In Parliament – Session 2021 - 2022

High Speed Rail (Crewe – Manchester) Environmental Statement

Volume 5: Map Book

MA02: Wimboldsley to Lostock Gralam Landscape and visual (LV-00, LV-02, LV-07, LV-08, LV-17)



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### Volume 5: Map Book

MA02: Wimboldsley to Lostock Gralam Landscape and visual (LV-00, LV-02, LV-07, LV-08, LV-17)





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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LV-02 – Landscape Character Areas	Maps showing the LCAs that have been considered for assessment a construction and operation.
LV-07 – Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints	Maps showing the construction phase zone of theoretical visibility an assessment of the Proposed Scheme has been undertaken.
LV-08 – Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints	Maps showing the operational phase year one and year fifteen zone which the visual assessment of the Proposed Scheme has been unde
LV-17 – Route wide Landscape Context	Map showing the route wide landscape proposals in context with the

th the National Character Areas (NCAs).

t and illustrating significant residual effects during

and the viewpoint locations from which the visual

ne of theoretical visibility and the viewpoint locations from ndertaken.

the wider landscape.

### Mapping explanatory notes

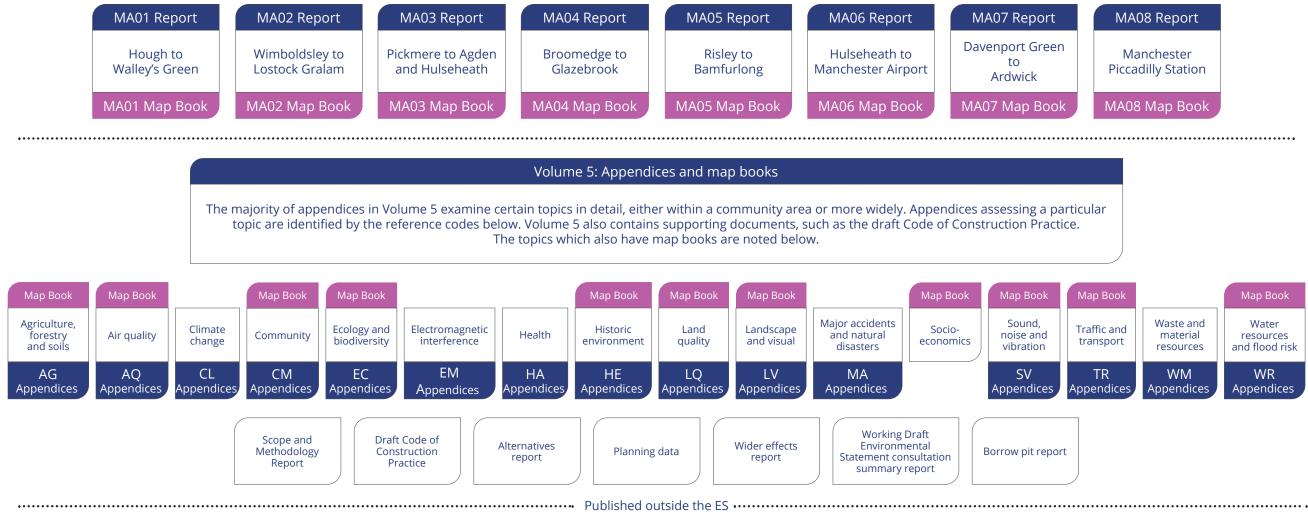
#### Structure of the HS2 Phase 2b Environmental Statement

This map book is part of the suite of documents that make up the Environmental Statement (ES) that accompanies the deposit of the High Speed Rail (Crewe – Manchester) hybrid Bill. The structure of the ES is shown in the diagram below:



Volume 5: /	٩n	nendices	and	map	books
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The topics which also have map books are noted below.



lume 4: Off-route effects
likely significant effects at locations Phase 2b Western Leg corridor and its local environment.
Map Book

### **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 XXX+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 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 1:20,000, 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 left hand side of the page, and Manchester to the right.

The exception to this, are map series LV-00, LV-02, 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 Manchester to the top.

#### Map books

In total, there are 29 map books, which make up the ES, found in Volume 2, Volume 4 and Volume 5. A list of the titles is provided below for reference.

Name	Name
Volume 2: Map book – MA01: Hough to Walley's Green	Volume 5: Map book – Agriculture (AG-01, AG02, AG-04)
Volume 2: Map book – MA02: Wimboldsley to Lostock Gralam	Volume 5: Map book – Air quality (AQ-01)
Volume 2: Map book – MA03: Pickmere to Agden and Hulseheath	Volume 5: Map book – Community (CM-01)
Volume 2: Map book – MA04: Broomedge to Glazebrook	Volume 5: Map book – Ecology and biodiversity (EC-01)
Volume 2: Map book – MA05: Risley to Bamfurlong	Volume 5: Map book – Historic Environment (HE-01, HE-02, HE-03)
Volume 2: Map book – MA06: Hulseheath to Manchester Airport	Volume 5: Map book – Land quality (LQ-01)
Volume 2: Map book – MA07: Davenport to Green Ardwick	Volume 5: Map book – MA01: Hough to Walley's Green Landscape and visual (LV-00, LV-02, LV-07, LV-08, LV-17)
Volume 2: Map book – MA08: Manchester Piccadilly Station	Volume 5: Map book – MA02: Wimboldsley to Lostock Gralam Landscape and visual (LV-00, LV-02, LV-07, LV-08, LV-17)
Volume 4: Map book – Off-route effects	Volume 5: Map book – MA03: Pickmere to Agden and Hulseheath Landscape and visual (LV-00, LV-02, LV-07, LV-08, LV-17)

Name	Name
Volume 5: Map book – MA04: Broomedge to Glazebrook Landscape and visual (LV-00, LV-02, LV-07, LV-08, LV-17)	Volume 5: Map book – MA05: Risley to Bamfurlong Landscape and visual
Volume 5: Map book – MA06: Hulseheath to Manchester Airport Landscape and visual (LV-00, LV-02, LV-07, LV-08, LV-17)	Volume 5: Map book – MA07: Davenport to Green Ardwick Landscape and
Volume 5: Map book – MA08: Manchester Piccadilly Station Landscape and visual (LV-00, LV-02, LV-07, LV-08, LV-17)	Volume 5: Map book – OR003 Annandale Depot Landscape and visual (LV
Volume 5: Map book – Planning Data/Committed Development (CT-13)	Volume 5: Map book – Socio-economics (SE-01)
Volume 5: Map book – Sound, noise and vibration (SV-02, SV-03, SV-08, SV-09)	Volume 5: Map book – Traffic and transport (TR-01, TR-03, TR-04, TR-08)
Volume 5: Map book – Water resources and flood risk (WR-01, WR-02, WR-03, WR-05, WR-06)	

#### ual (LV-00, LV-02, LV-07, LV-08, LV-17) and visual (LV-00, LV-02, LV-07, LV-08, LV-17) (LV-00, LV-02, LV-07, LV-08, LV-17)

Data dictionary and definitions



Legend features	Definition	Source	Copyright
5m contours	A contour line showing points of equal elevation (height) above a reference level, such as mean sea level and therefore gives indication of the topography, showing valleys and hills, and the steepness of slopes. Spaced at intervals of 5m.	High Speed Two (HS2) Ltd	
Community area boundary	The Environmental Statement has been split into eight sections called Community Areas.	High Speed Two (HS2) Ltd	© Crown copyrig permission of Or Licence Number of Publication 20
Construction compounds	A strategic construction hub for core project management (engineering, planning and construction delivery), commercial and administrative staff associated with the construction of the Proposed Scheme. These compounds will include an area for equipment and materials storage, as well as providing main welfare facilities for construction staff, with some compounds also providing overnight sleeping accommodation for construction staff.	High Speed Two (HS2) Ltd	
County boundary	County boundaries from Ordnance Survey boundary mapping.	Ordnance Survey	© Crown copyrig permission of Or Licence Number of Publication 20
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 copyrig permission of Or Licence Number of Publication 20
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	
Engineering earthworks: Cutting	Cuttings created in the construction of the railway and associated works such as highways.	High Speed Two (HS2) Ltd	
Engineering earthworks: Embankment	Embankments created in the construction of the railway and associated works such as highways.	High Speed Two (HS2) Ltd	
Existing woodland and tree belts	A dataset showing large areas of trees that are likely to have an impact on whether the scheme is visible during construction and vegetation. It was used in the ZTV as part of the base models.	High Speed Two (HS2) Ltd	

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Legend features	Definition	Source
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.	
Landscape Character Area	This dataset represents the landscape character areas that have been assessed route wide as defined by the Landscape Architects. Landscape character areas (LCAs) are single unique areas which are the discrete geographical areas of a particular landscape type.	High Speed Two (HS2) Ltd
Large urban area	Urban areas derived from Ordnance Survey Meridian data.	Ordnance Survey
Non engineering earthworks: Cutting	Cuttings created in the construction of landscape features and mitigation measures.	High Speed Two (HS2) Ltd
Non engineering earthworks: Embankment	Embankments created in the construction of landscape features and mitigation measures.	High Speed Two (HS2) Ltd
Non significantly affected photomontage location	This dataset shows the locations of photomontages from which the schemes visual impact has been assessed as non-significant during either construction or operation.	High Speed Two (HS2) Ltd
Non significantly affected viewpoint	This dataset shows the locations of the visual receptors from which the schemes visual impact has been assessed as non-significant during either construction or operation.	
Non significantly affected viewpoint or photomontage number	This dataset shows the locations of the visual receptors from which the schemes visual impact has been assessed as non-significant during either construction or operation.	
Other planting and hedgerows	Soft landscape design that can include any seeded areas for the purpose of creating grassland except for the engineering earthworks. 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
Proposed tree planting	A dataset showing proposed planting that may have an impact on whether the scheme is visible during construction and operation. It was used in the operation year 15 ZTV.	High Speed Two (HS2) Ltd

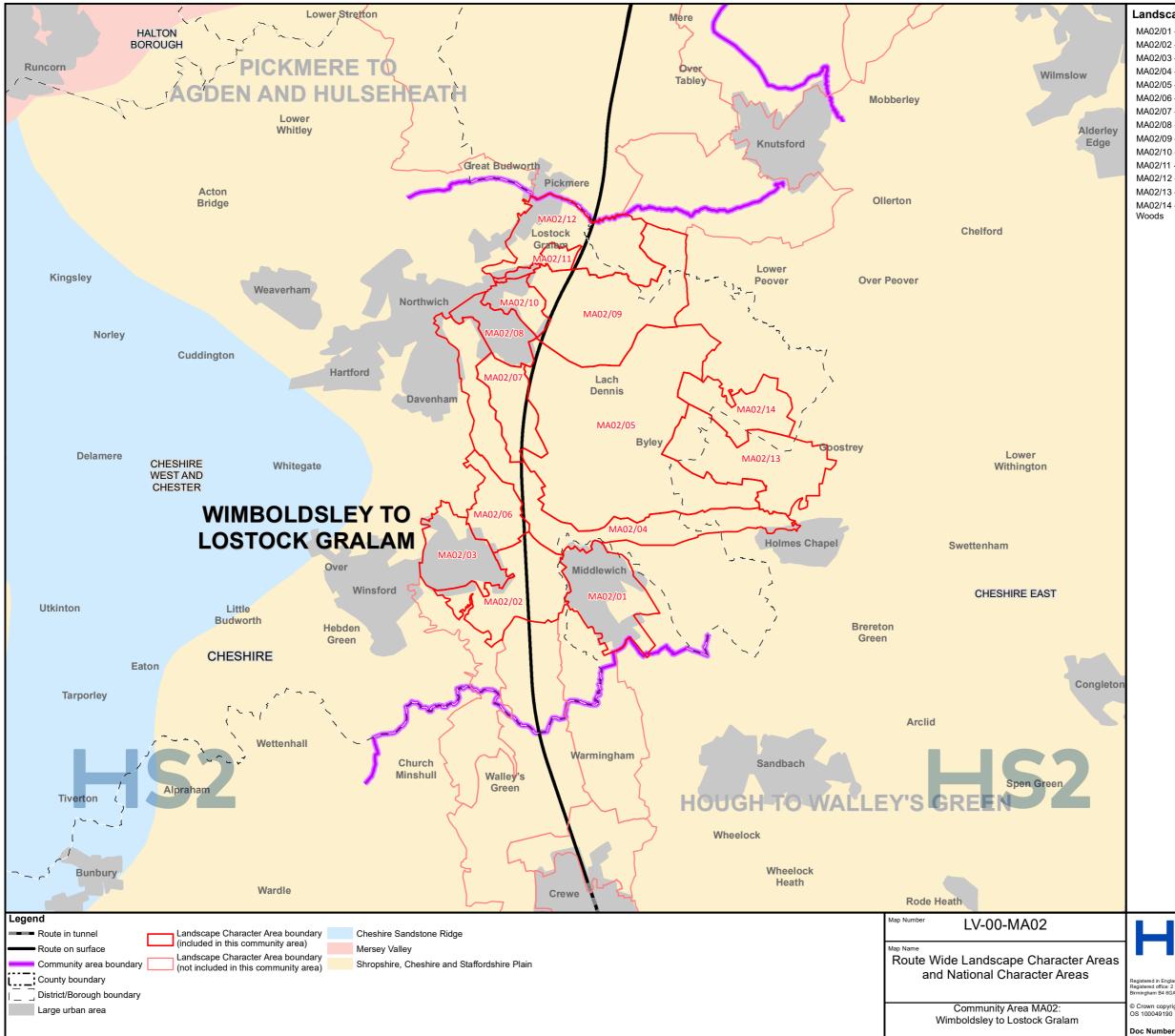
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Legend features	Definition	Source	Copyright
Public Rights of Way (PRoW) Route in tunnel Route on surface Significantly affected photomontage location Significantly affected viewpoint Significantly affected viewpoint or ohotomontage number Free planting Water body ZTV construction		Cheshire East council	© Cheshire East
		Cheshire West council	© Cheshire West
	Public rights of way are highways which can be used for the following purposes:	Cumbria County council	© Cumbria Cour
		Manchester City council	© Manchester Ci
	- Footpaths - pedestrians only	Preston City council	© Preston City co
Public Rights of Way (PRoW)	- Bridleways - pedestrians, cyclists and equestrians	Salford City council	© Salford City co
	- Restricted byways - as bridleways plus non-motorised vehicles	Trafford Metropolitan Borough	© Trafford Metro
	- Byways open to all traffic.	council	council.
	Definitive Map data supplied by surveying authorities.	Warrington Borough council	© Warrington Bo
		Wigan Metropolitan Borough	© Wigan Metrop
		council	council.
Route in tunnel	Represents the proposed route of HS2, split into route on surface and tunnelled	High Speed Two (HS2) Ltd	
	sections.		
Route on surface	Represents the proposed route of HS2, split into route on surface and tunnelled	High Speed Two (HS2) Ltd	
	sections.		
	This dataset shows the locations of photomontages from which the schemes		
Significantly affected photomontage location	visual impact has been assessed as significant during either construction or	High Speed Two (HS2) Ltd	
	operation.		
	This dataset shows the locations of the visual receptors from which the schemes		
Significantly affected viewpoint	visual impact has been assessed as significant during either construction or	High Speed Two (HS2) Ltd	
	operation.		
Significantly affected viewpoint or	This dataset shows the locations of the visual receptors from which the schemes		
	visual impact has been assessed as significant during either construction or	High Speed Two (HS2) Ltd	
	operation.		
	A dataset showing proposed planting that may have an impact on whether the		
Tree planting	scheme is visible during construction and operation. It was used in the	High Speed Two (HS2) Ltd	
	operation year 15 ZTV.		
			© Crown copyrig
NAC . 1 1	Any mass of water having definite hydrological, physical, chemical and biological		permission of Or
water body	characteristics.	Ordnance Survey	Licence Number
			of Publication 20
	This is a computer generated model showing areas of land within which		
	the activities undertaken during the construction of the scheme may be		
ZTV construction	theoretically visible. ZTV has been used as a tool for identifying likely	High Speed Two (HS2) Ltd	
	areas for survey and assessment based on initial scheme design.		
	This is a computer generated model showing areas of land within which		
ZTV operation year 1	the scheme may be theoretically visible on day 1 of operation.	High Speed Two (HS2) Ltd	
	This is a computer generated model showing areas of land within which		
	the scheme may be theoretically visible after 15 years of operation by		
ZTV operation year 15	incorporating an assumed height of 7.5 metres for any mitigation	High Speed Two (HS2) Ltd	
	planting.		
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LV-00 - Route-wide Landscape Character Areas and National Character Areas





