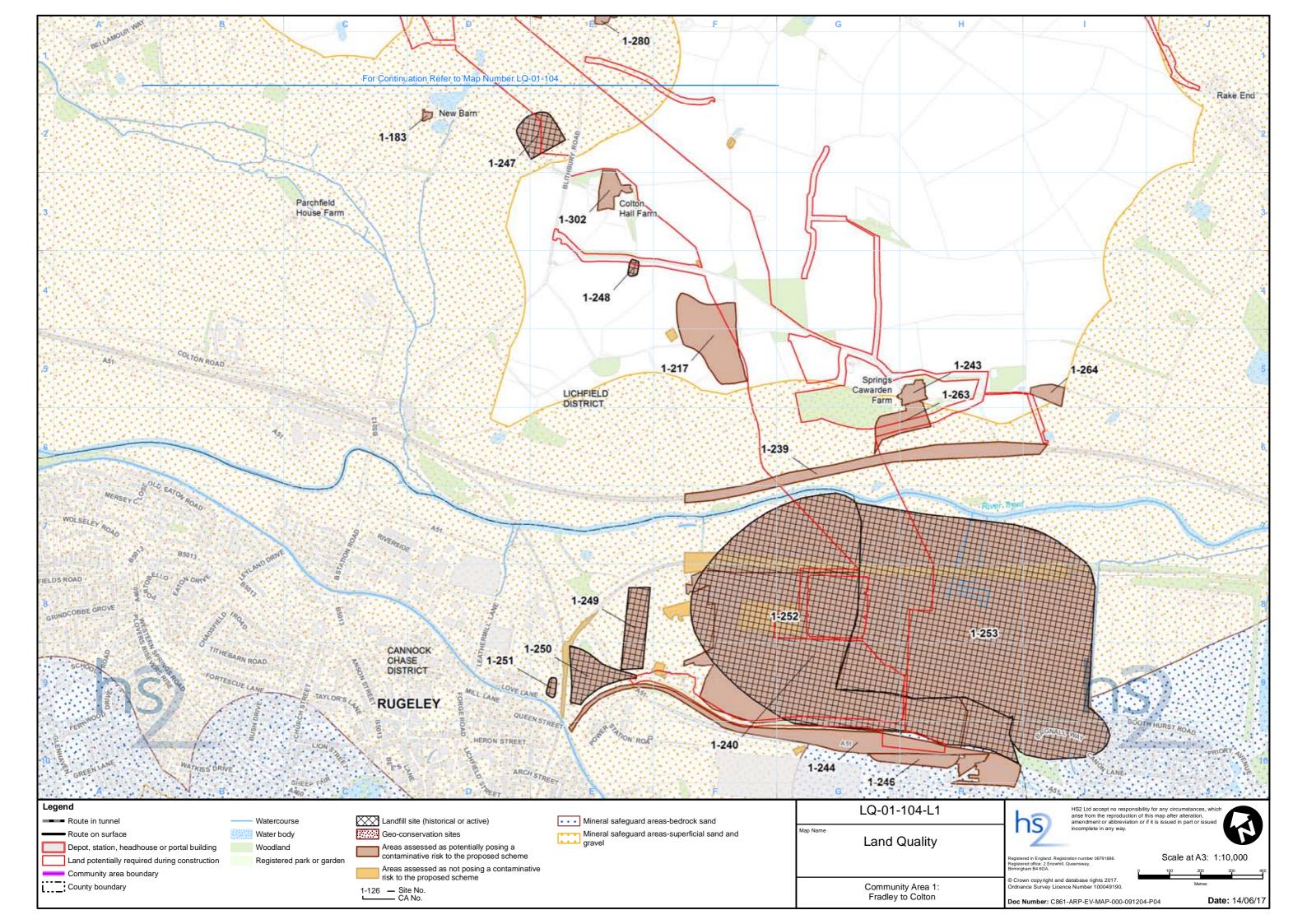


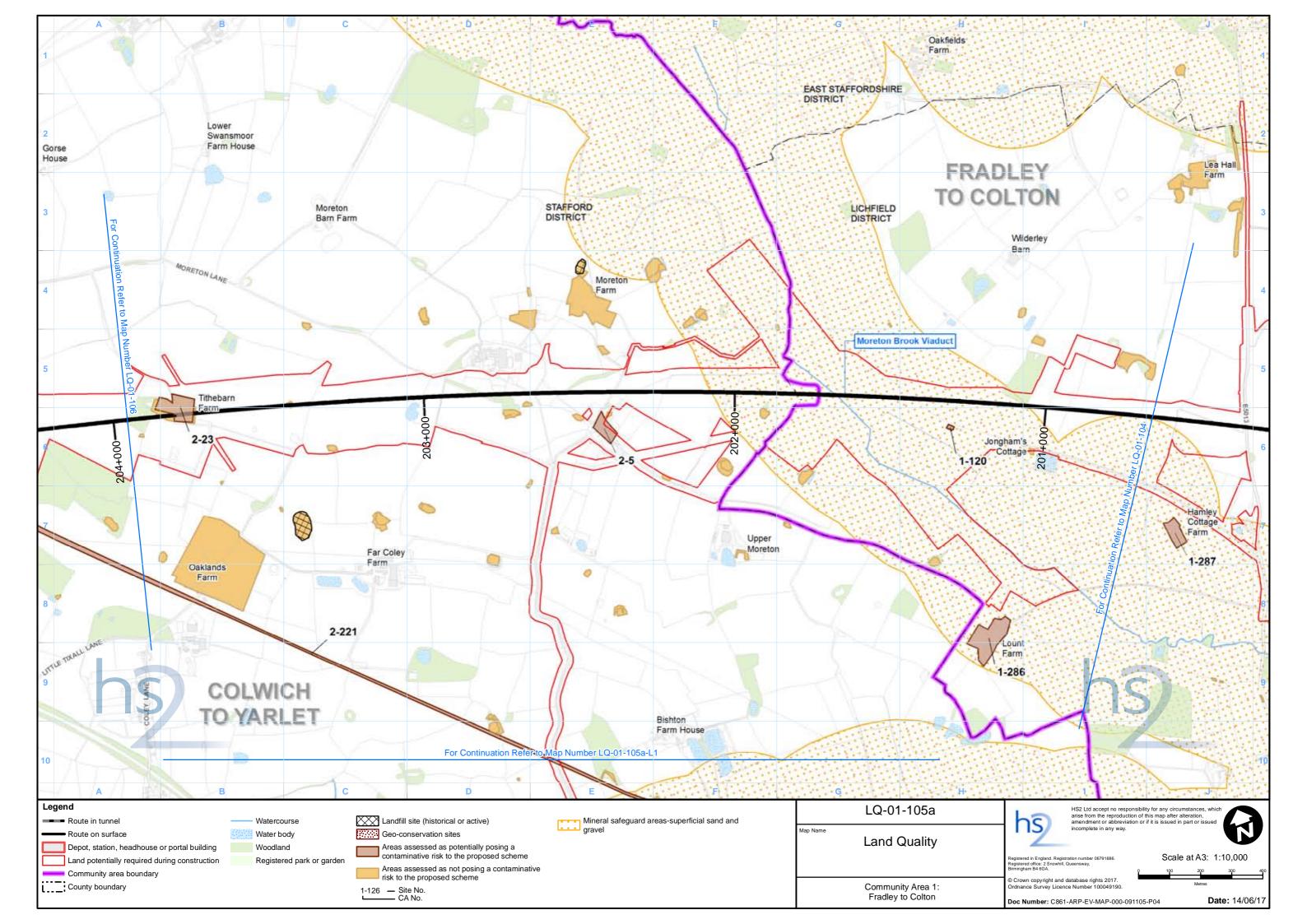


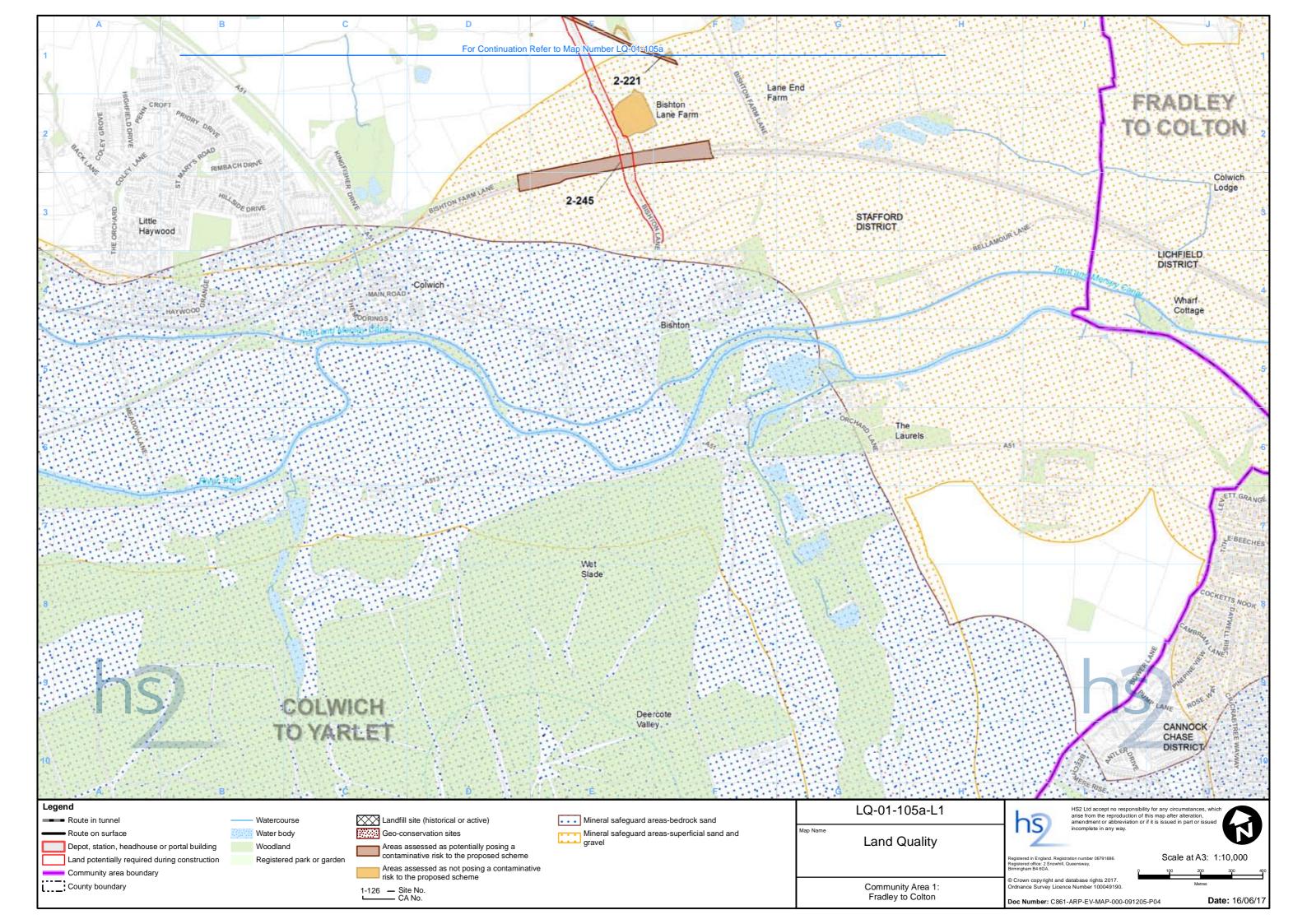