#### Landscape Character Areas

MA02/01 - Middlewich

- MA02/02 Winsford and Middlewich Fringe Farmland
- MA02/03 Winsford East
- MA02/04 Dane Valley
- MA02/05 Stublach Plain
- MA02/06 Bostock Hall Estate
- MA02/07 Whatcroft and Billinge Green Flashes
- MA02/08 Rudheath
- MA02/09 Lostock Plain
- MA02/10 Rudheath Lime Beds
- MA02/11 Lostock Gralam
- MA02/12 Wincham Brook and Holford Lower Wooded Farmland
- MA02/13 Cranage and Byley Sandy Woods
- MA02/14 Rudheath Woods, Shakerley and New Platt Meres Sandy

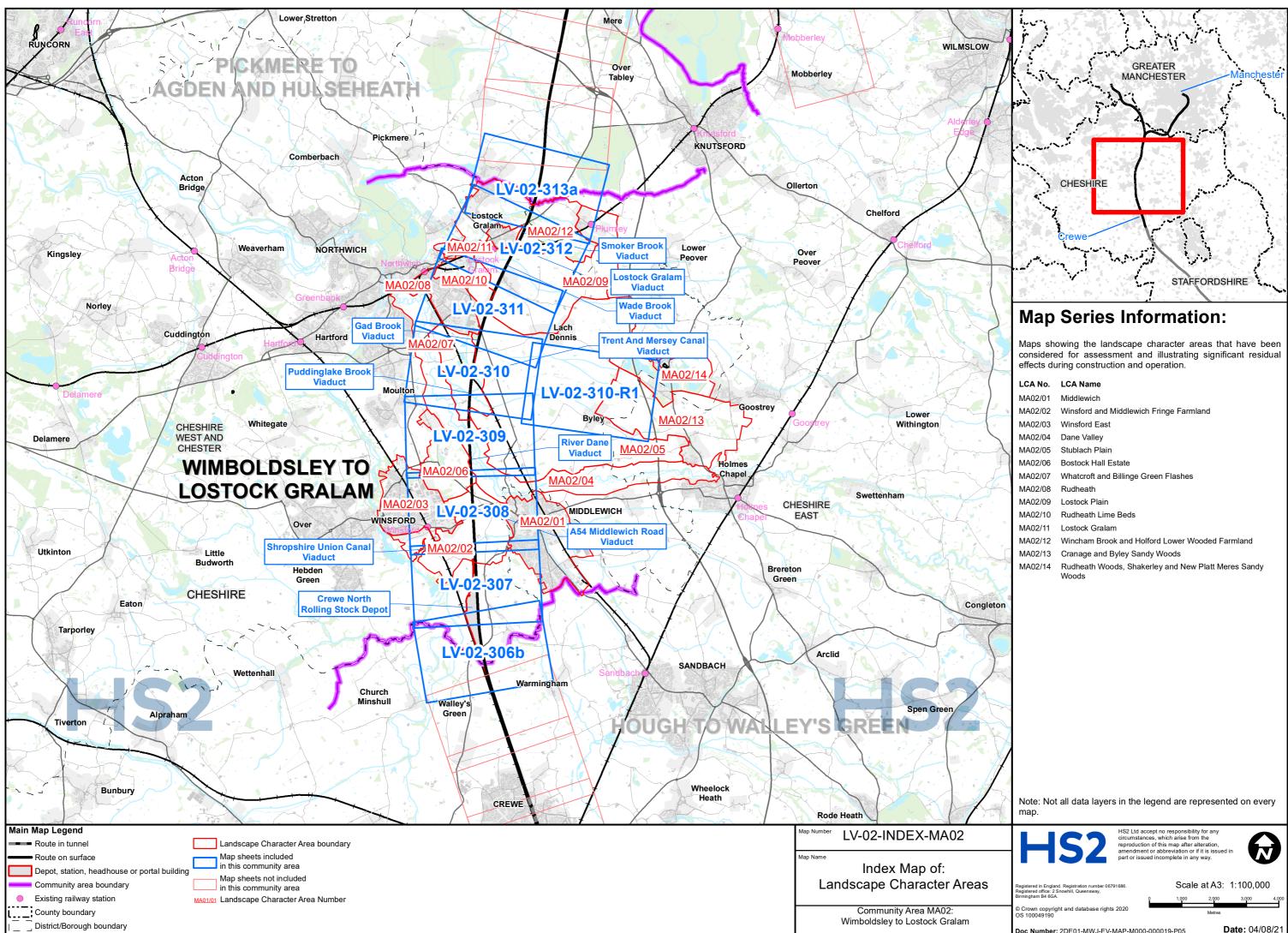
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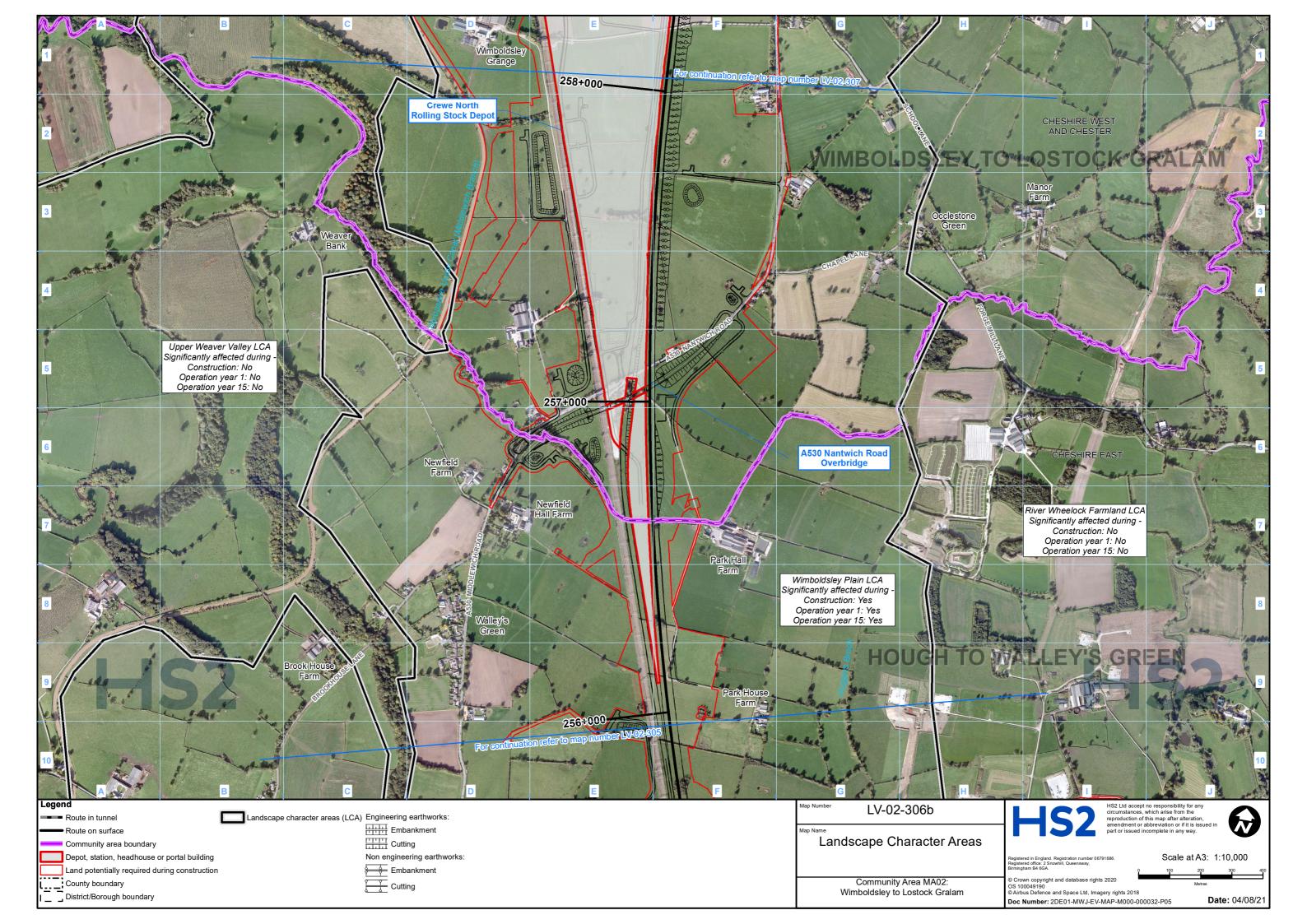
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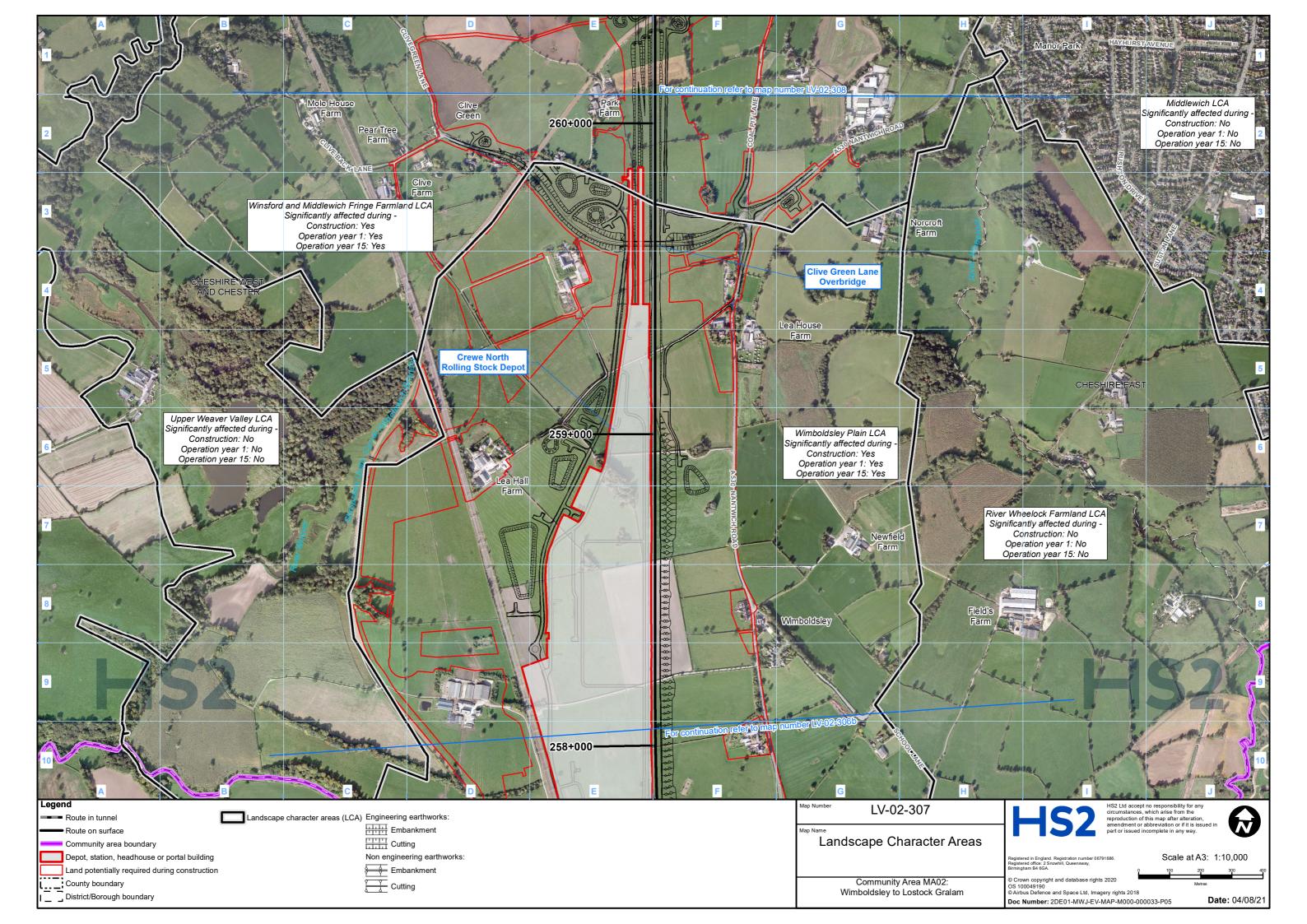
LV-02 - Landscape Character Areas

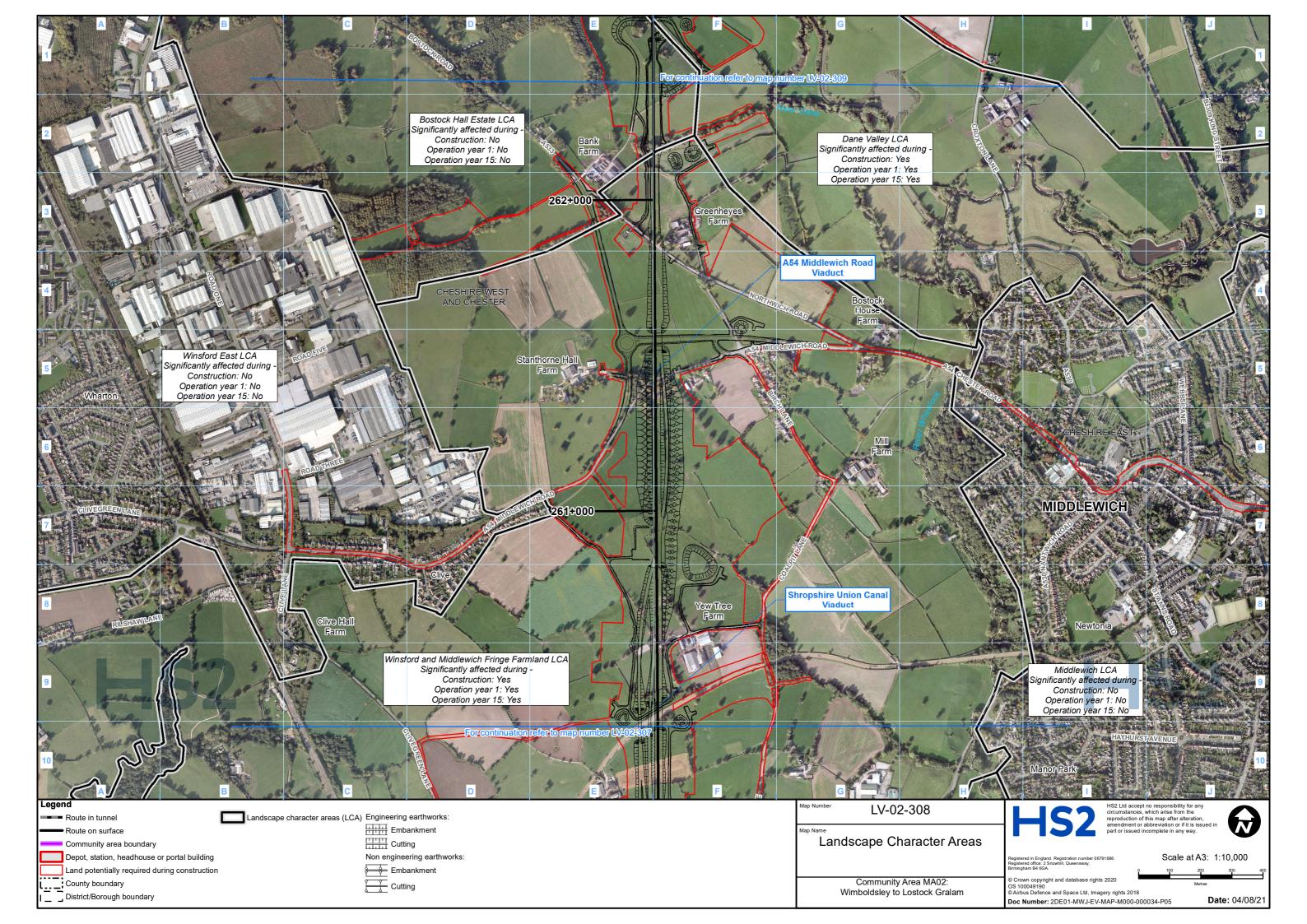


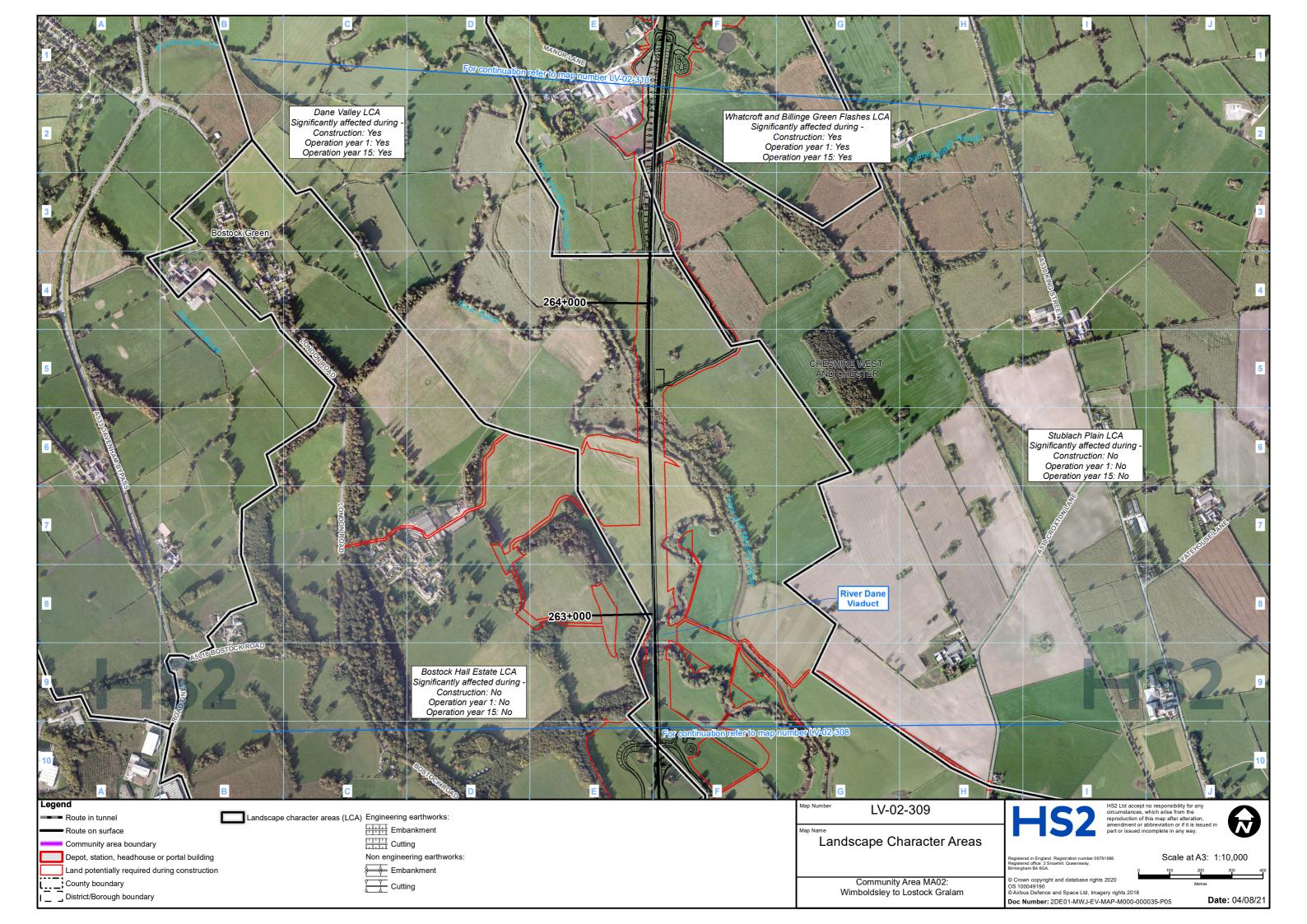


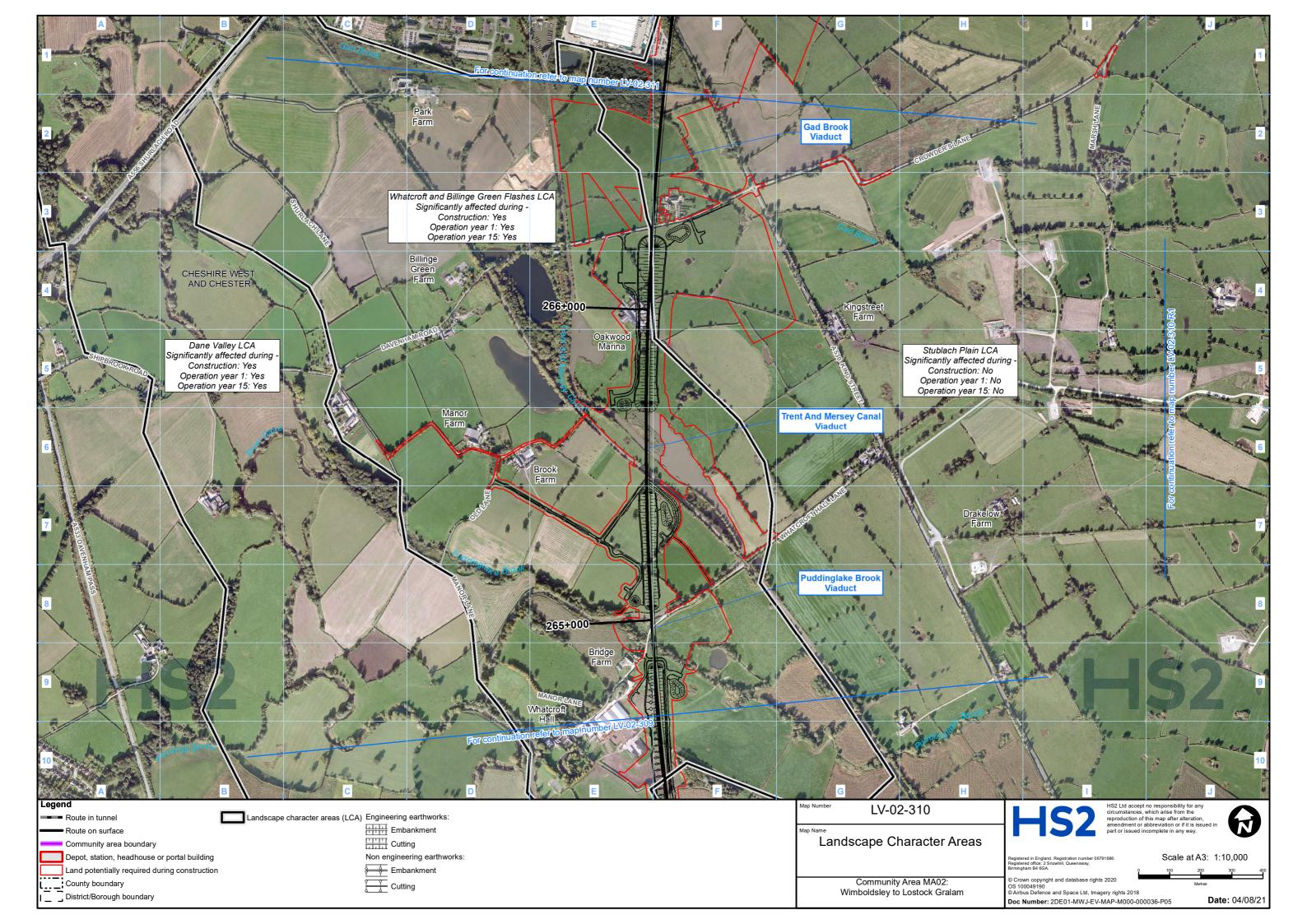
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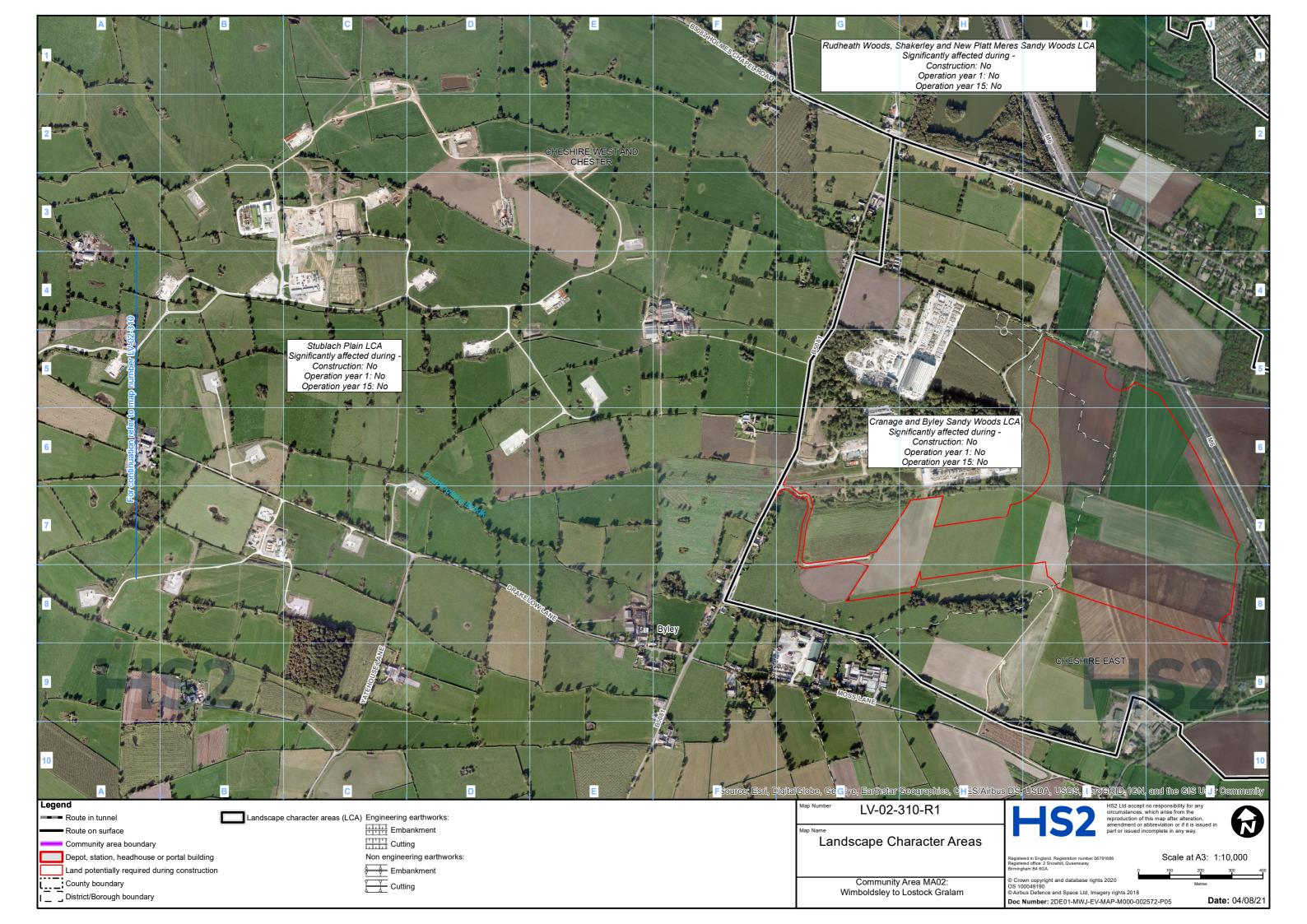