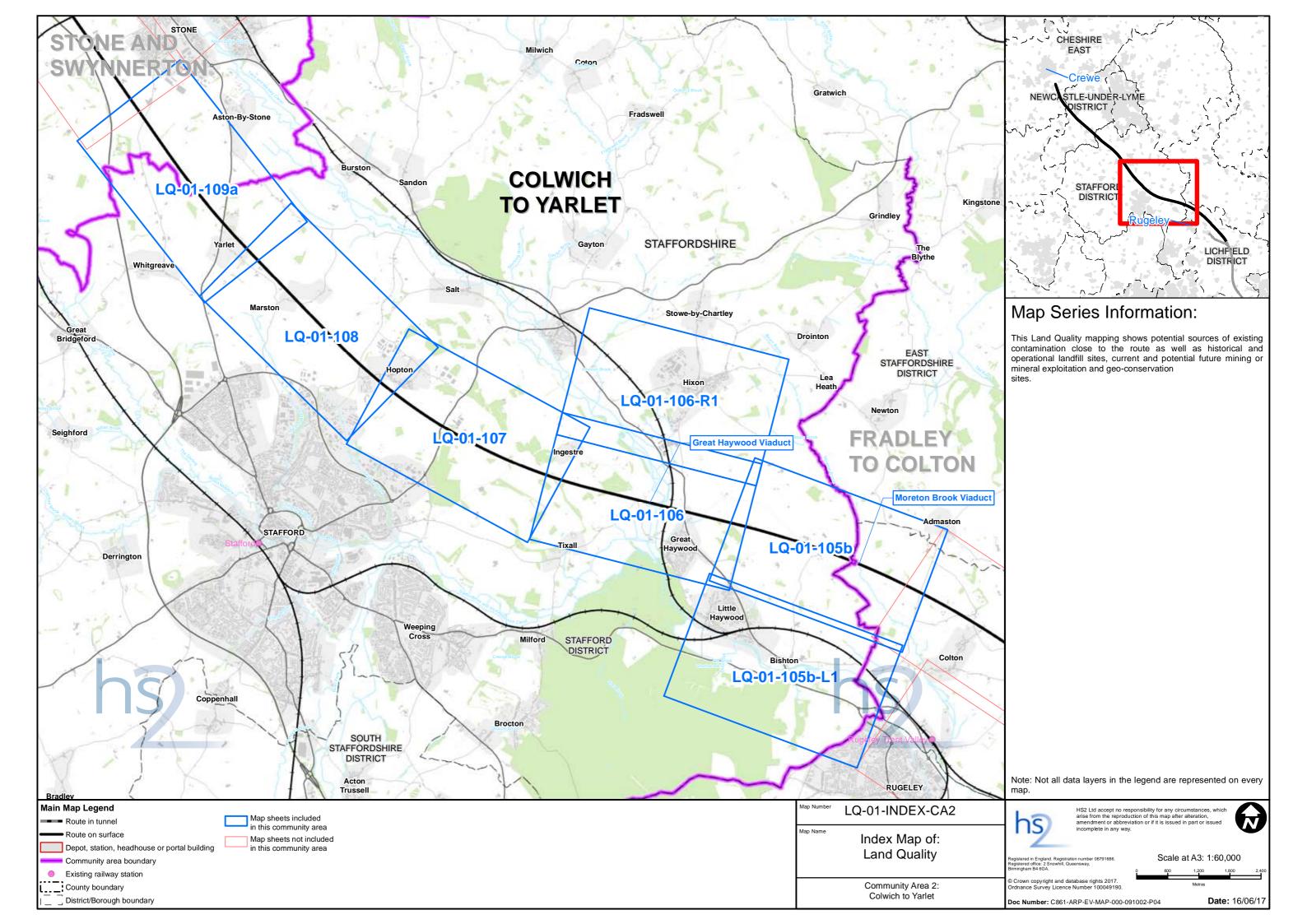


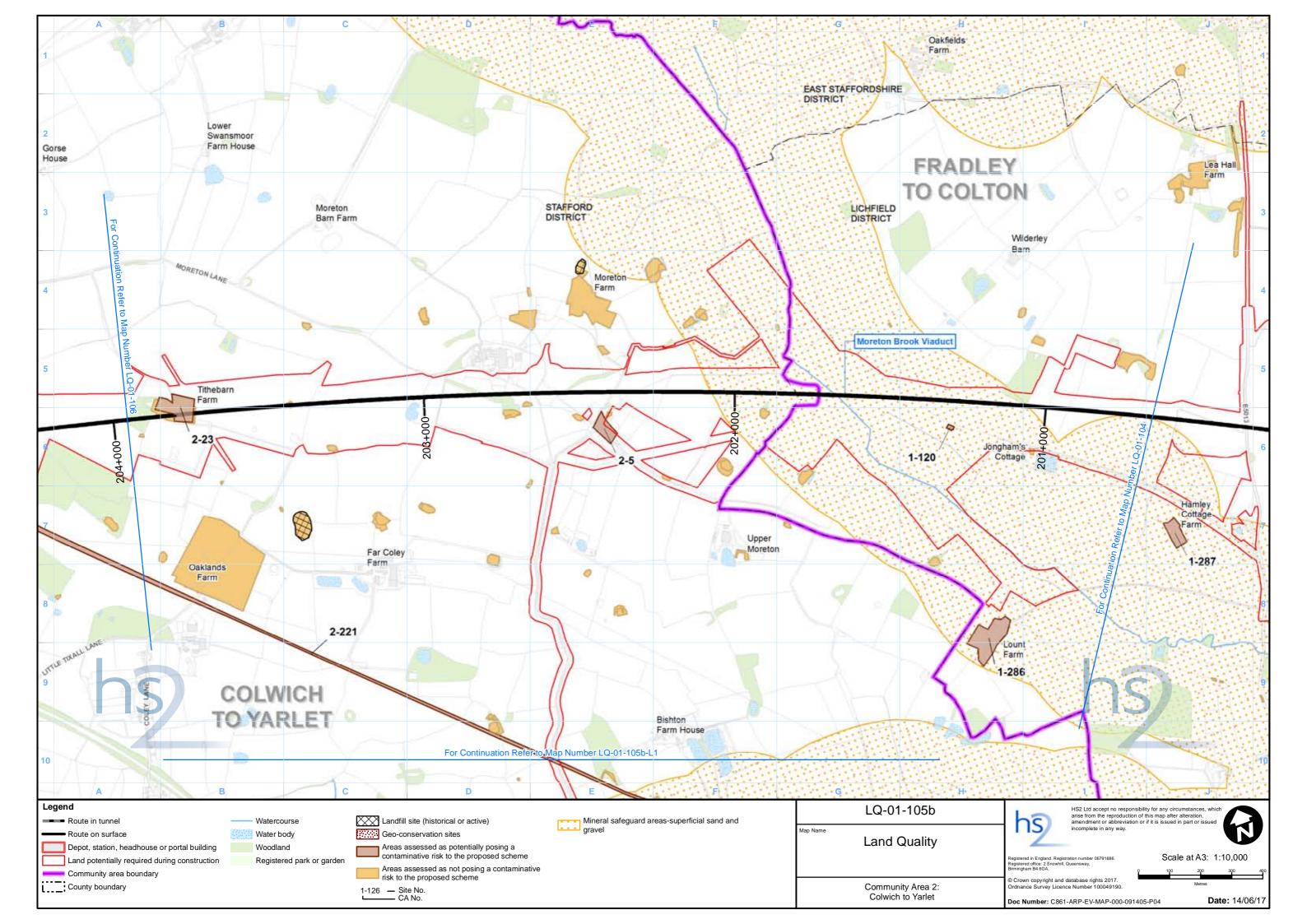


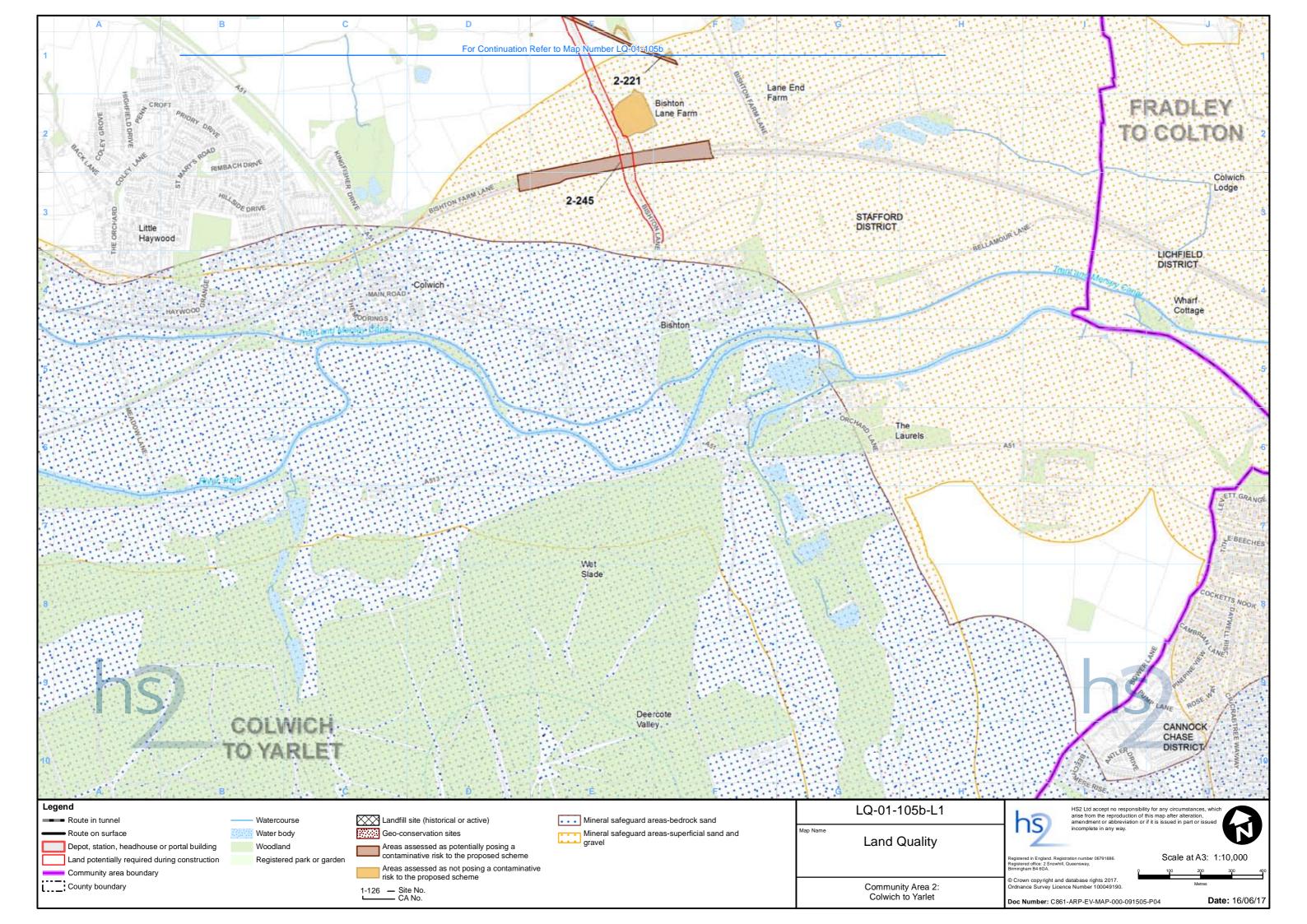


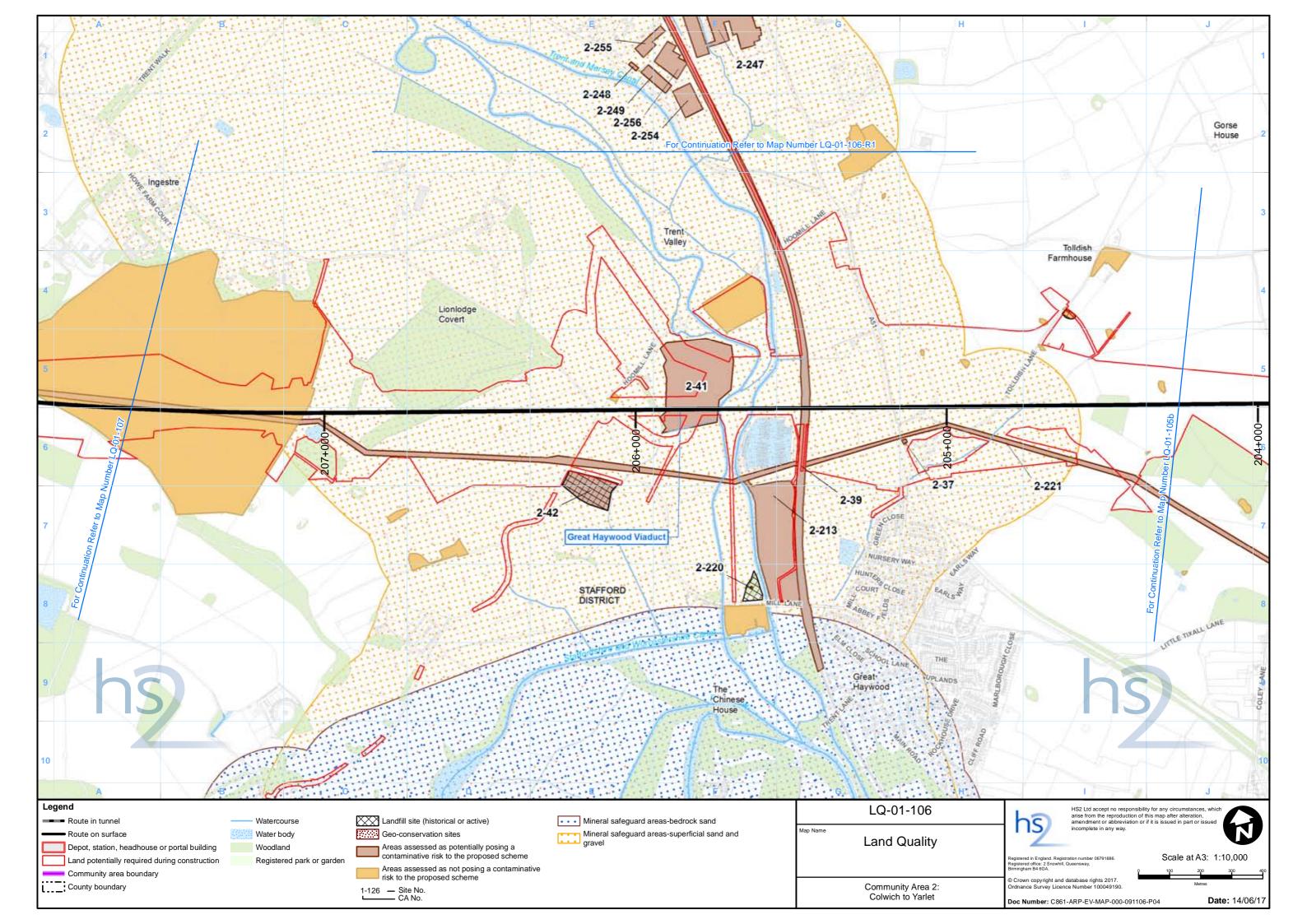