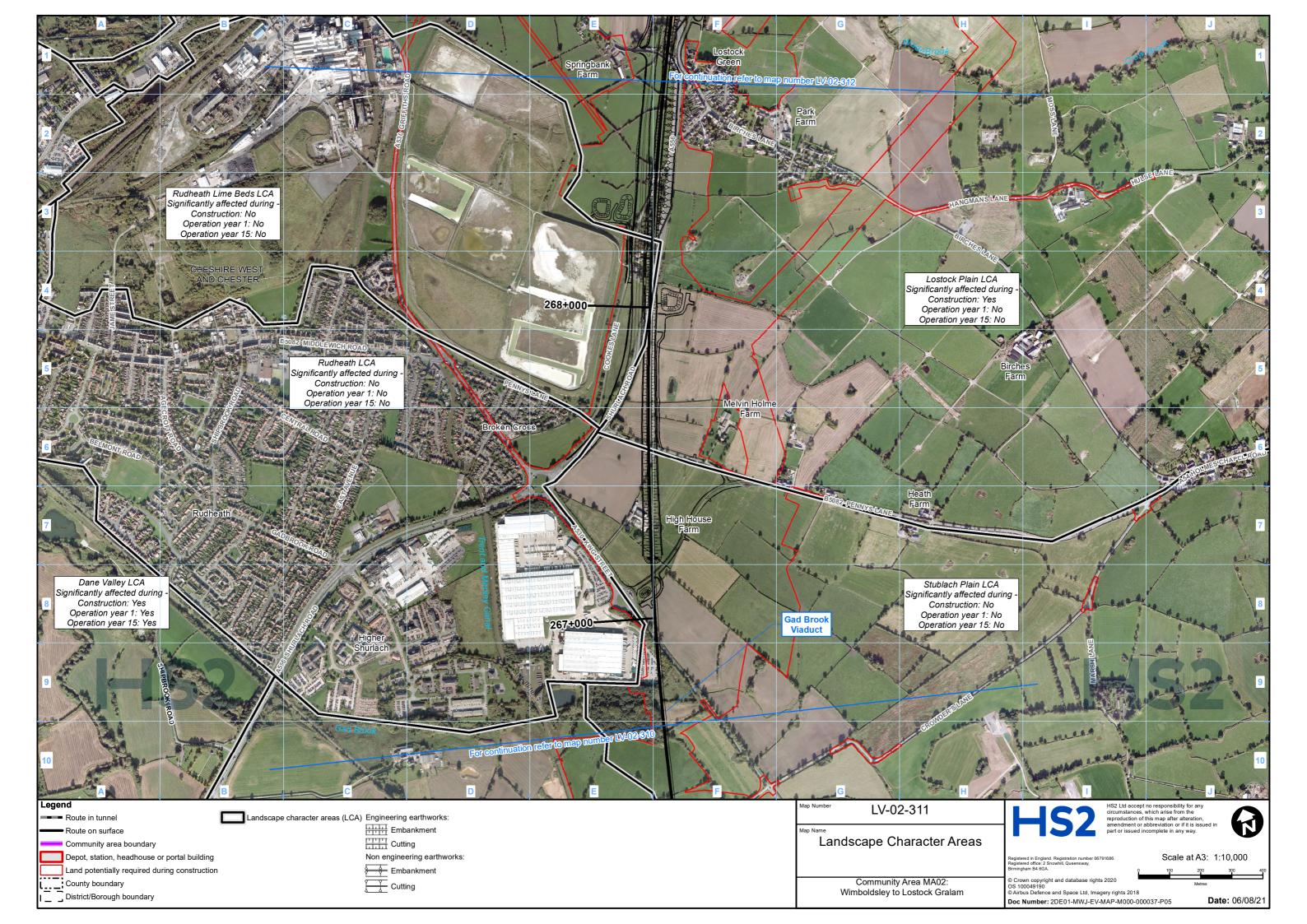


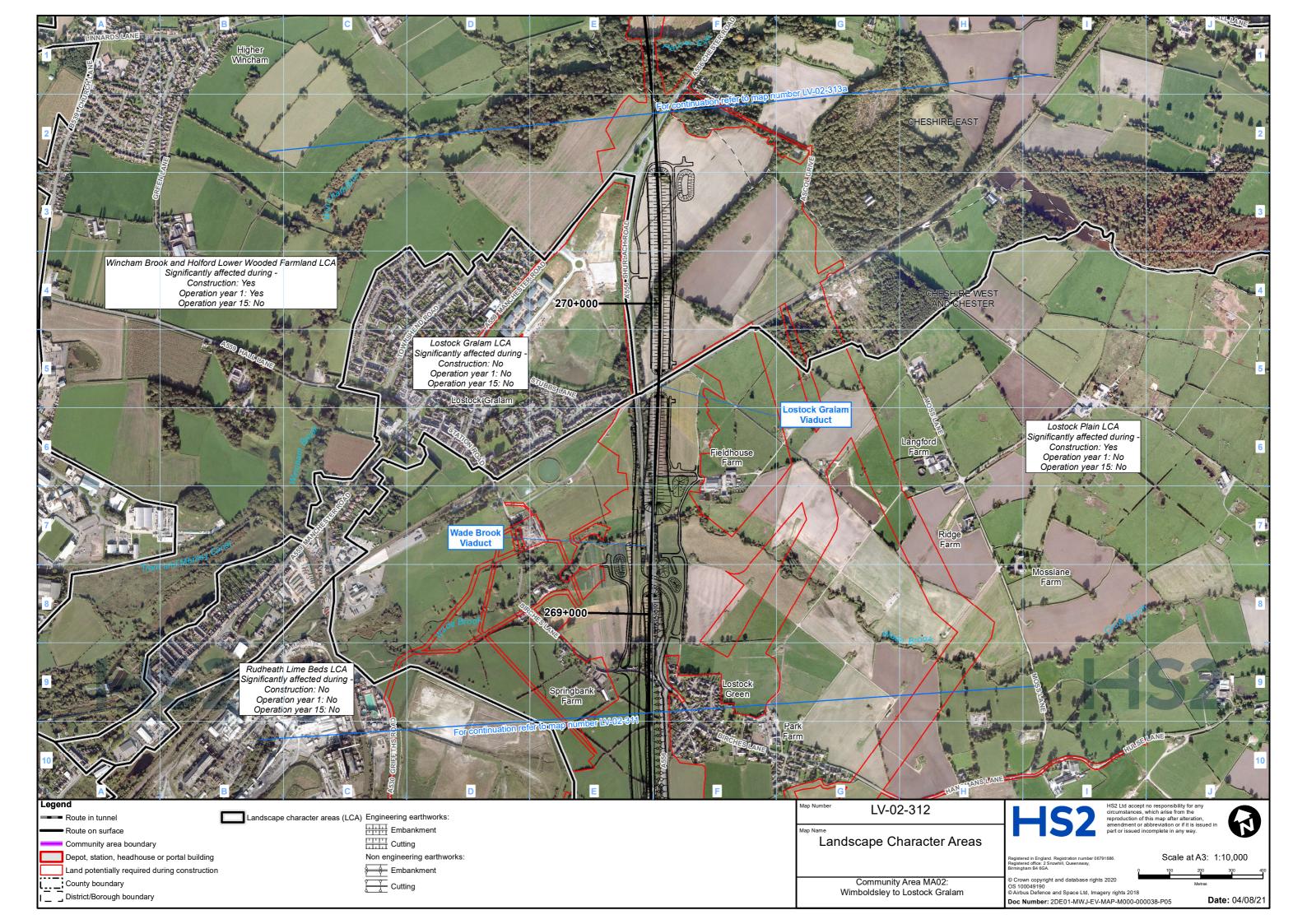


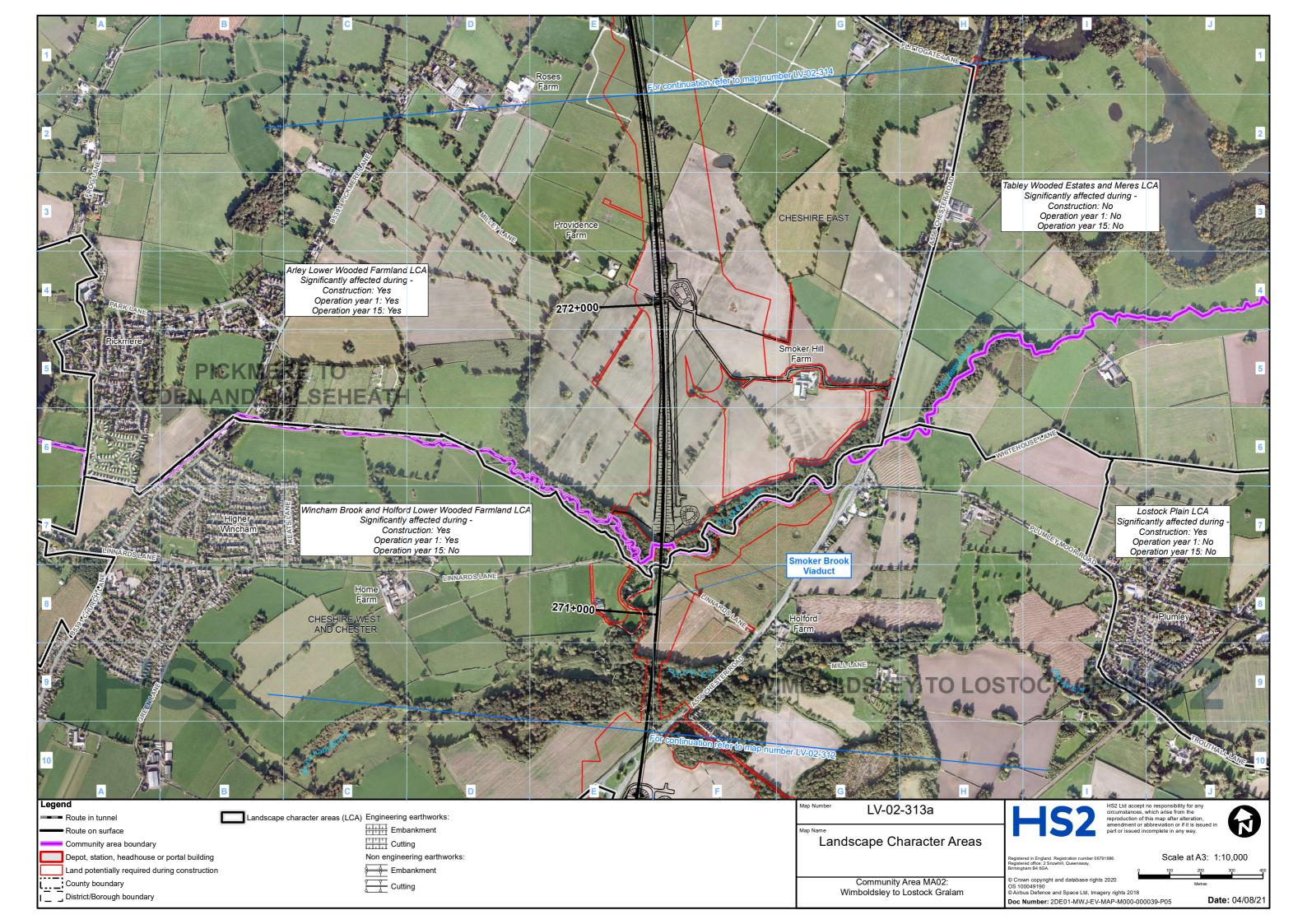










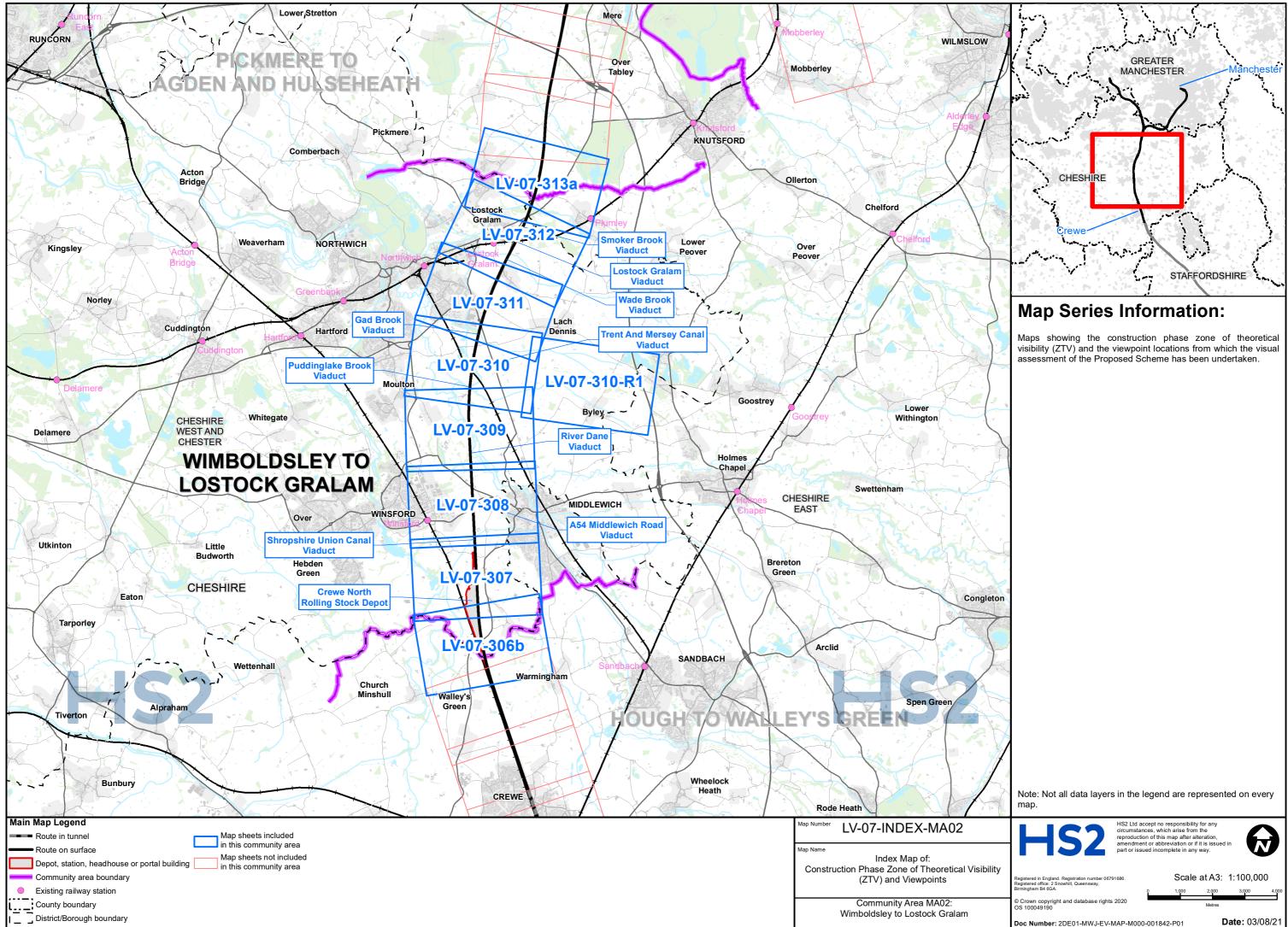


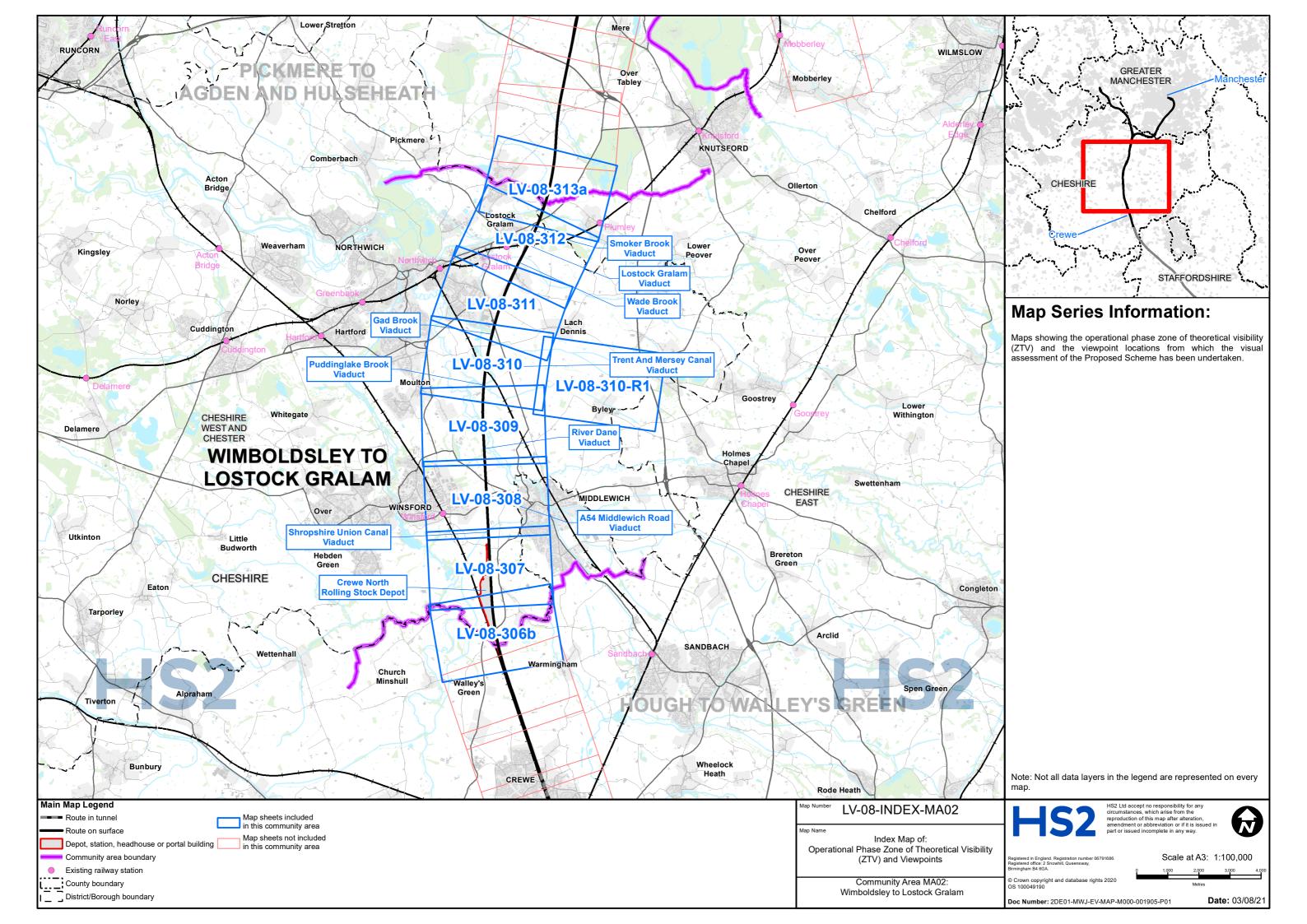
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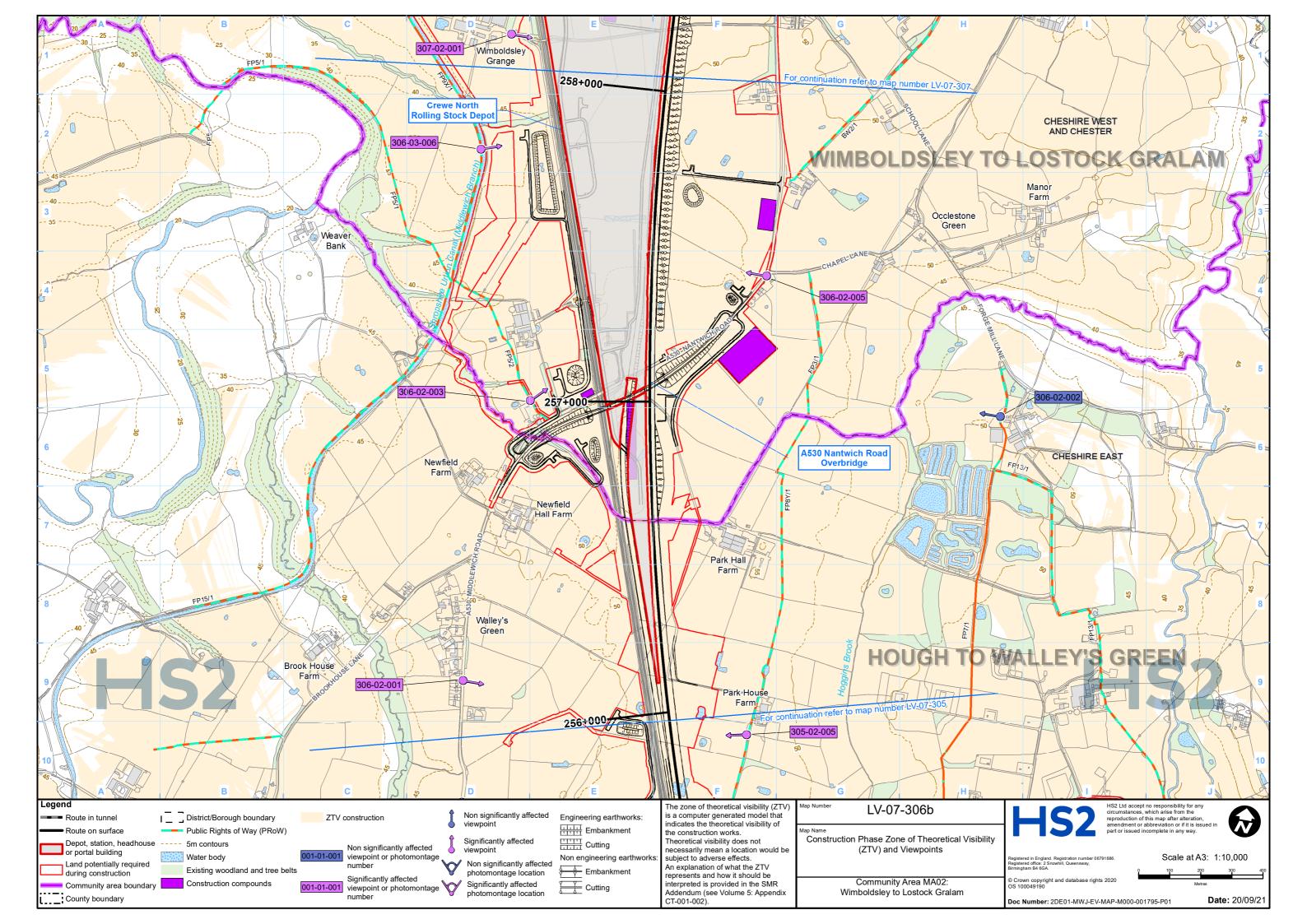
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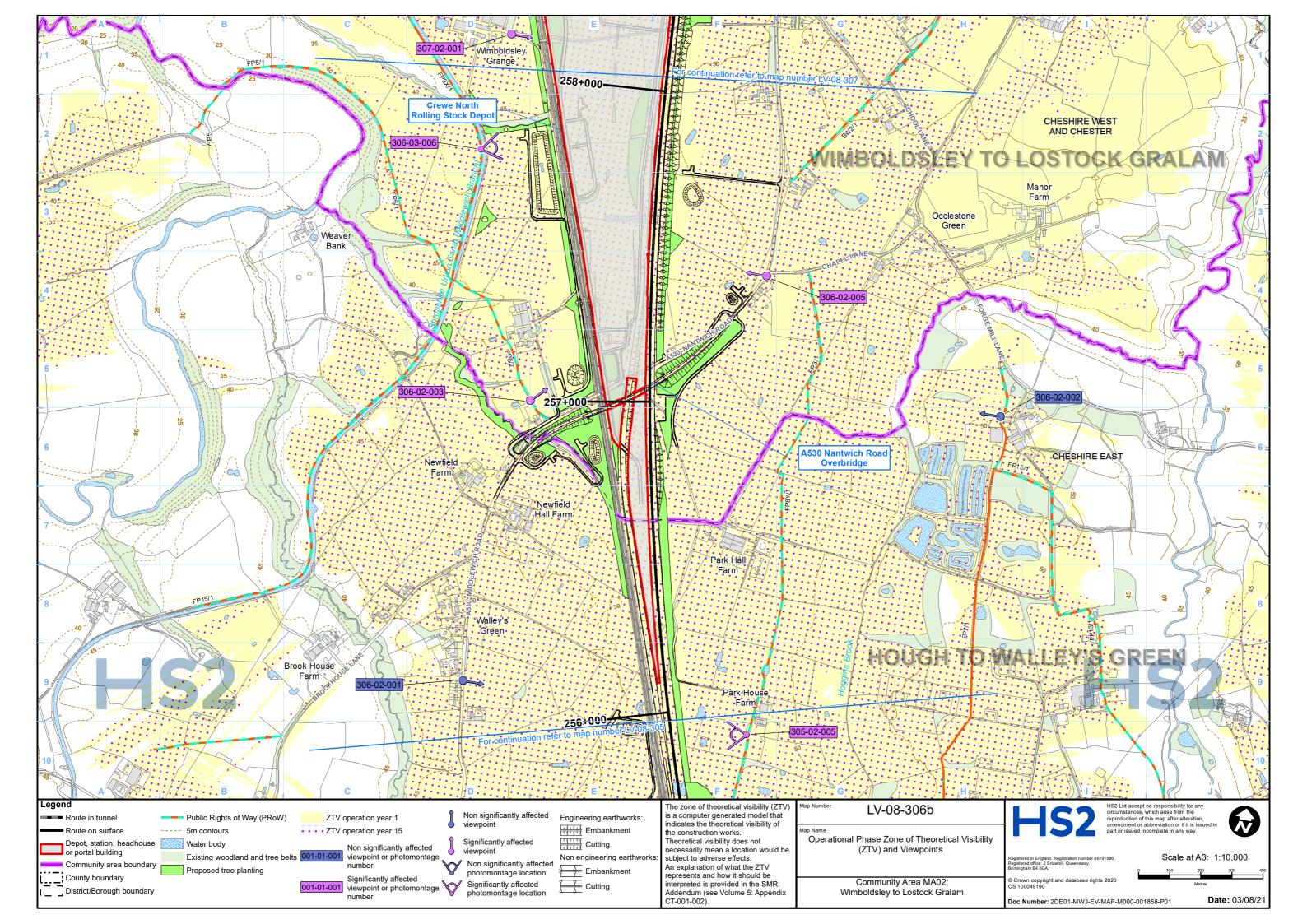
LV-07 - Construction Phase Zone of Theoretical Visibility (ZTV) and Viewpoints LV-08 - Operational Phase Zone of Theoretical Visibility (ZTV) and Viewpoints

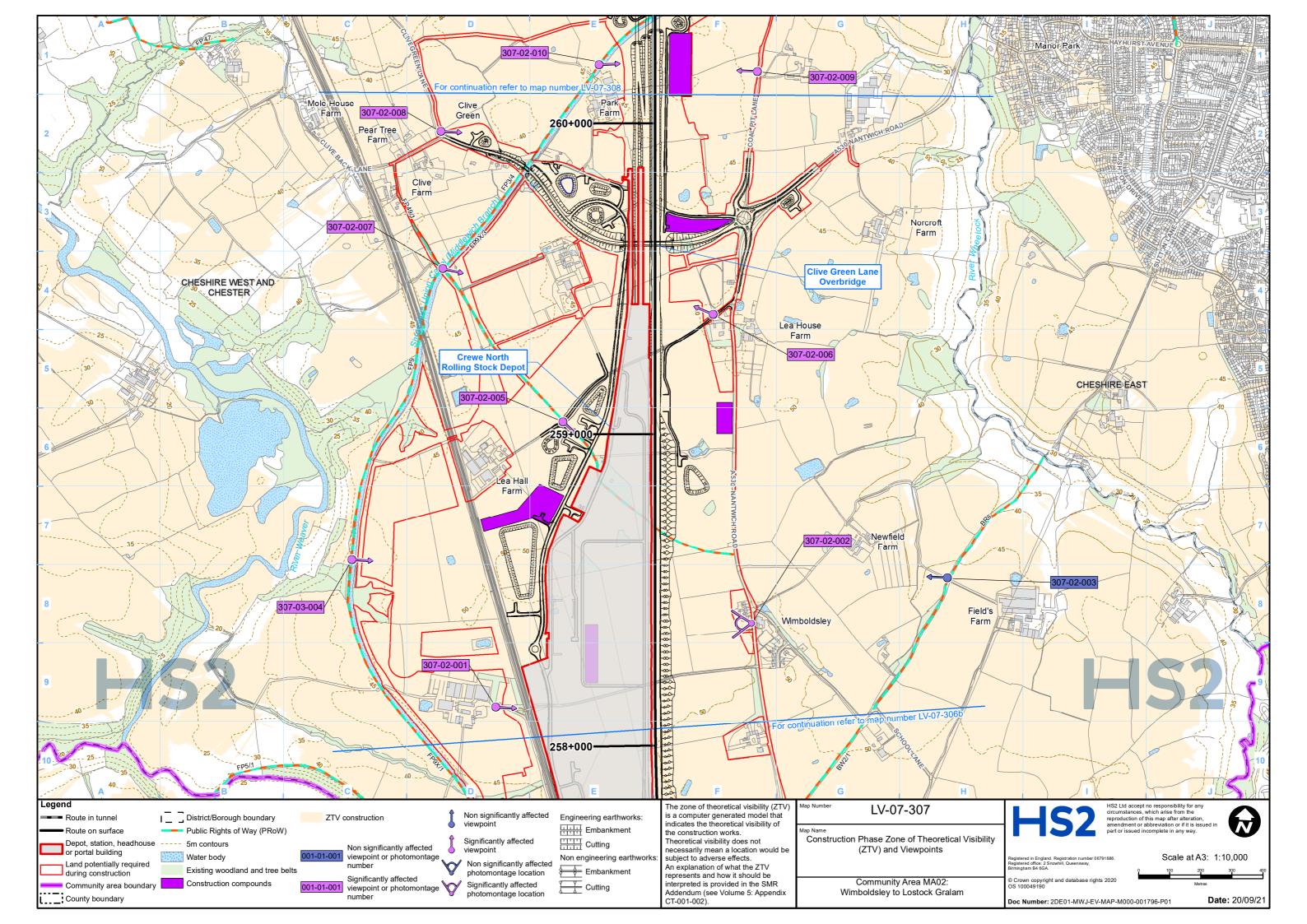


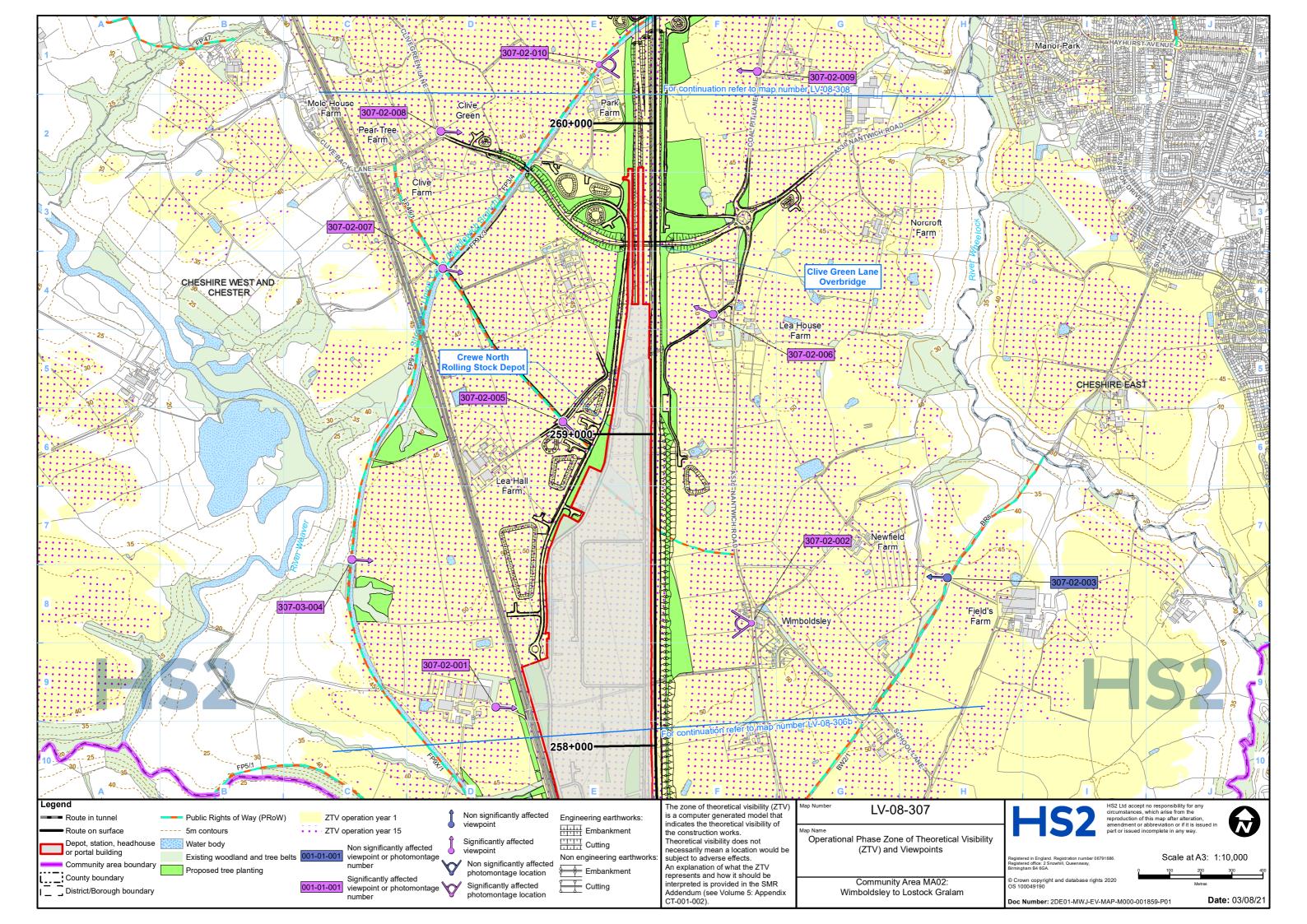


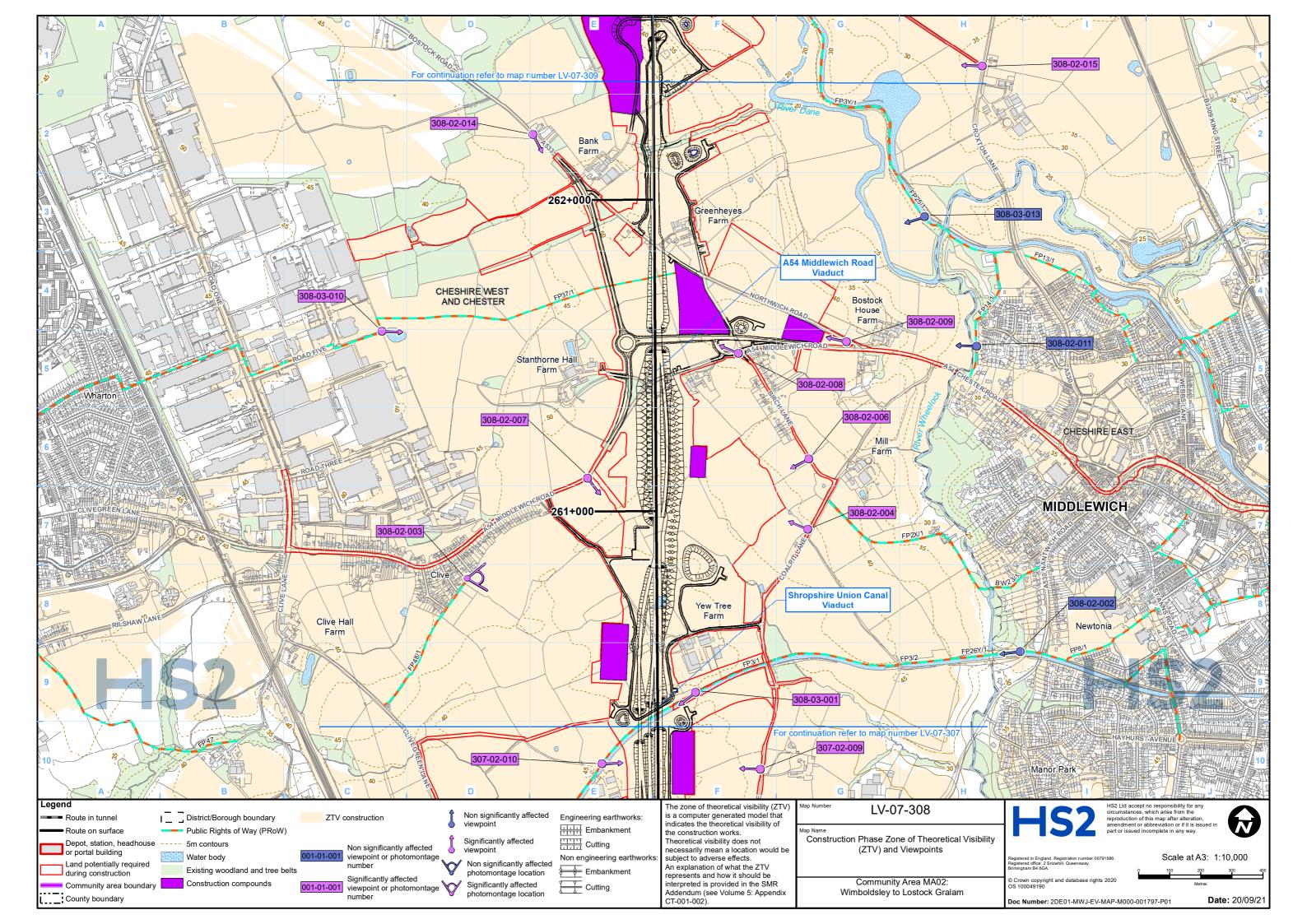


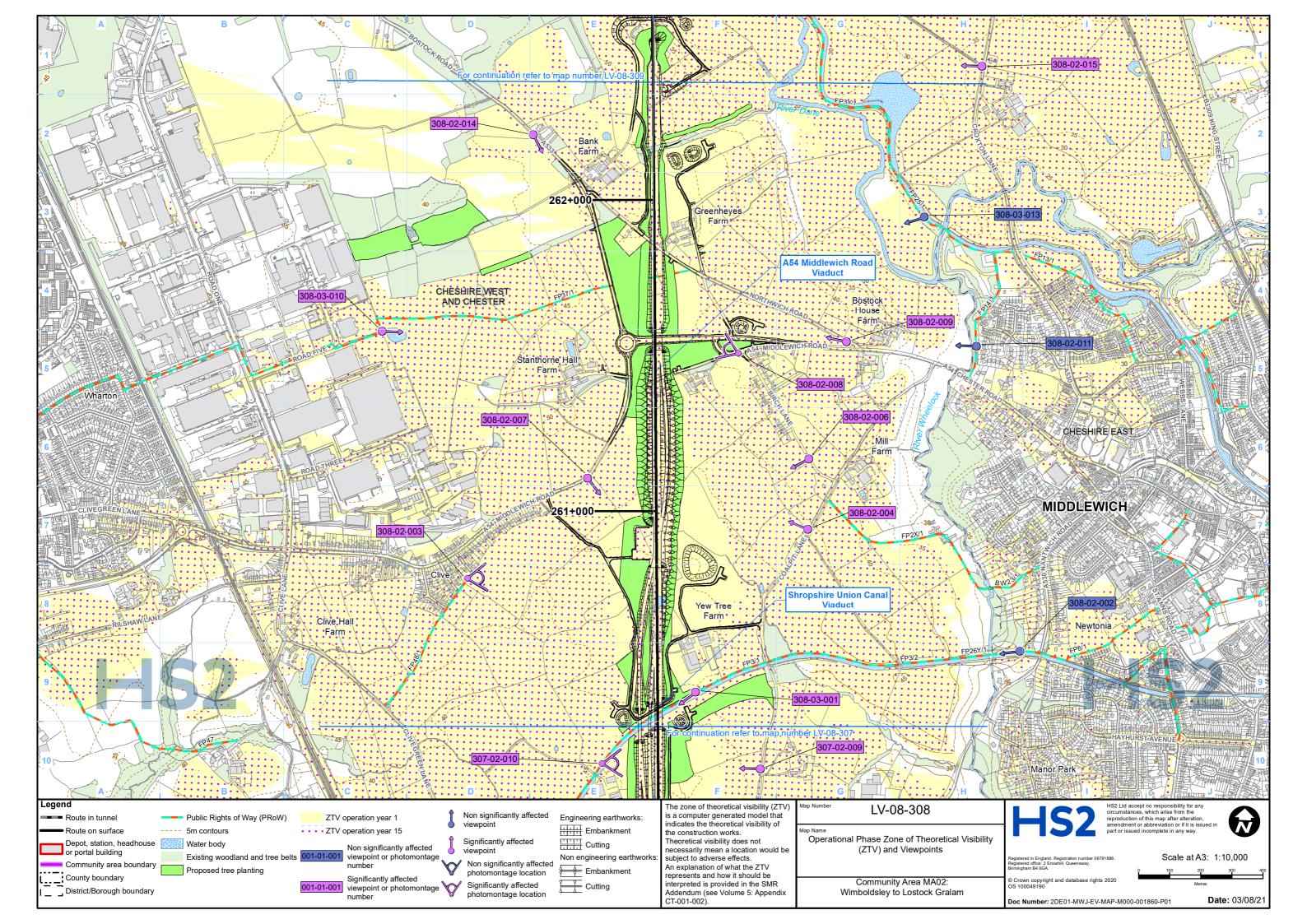


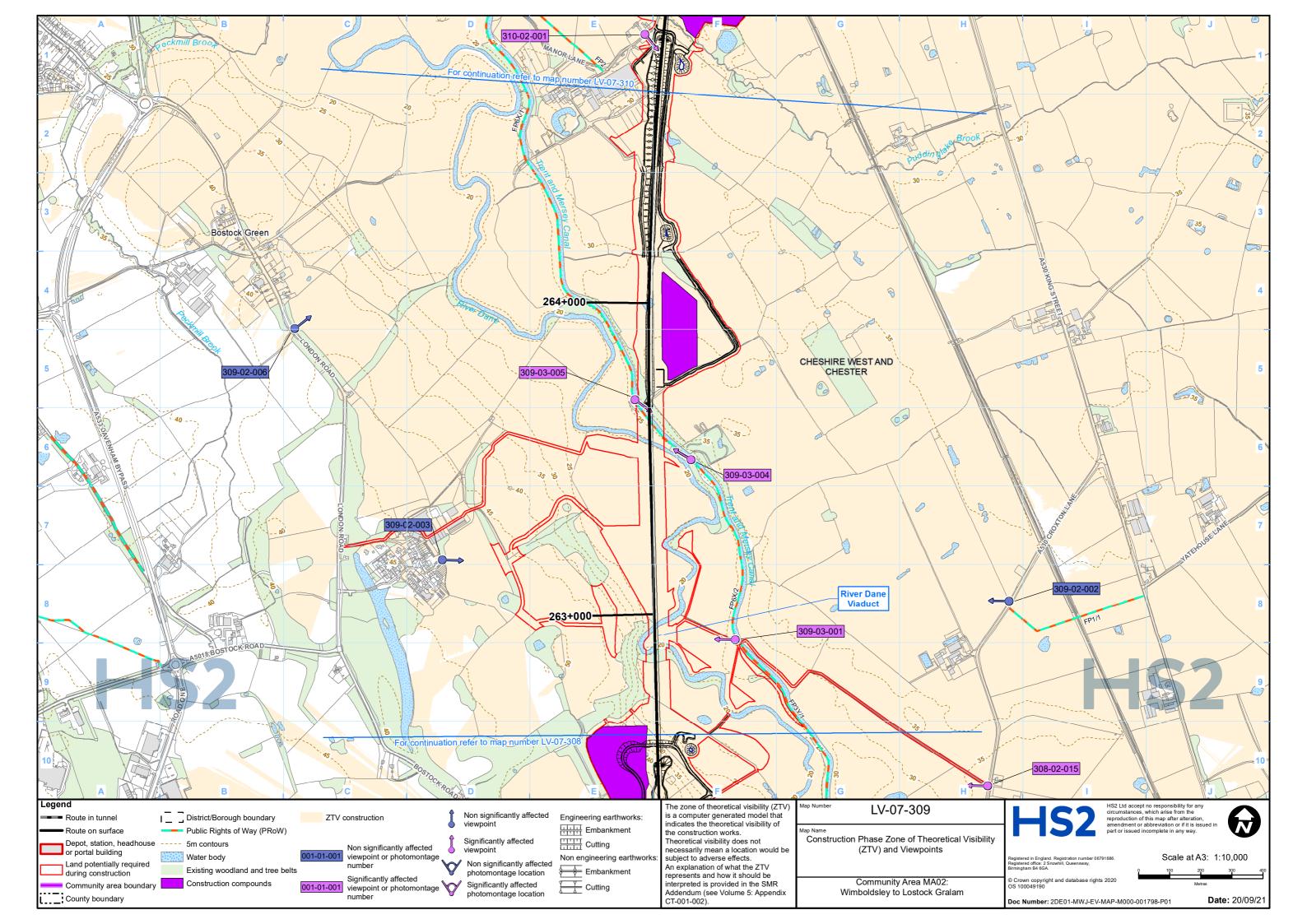