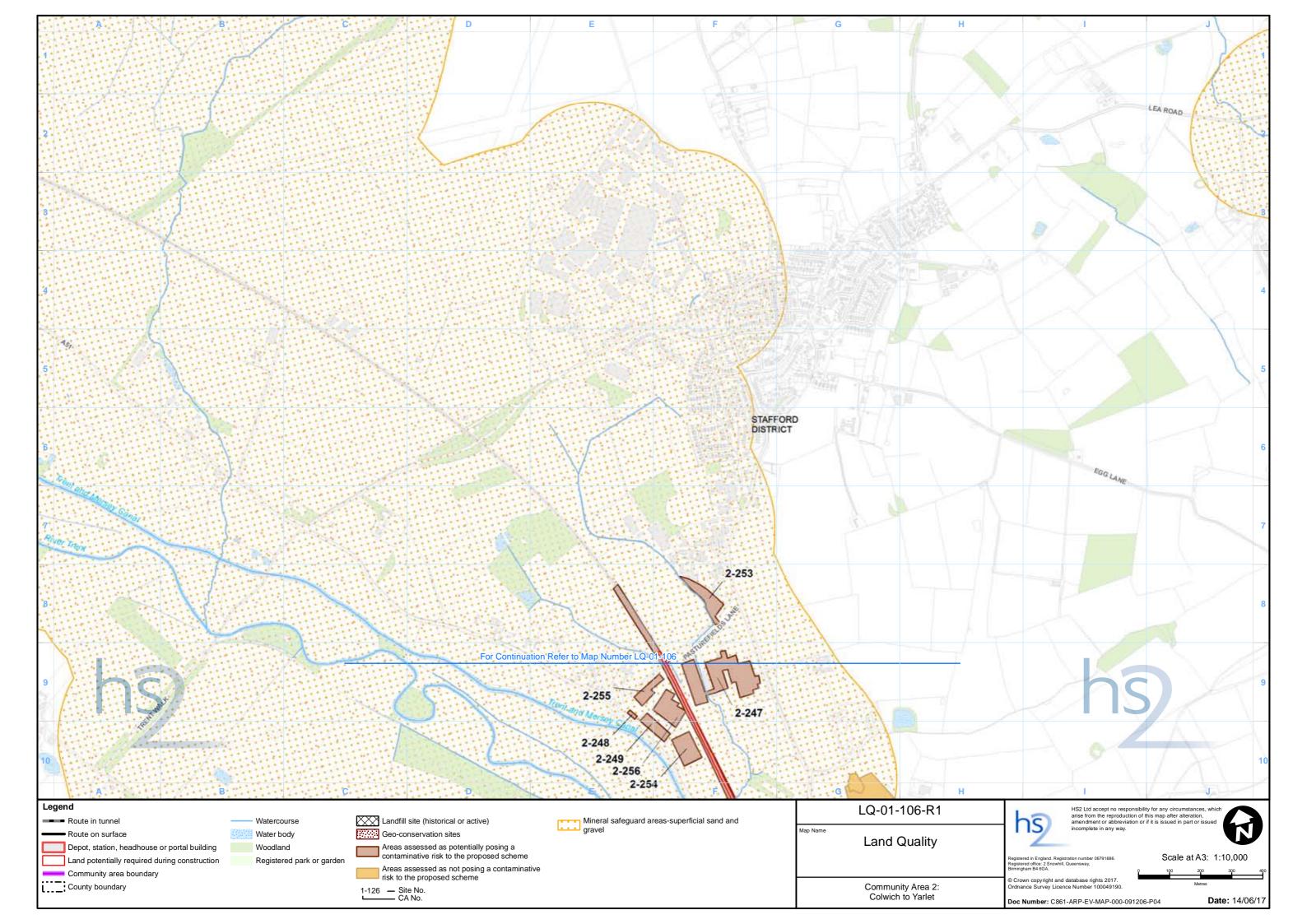
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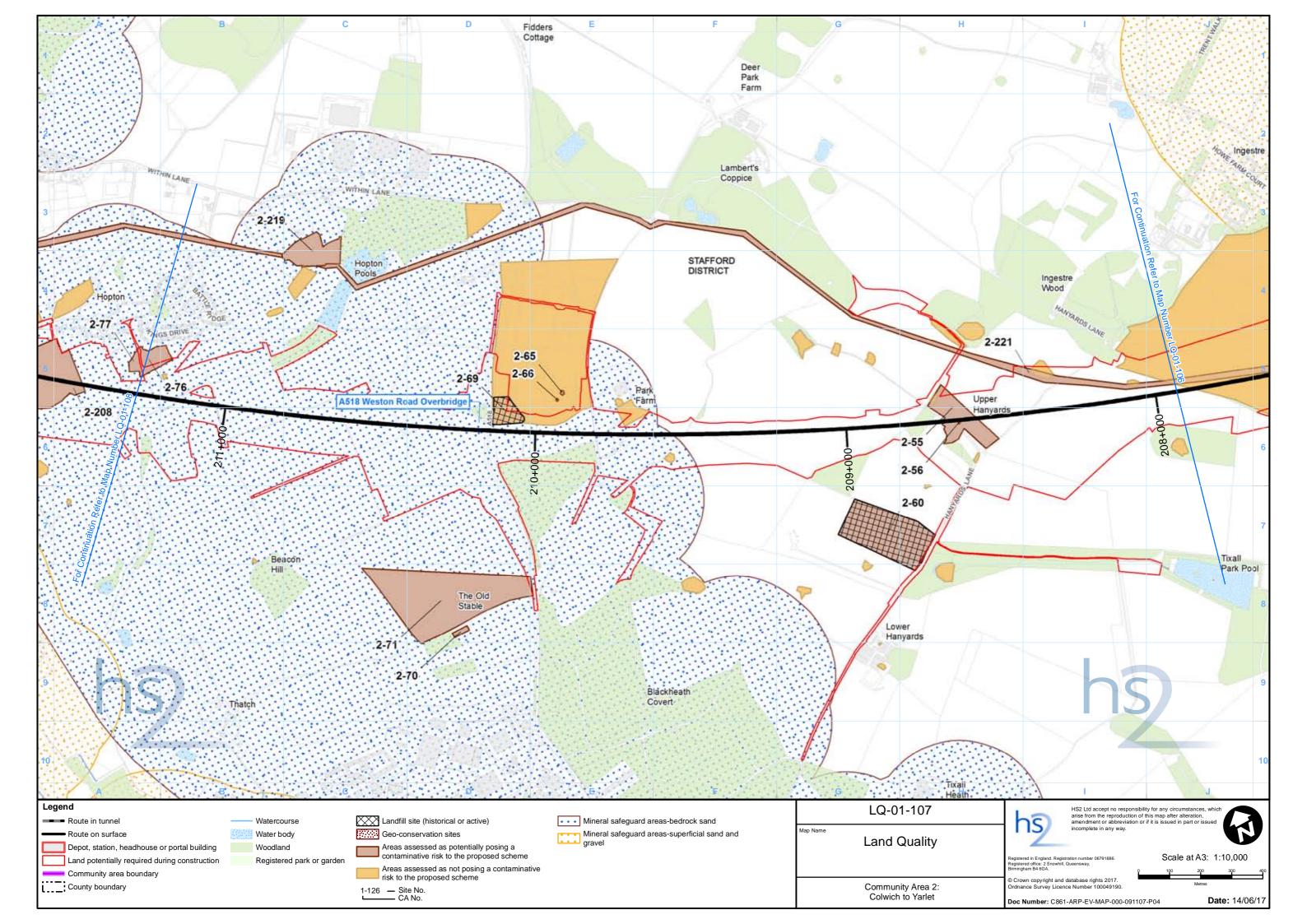


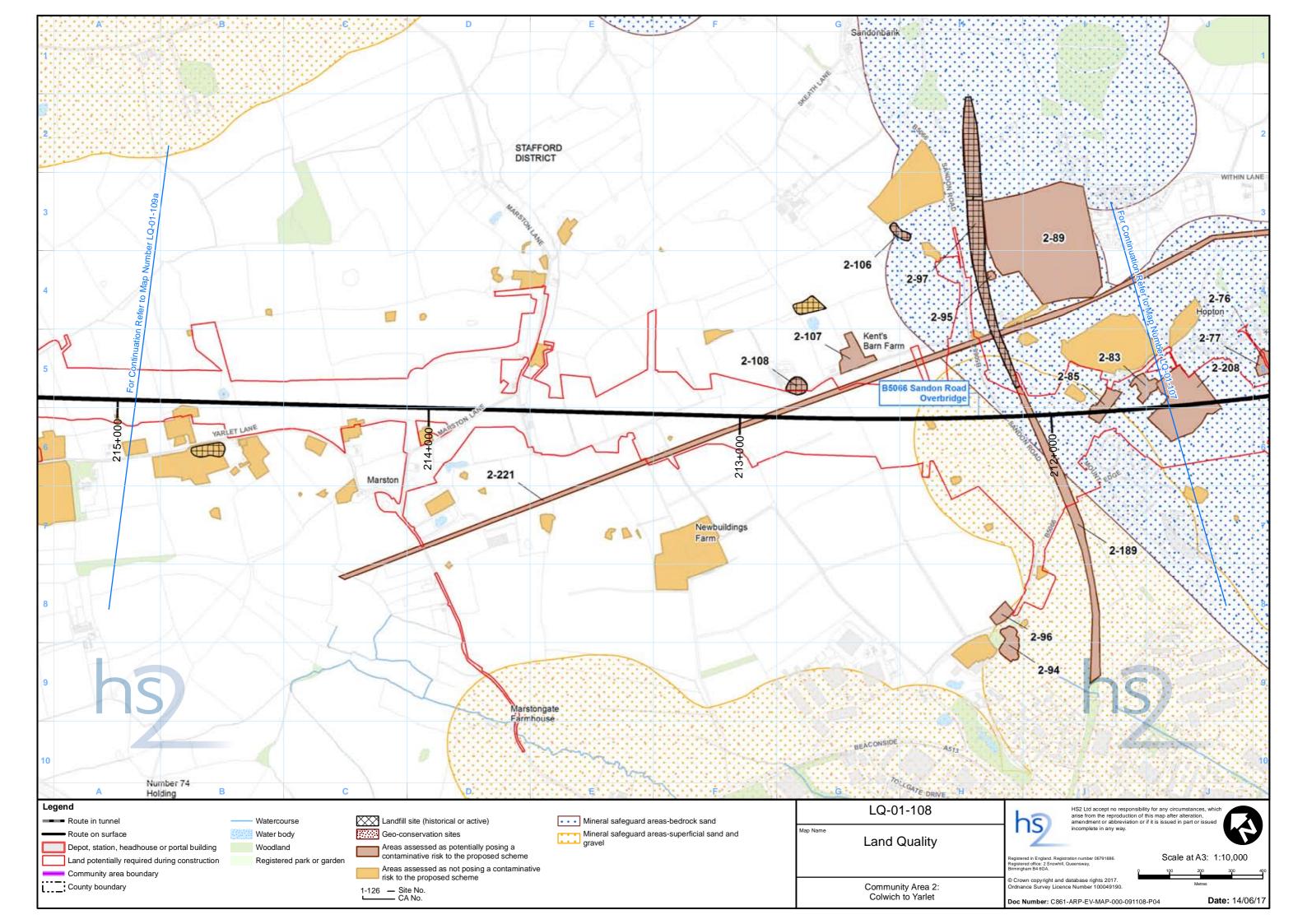


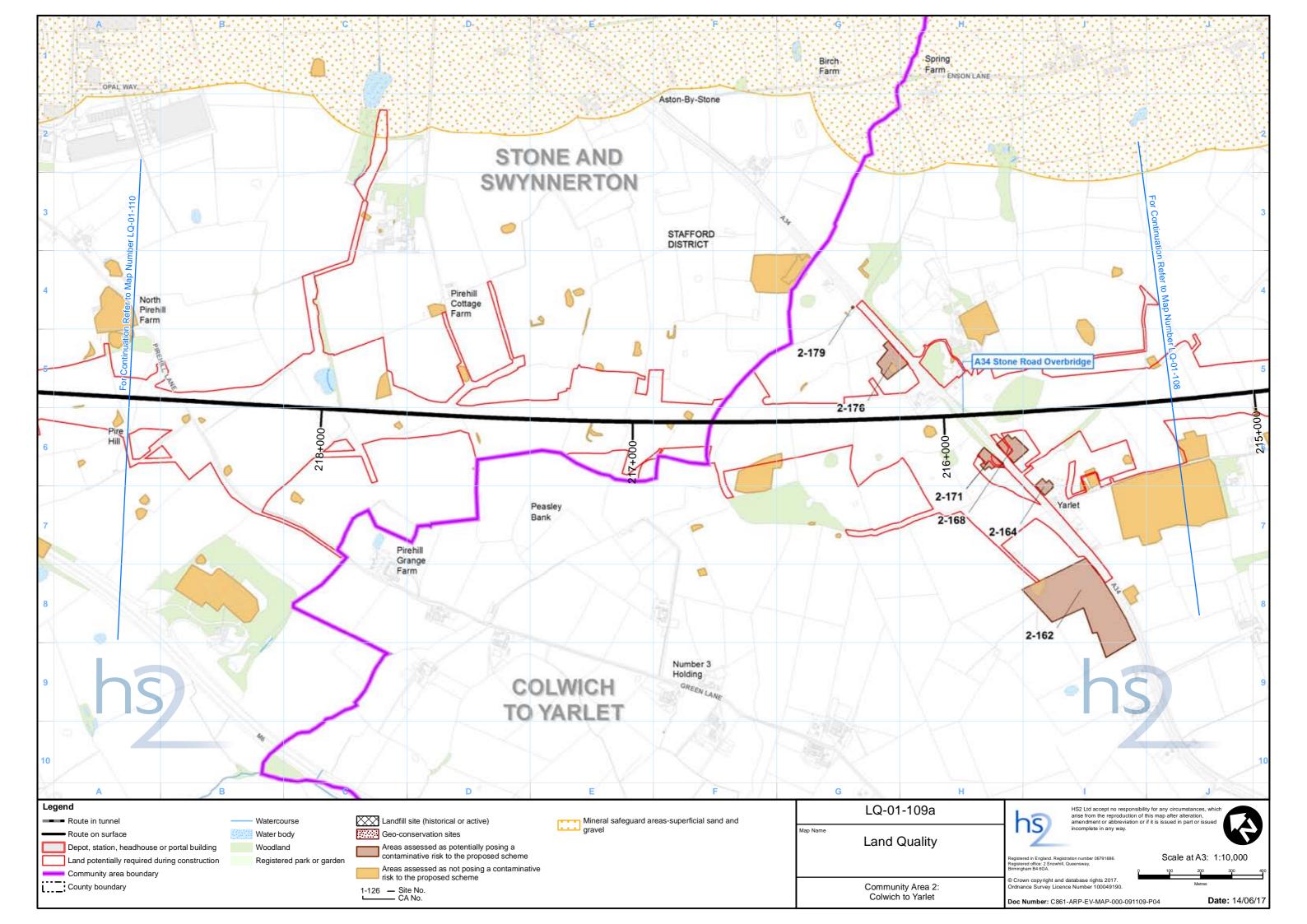




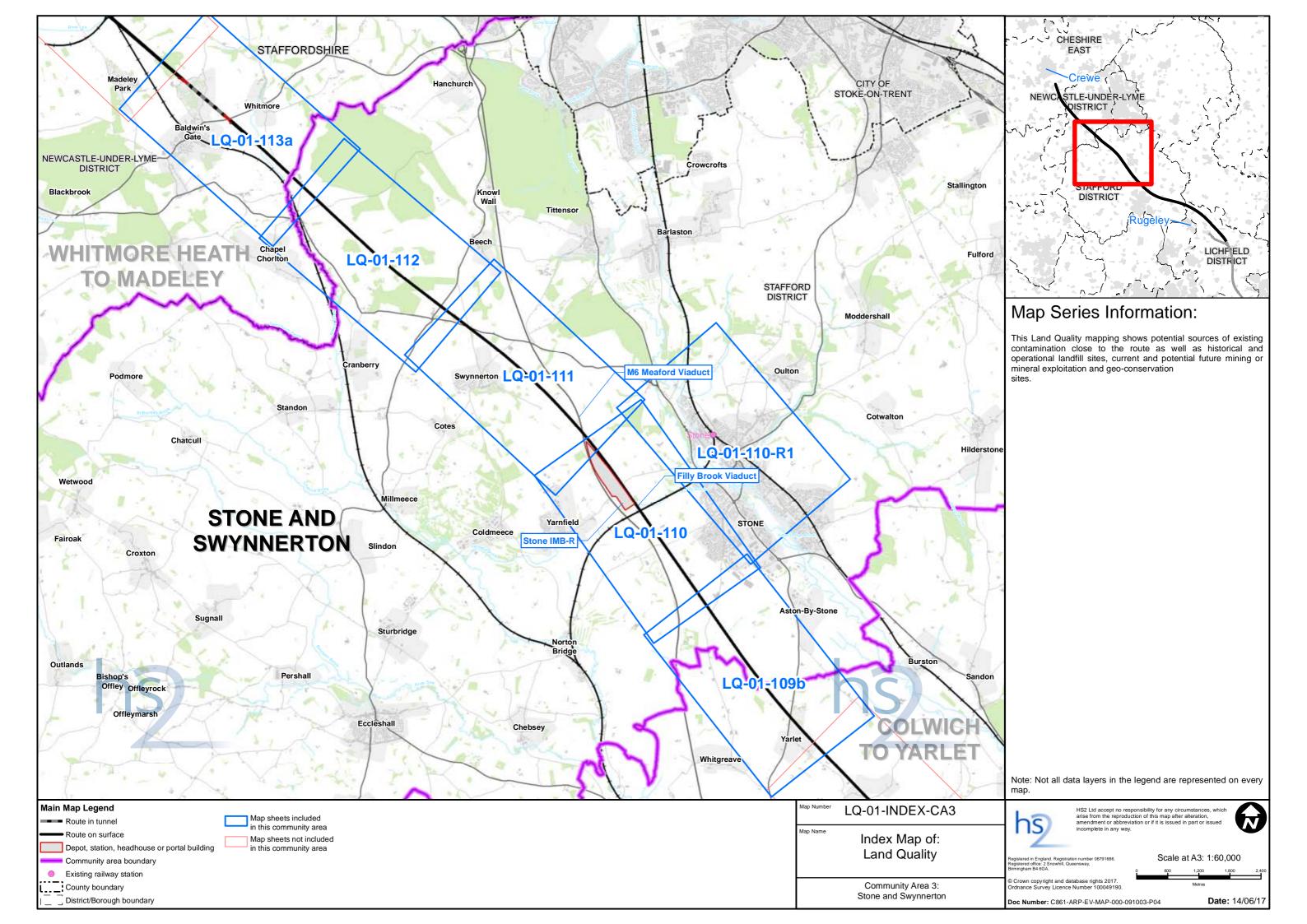