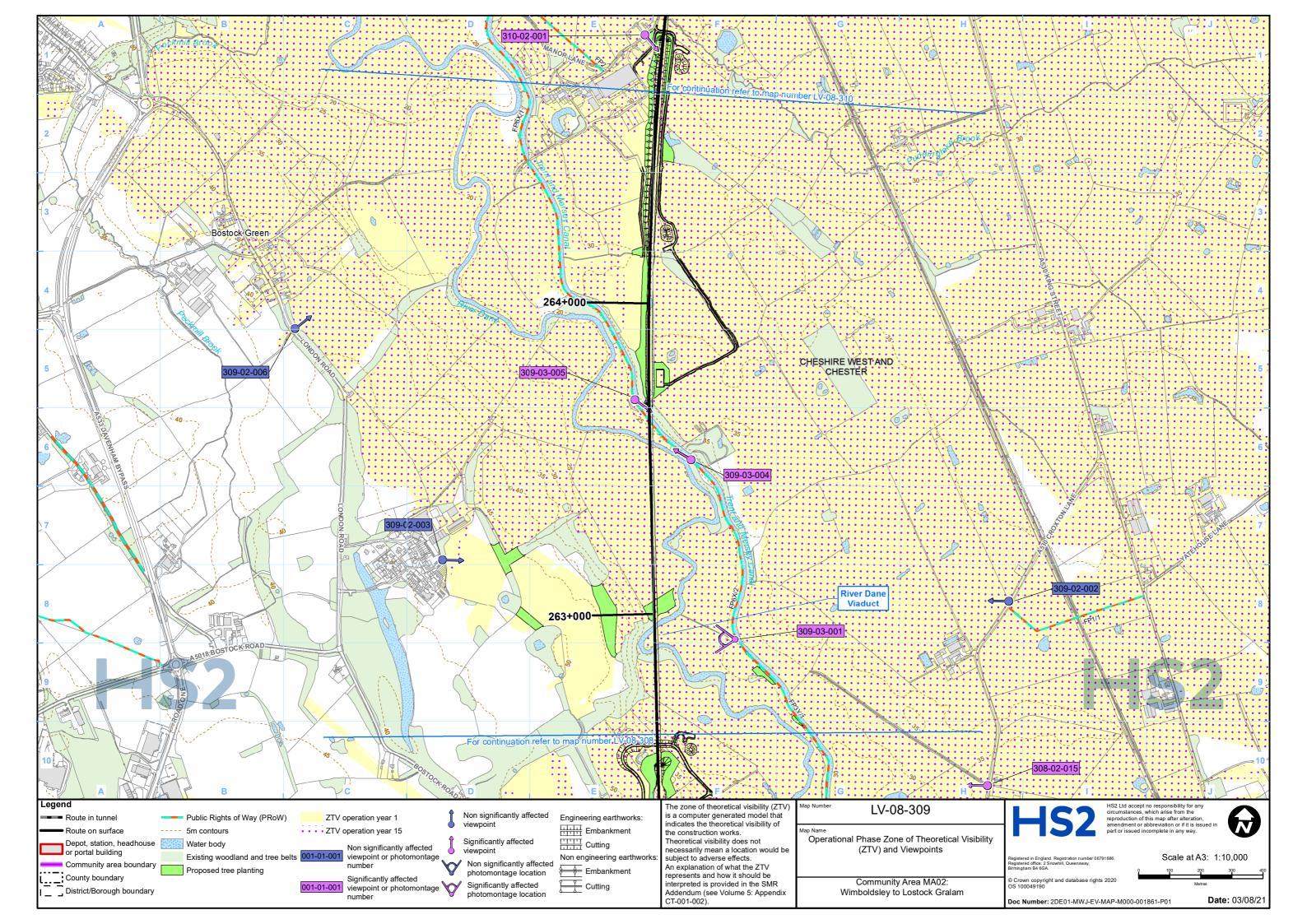


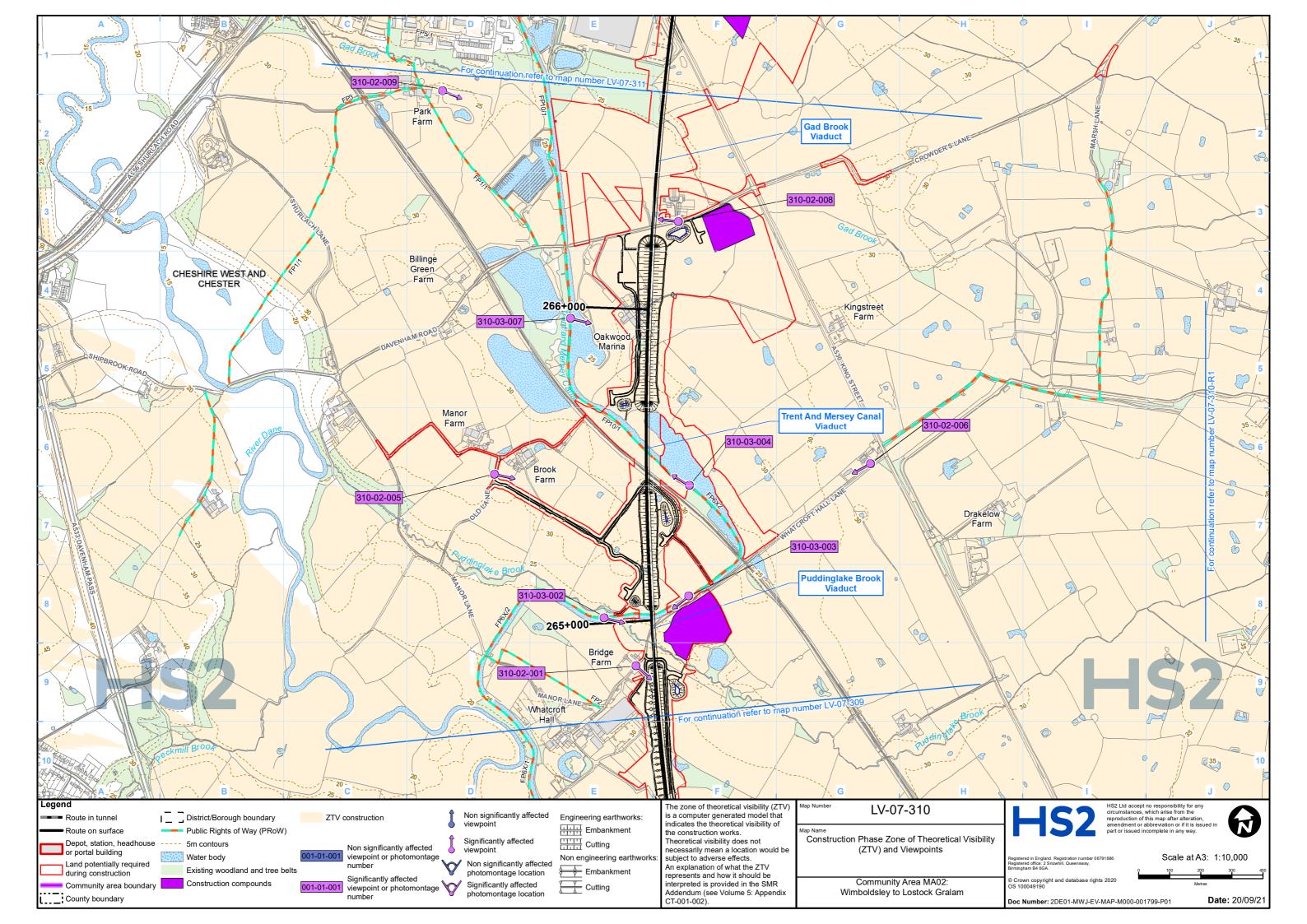


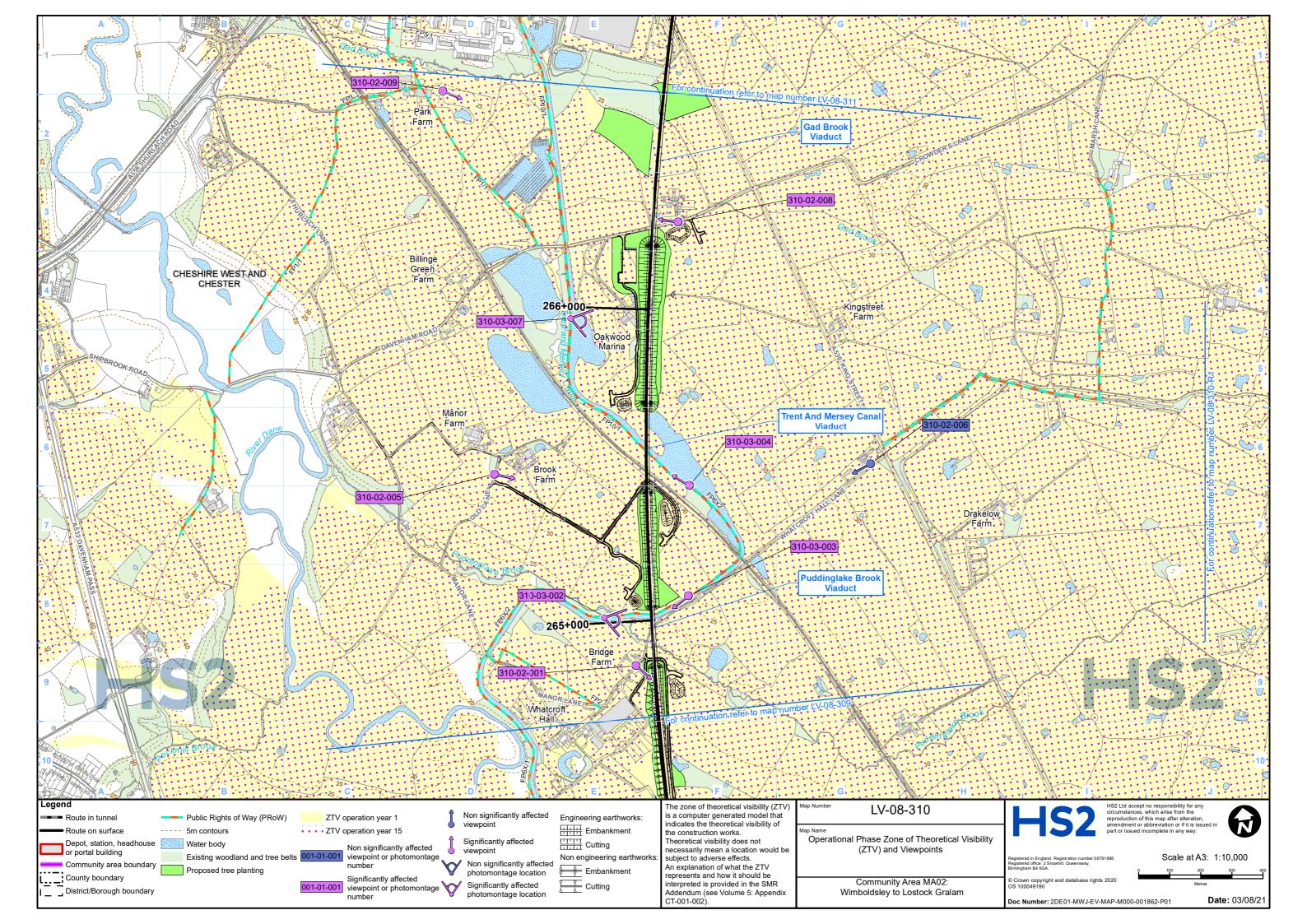


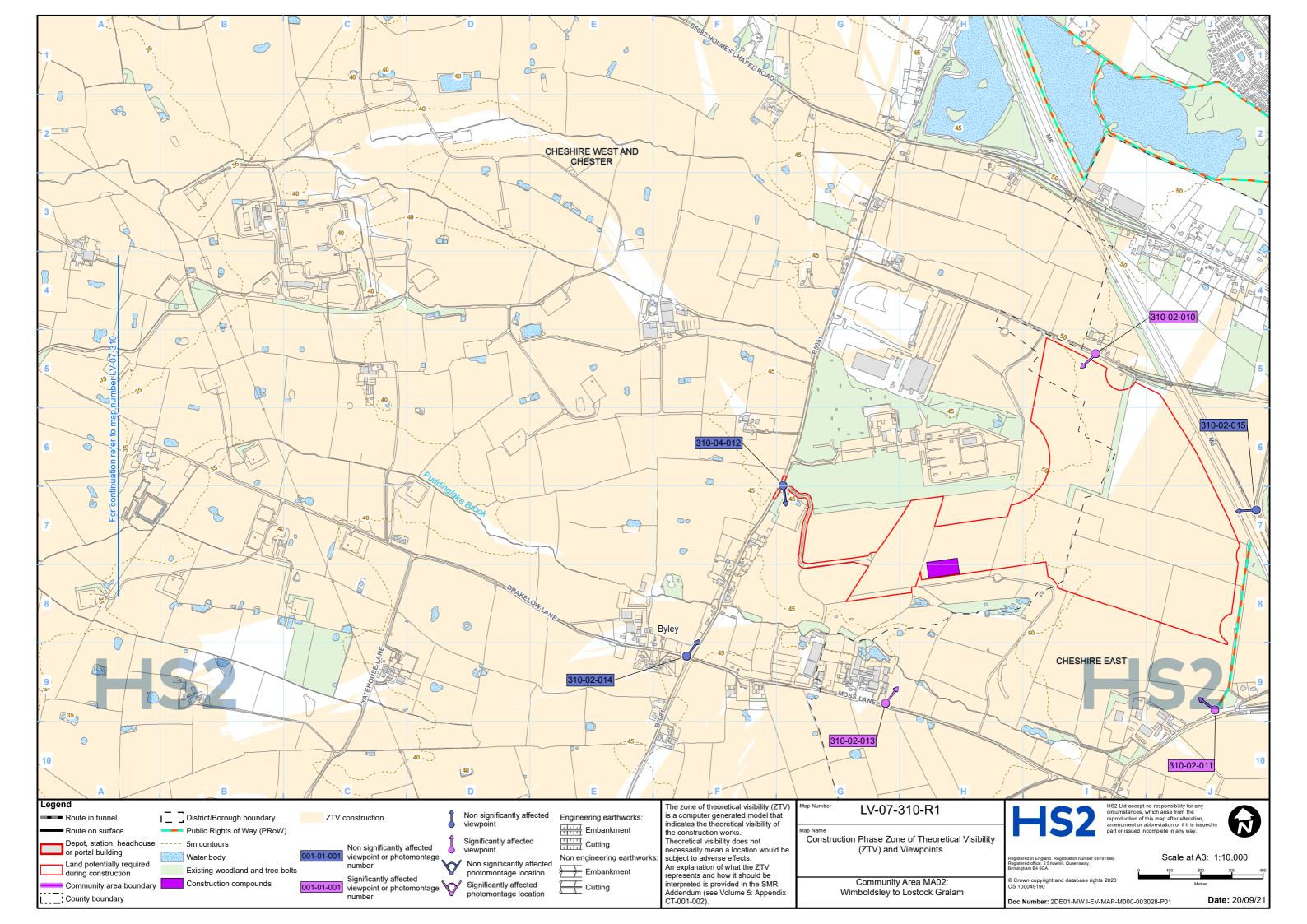


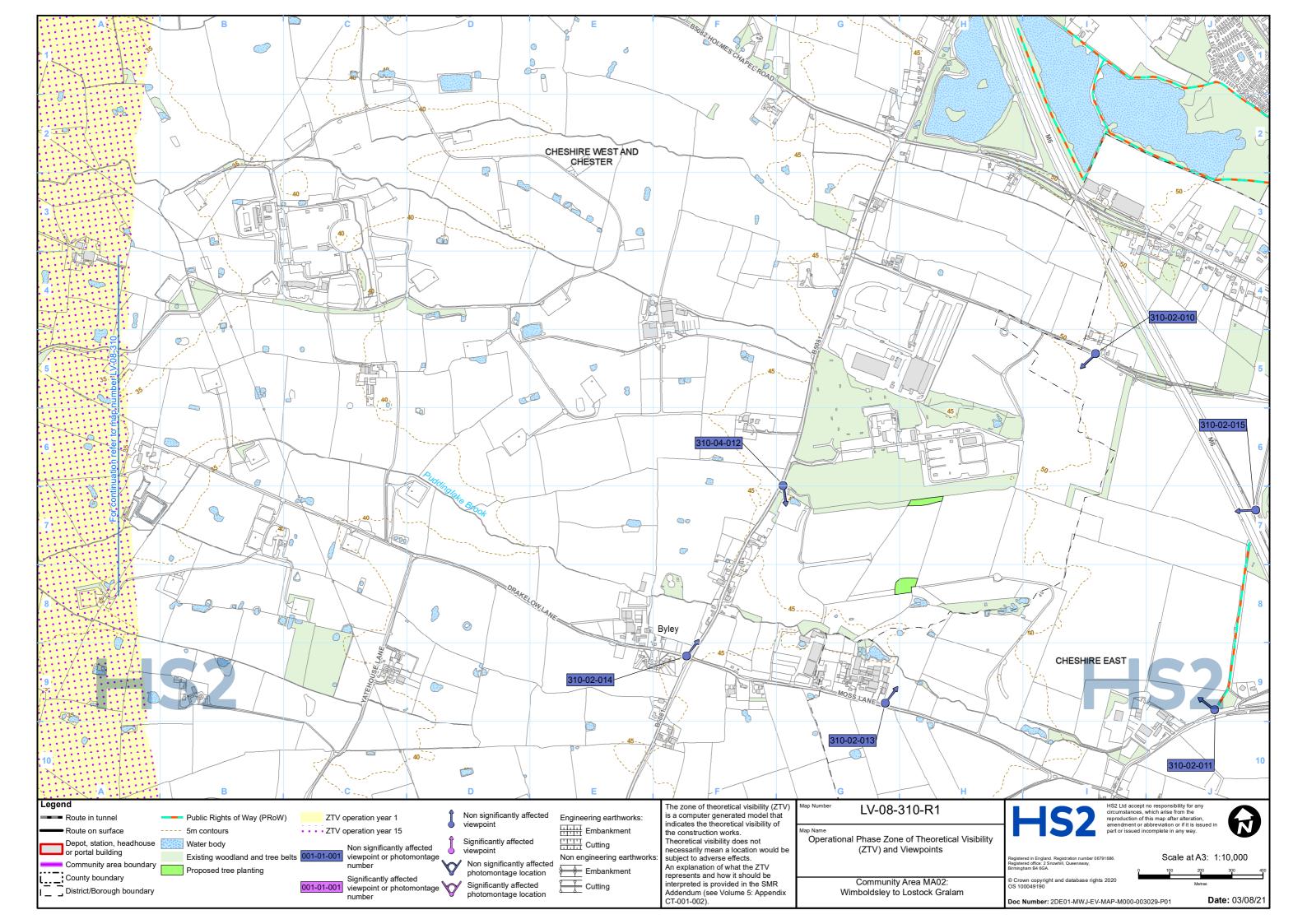