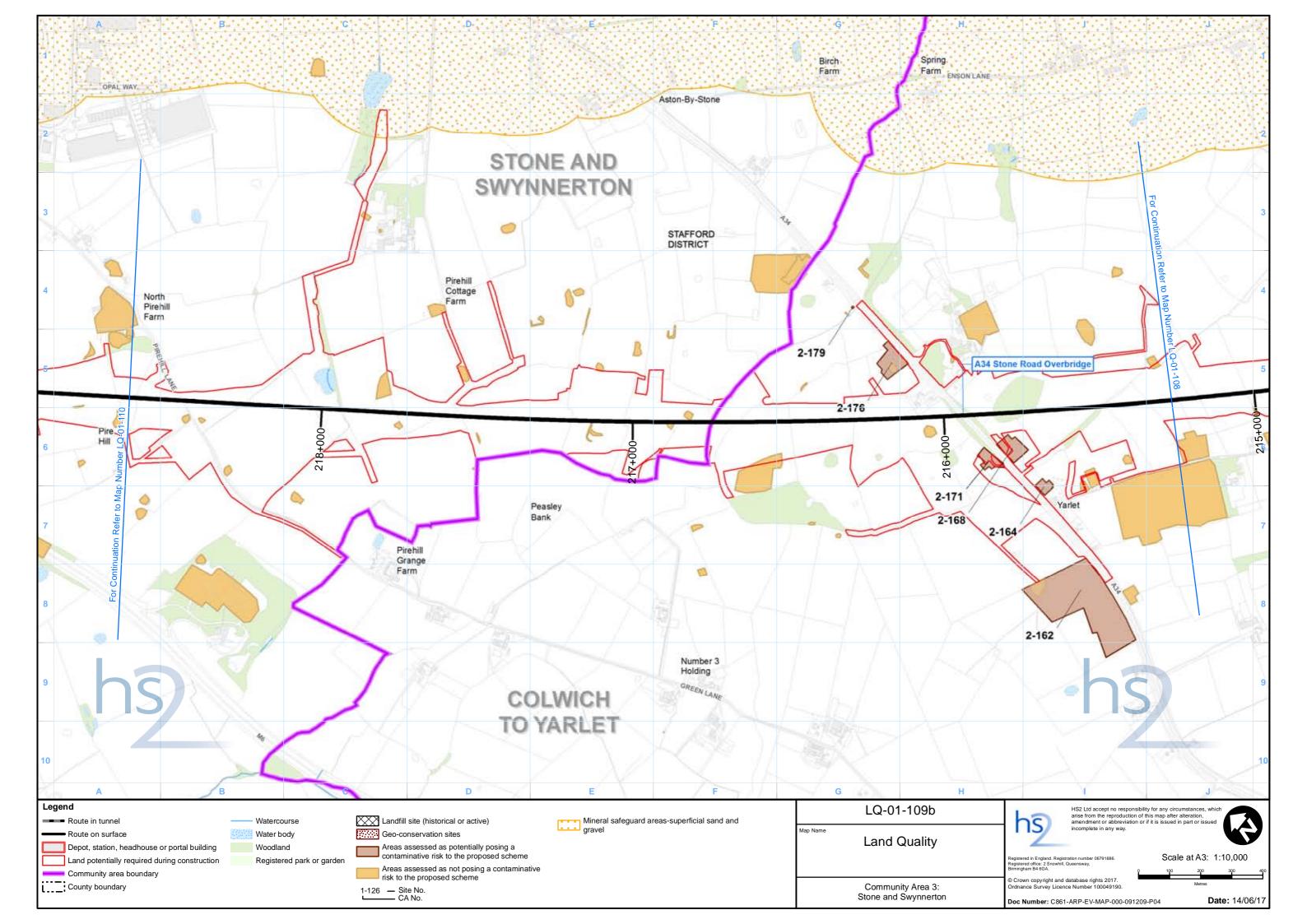


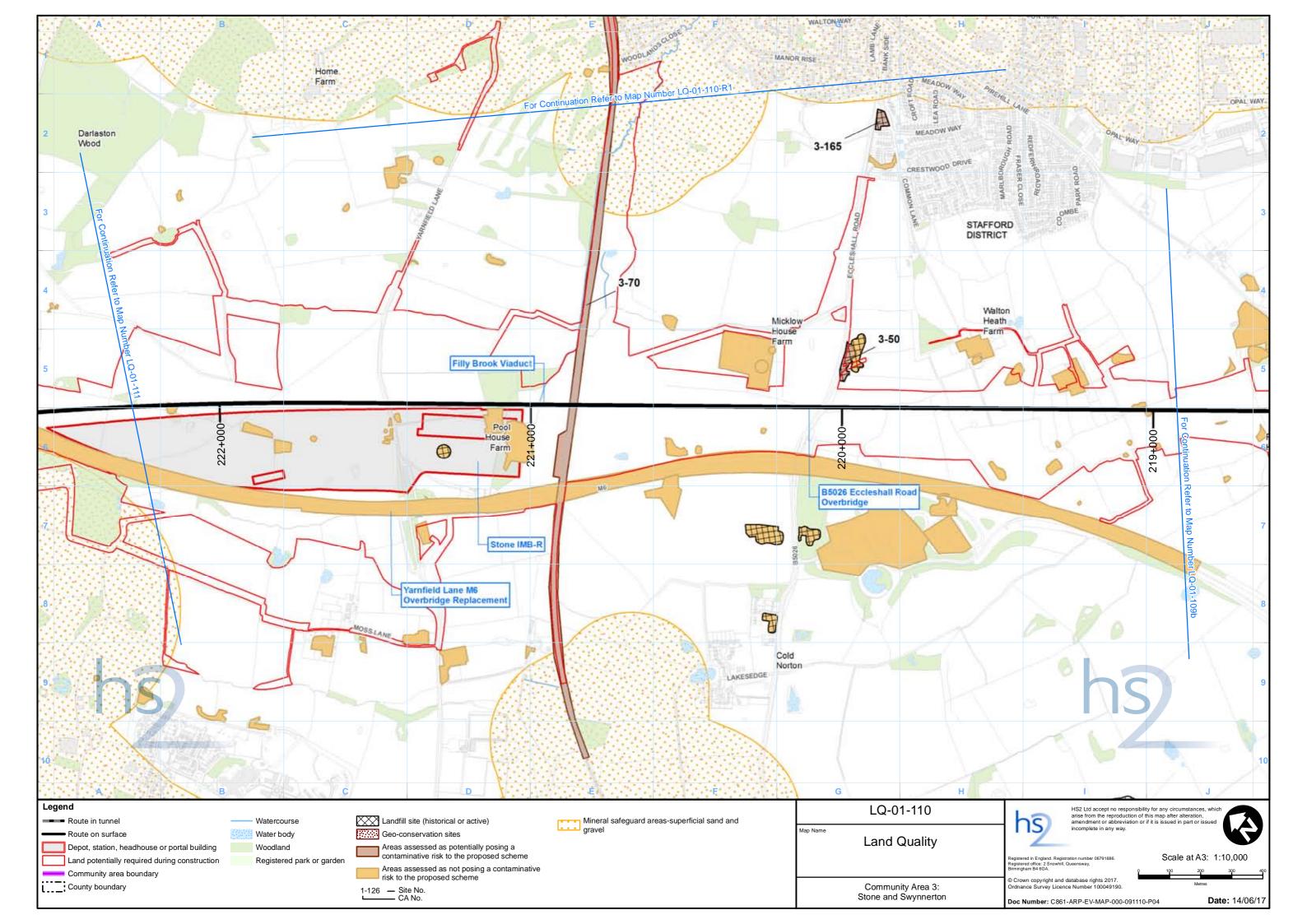


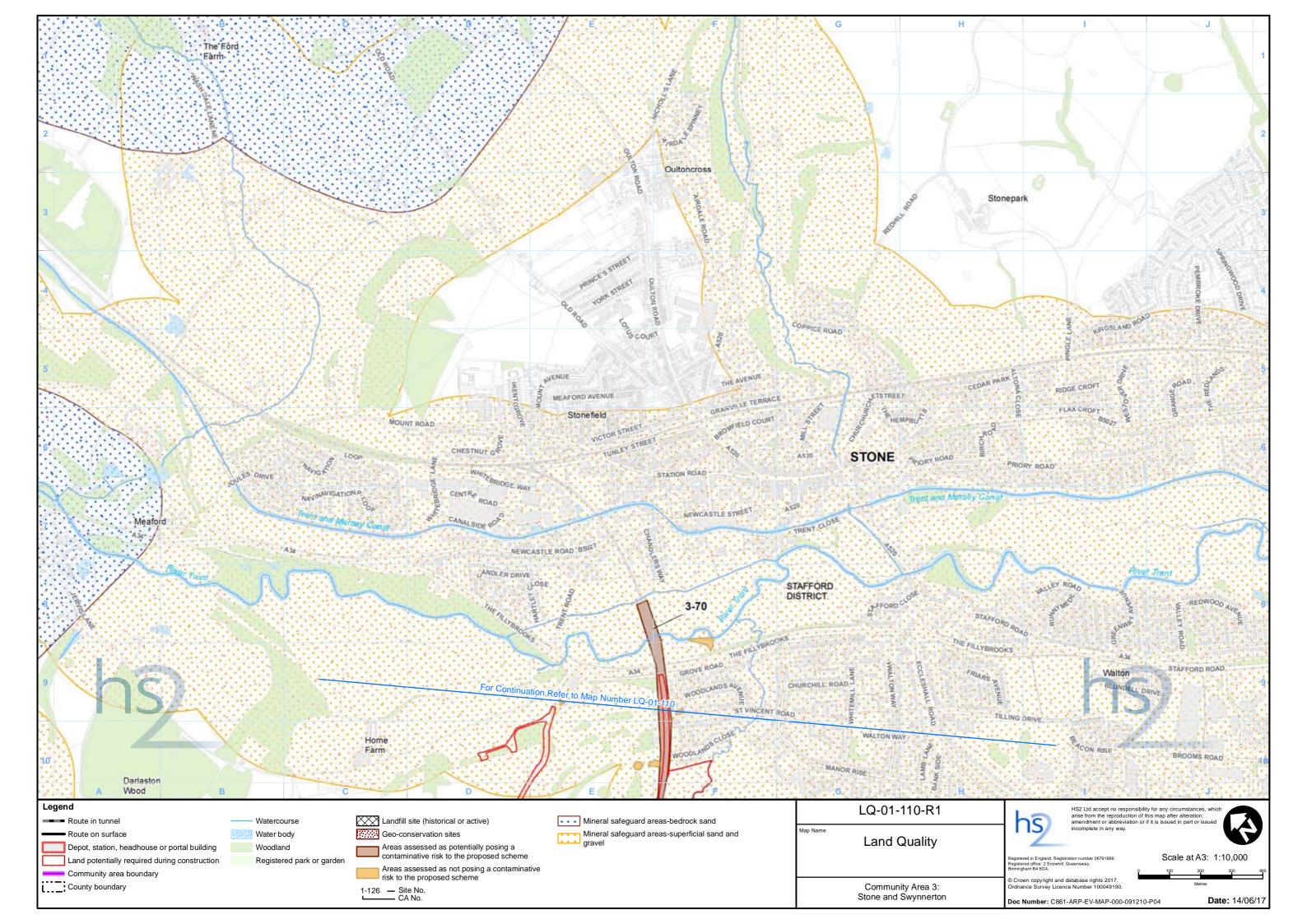


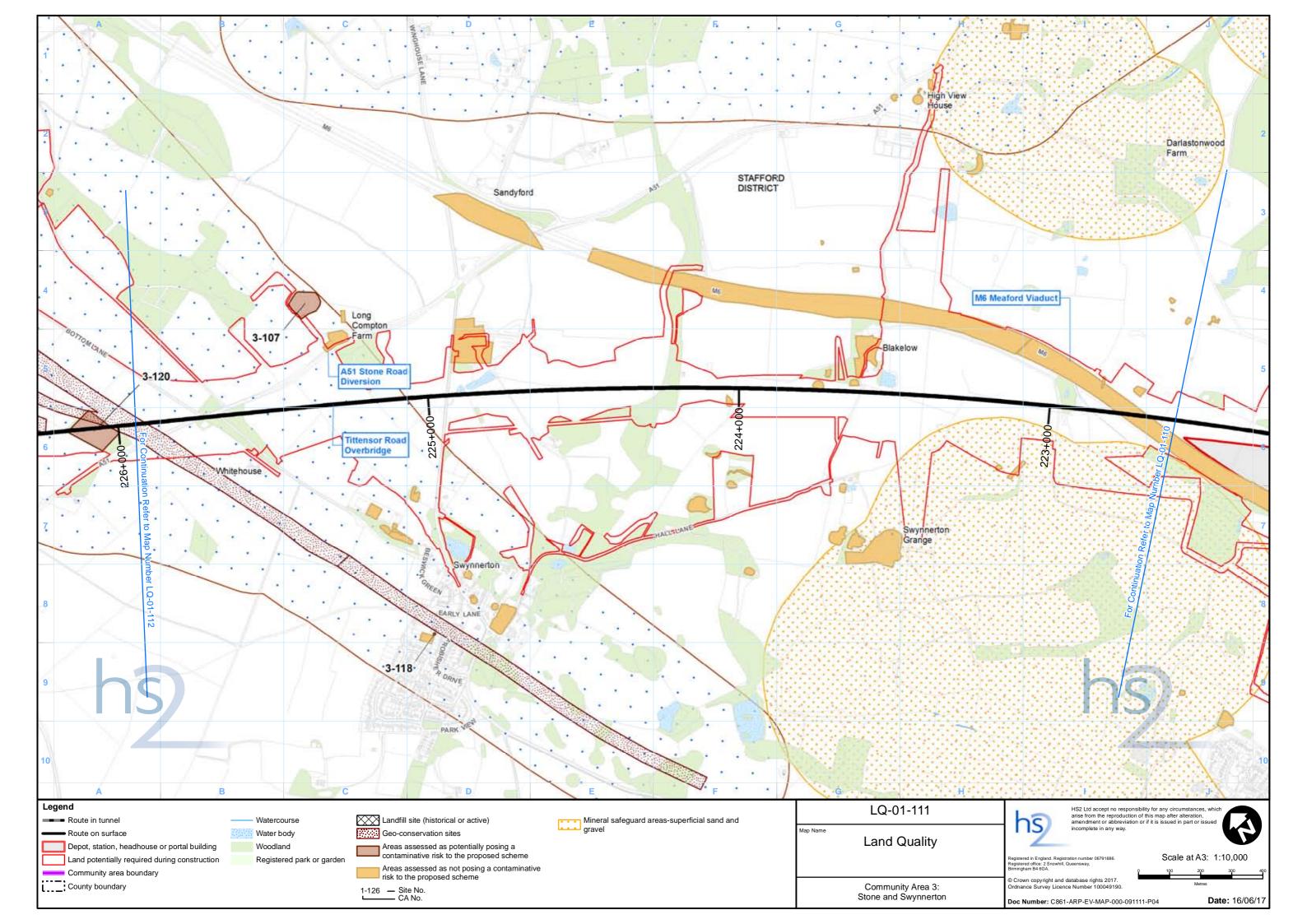
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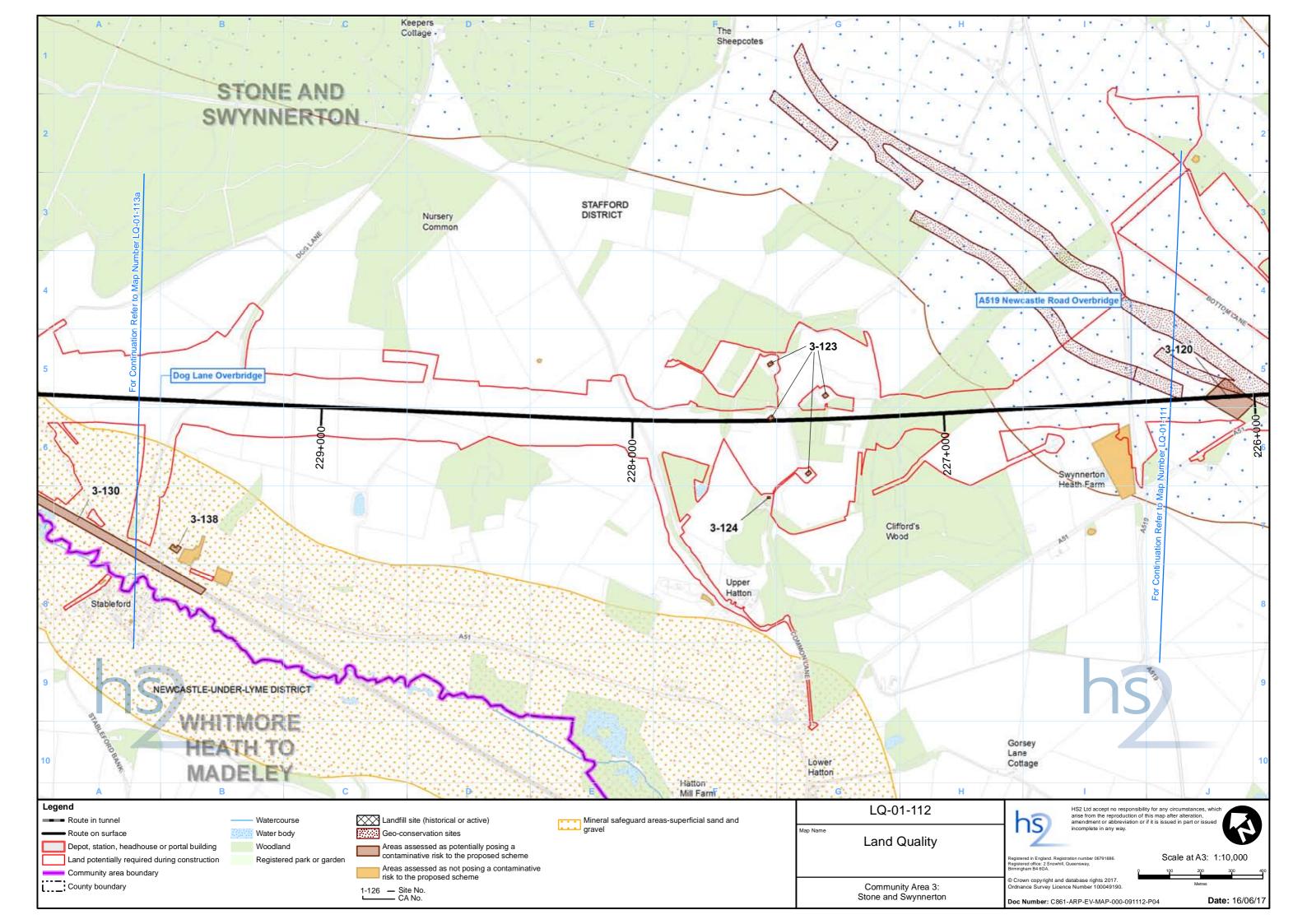