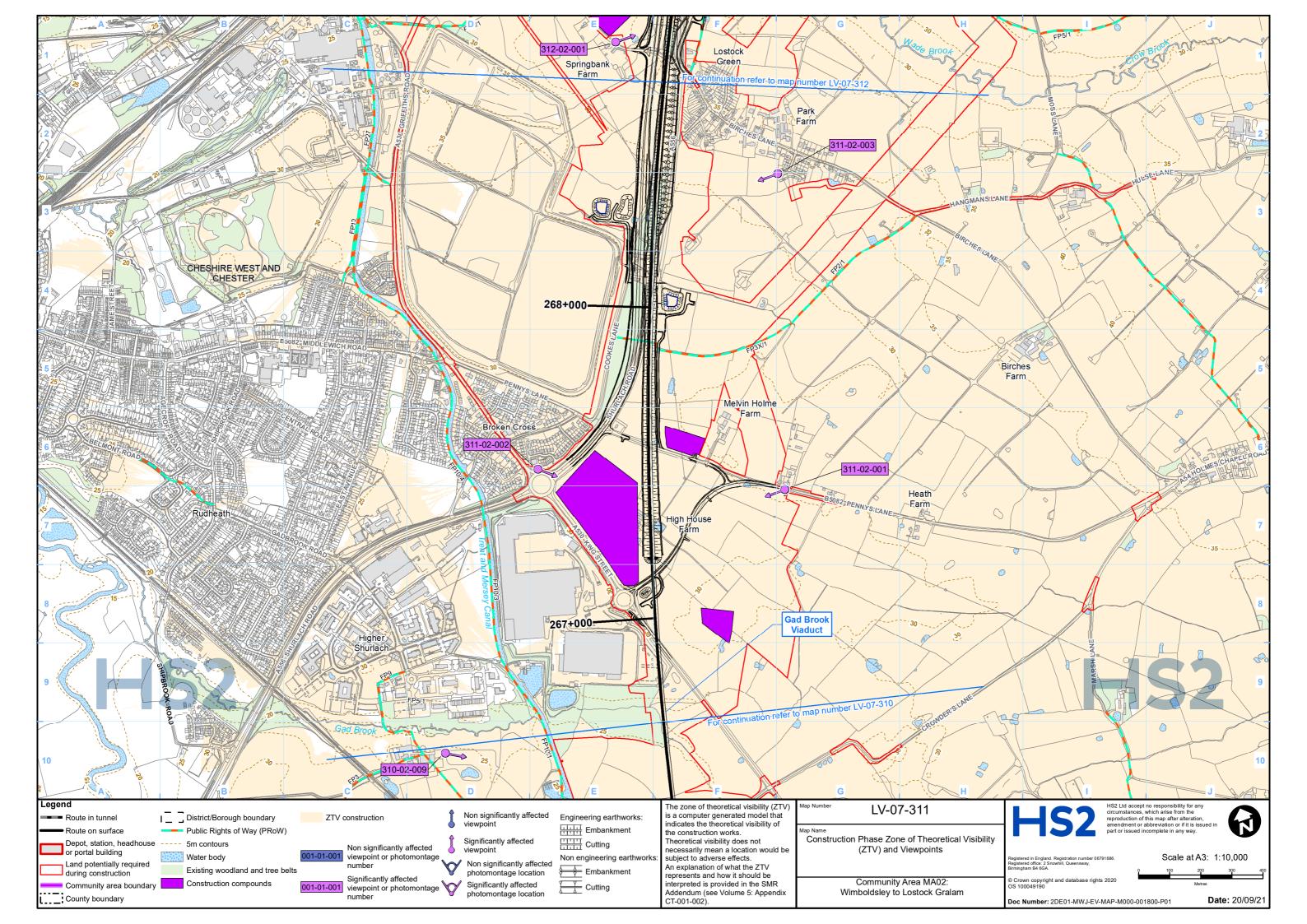


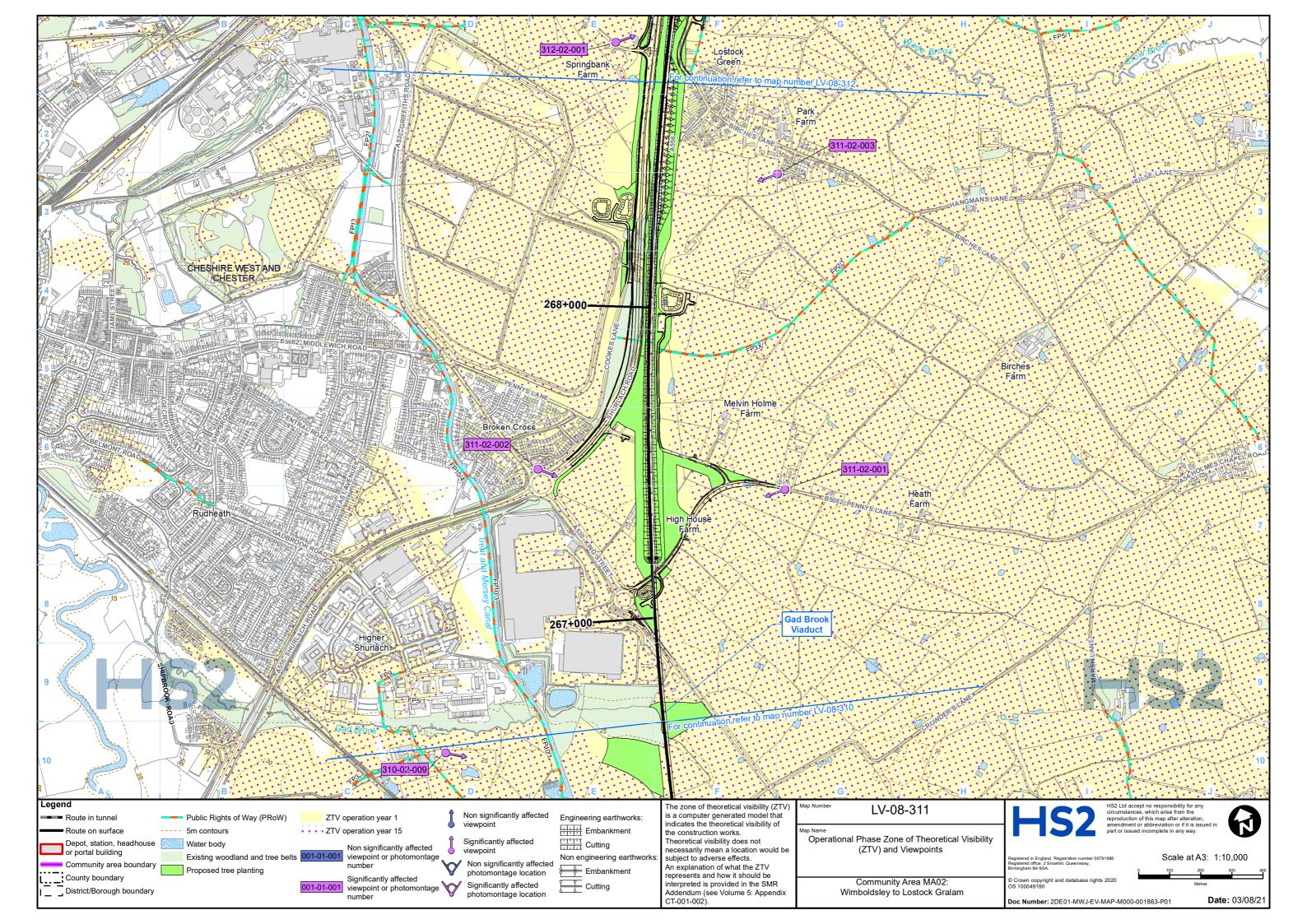


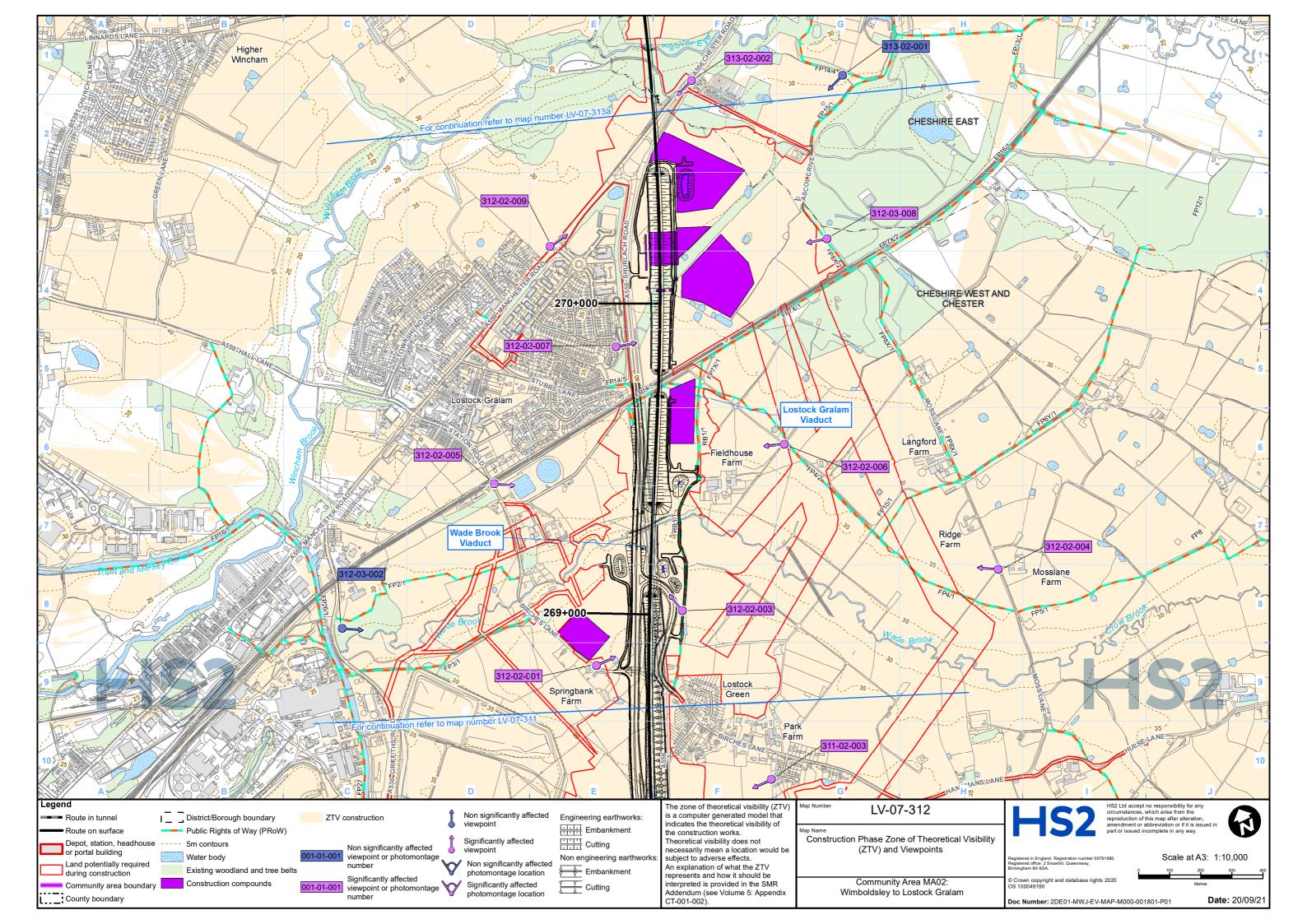


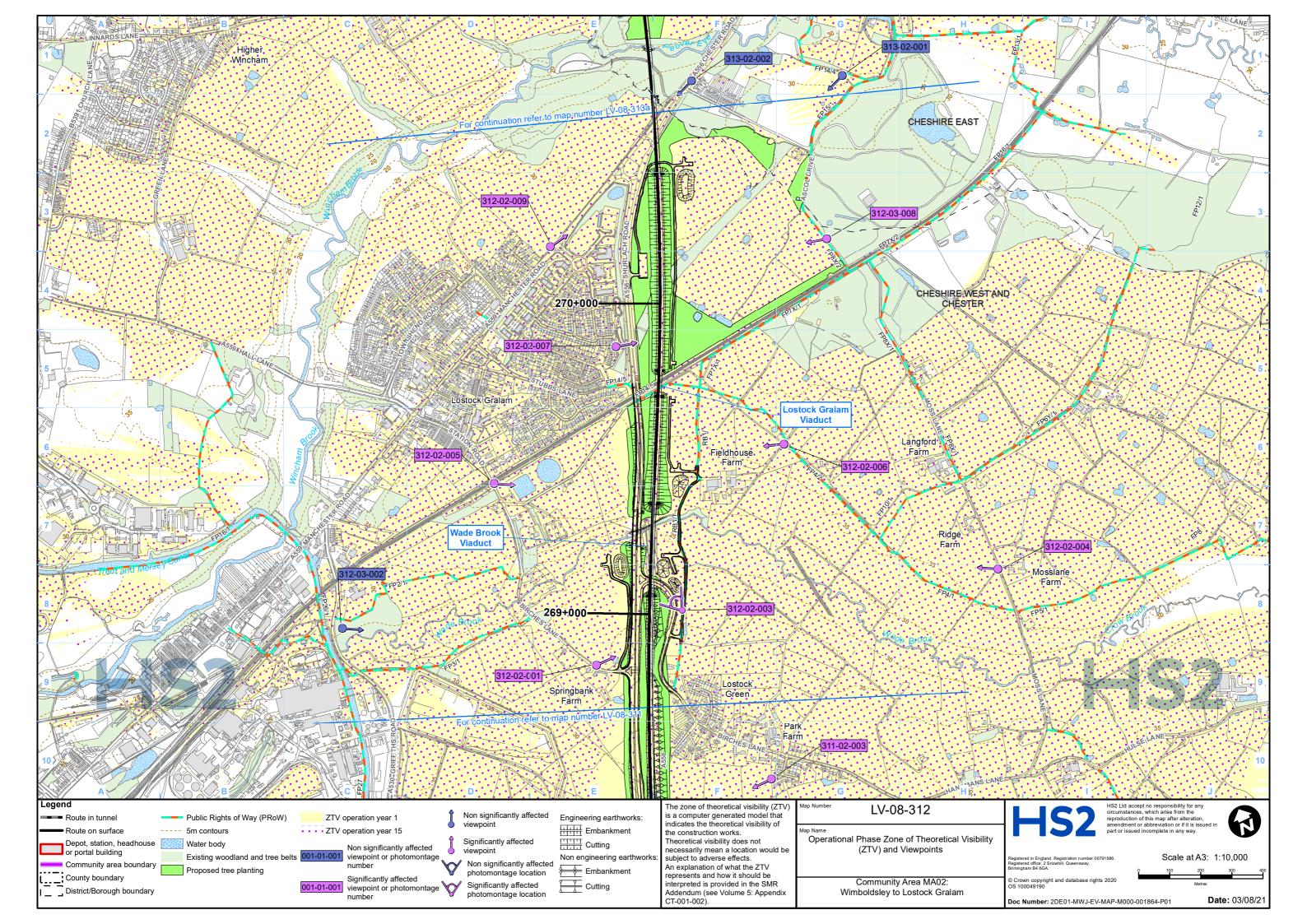


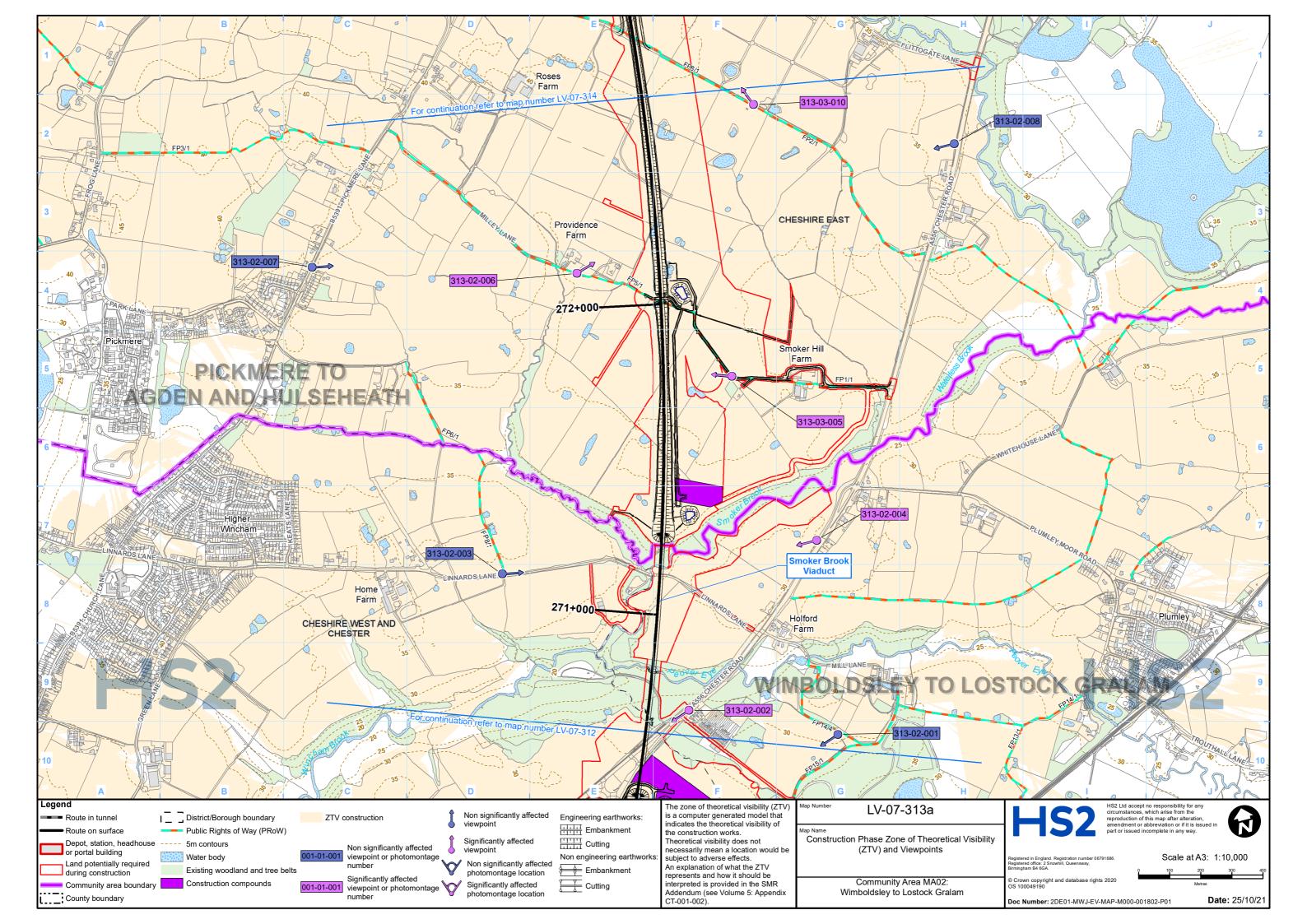