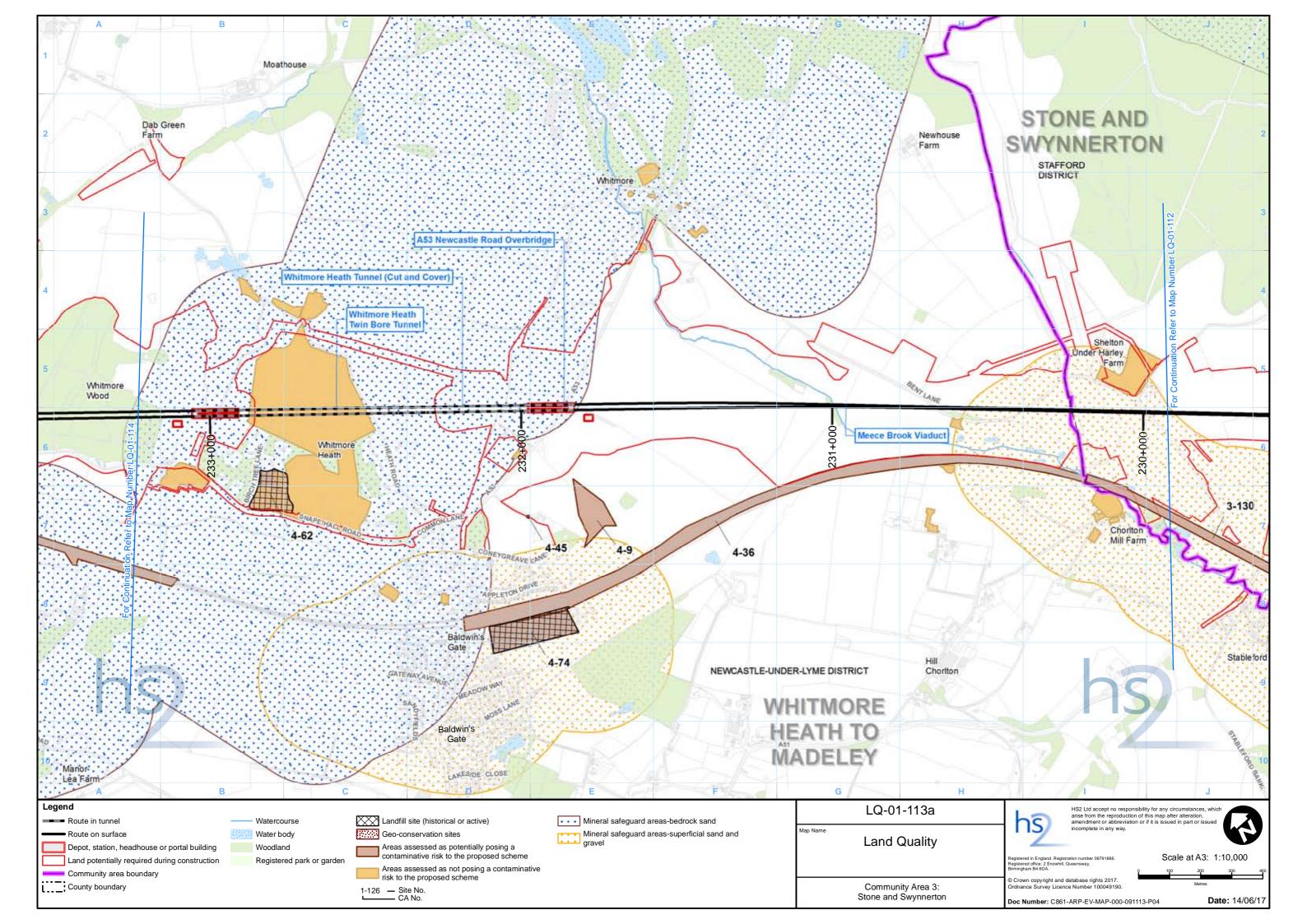




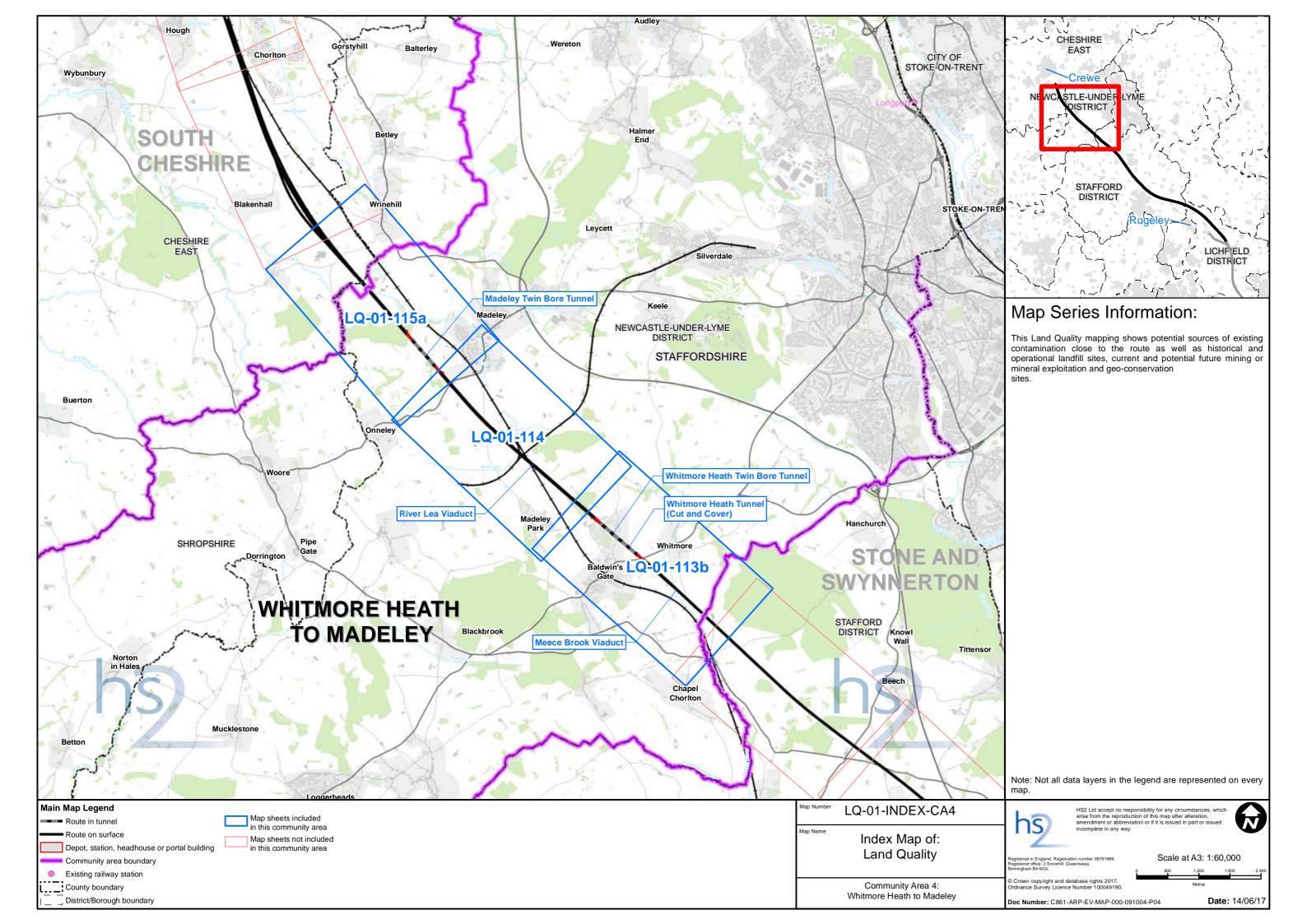


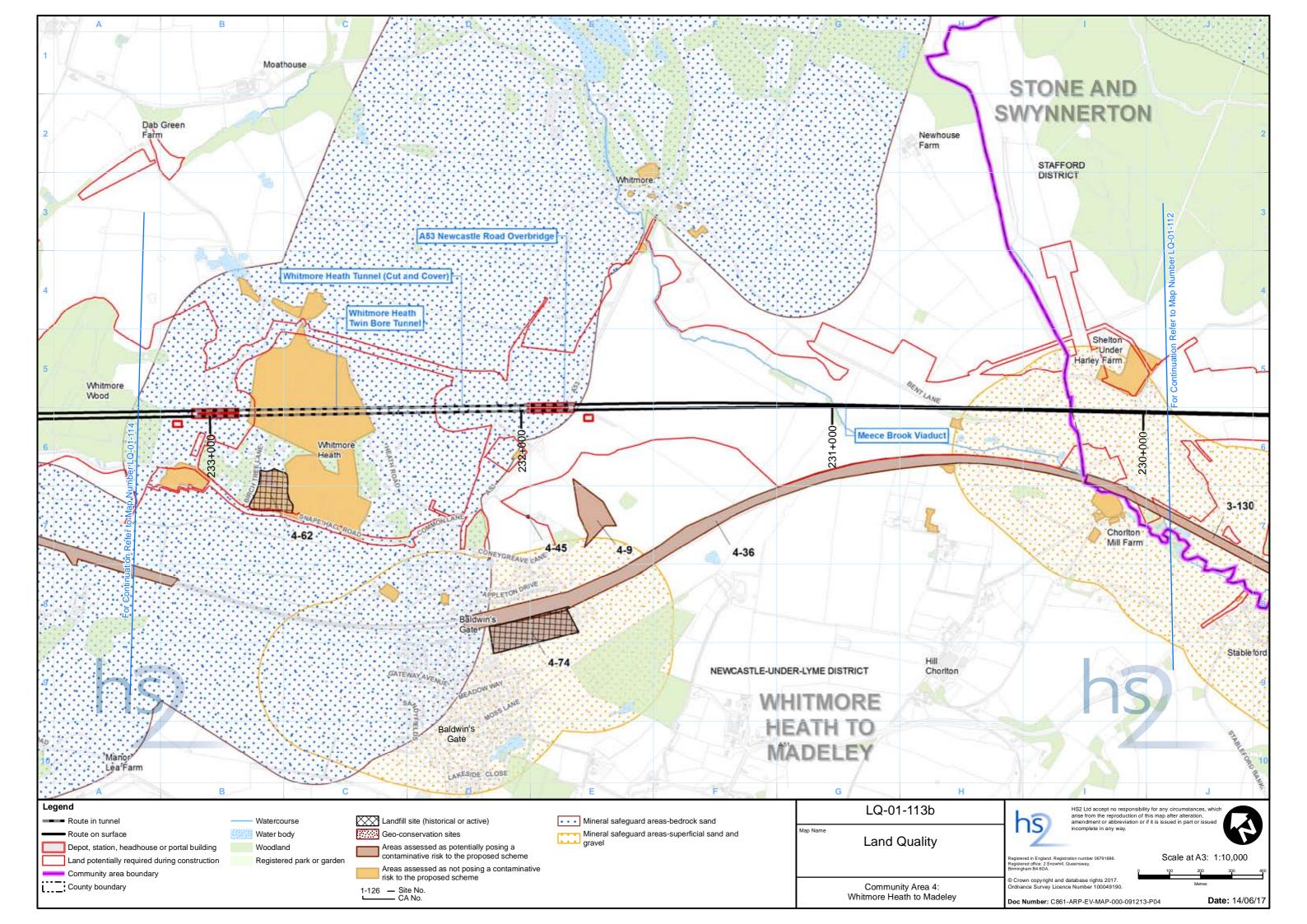


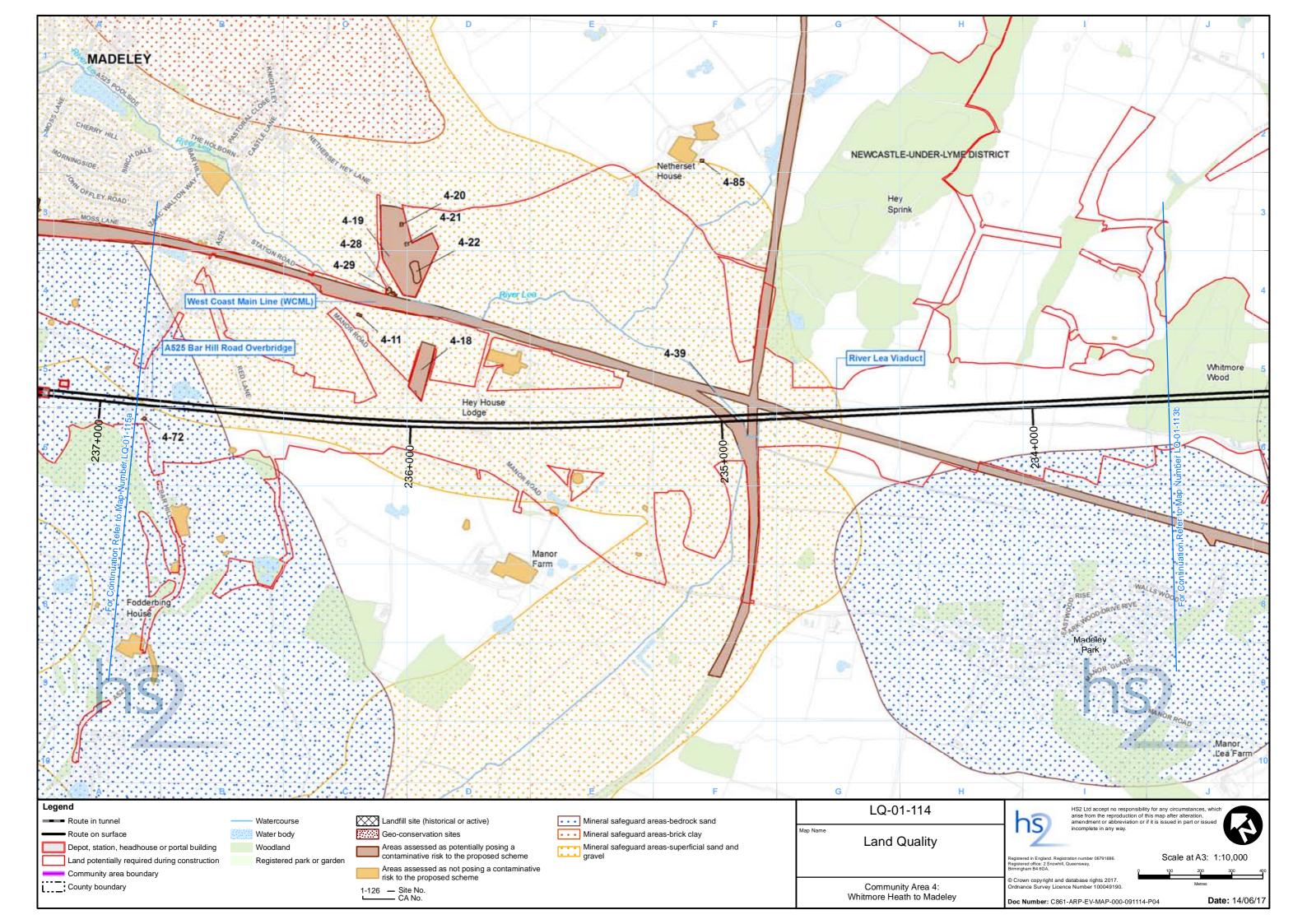


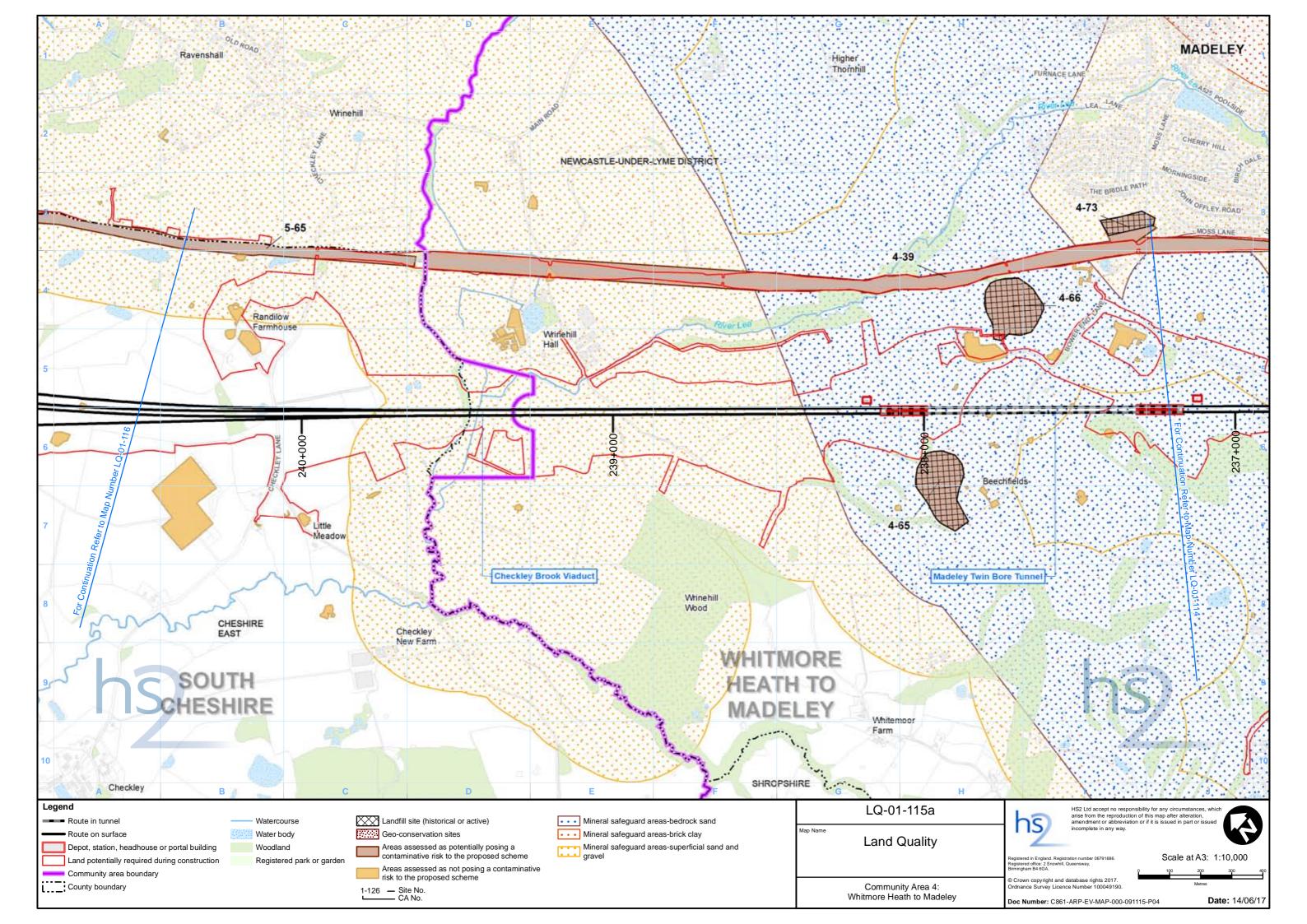


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CA5 South Cheshire
LQ-01 - Land Quality