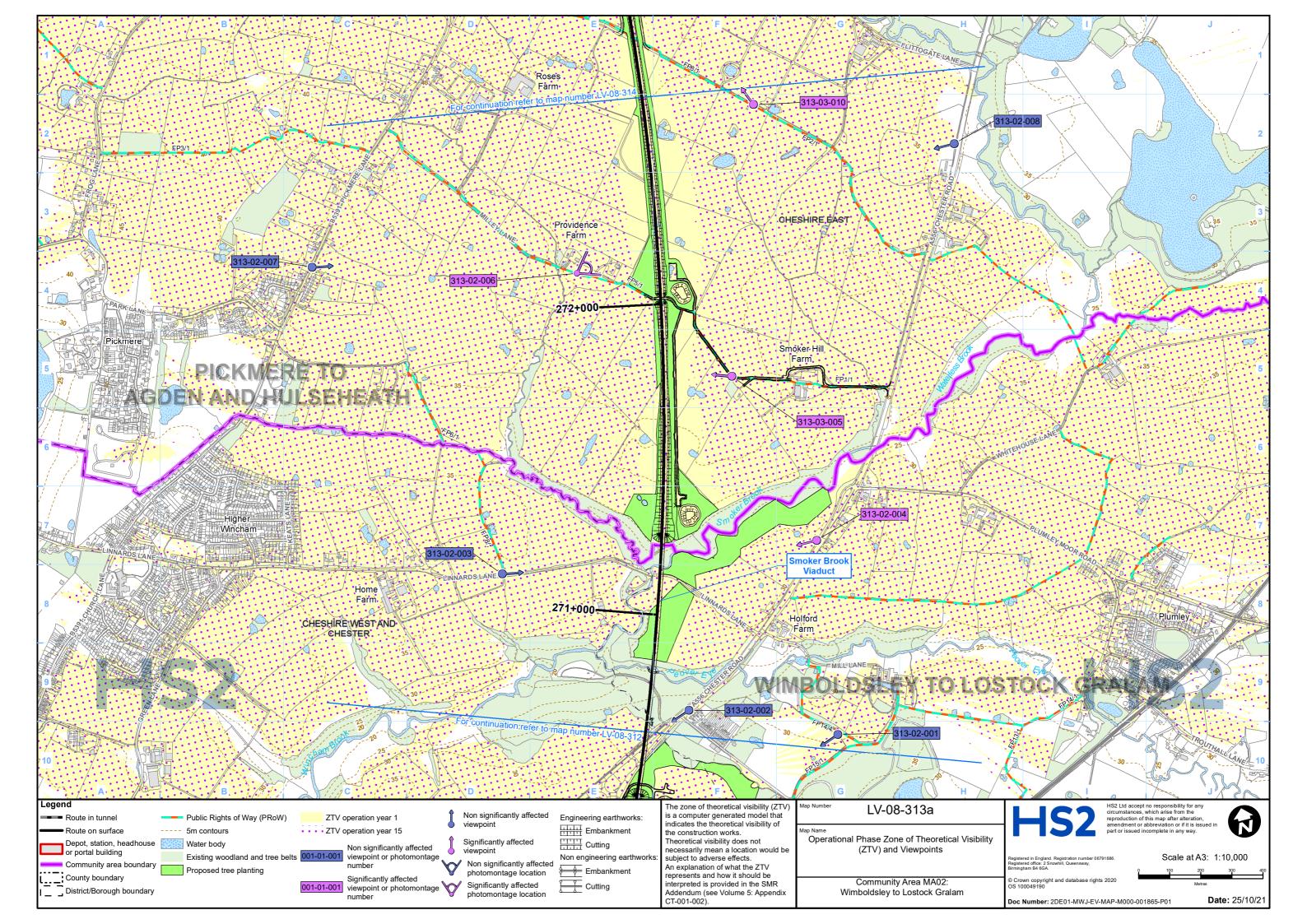












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## HS2

## High Speed Rail (Crewe – Manchester) Environmental Statement

LV-17 - Routewide Landscape Context



