

## **1EW03 – Enabling Works Central**

# **AWHe Fieldwork Report for Trial Trench Evaluation at Upper Bottom House Farm, Chalfont St. Giles, Buckinghamshire (AC100/9) Site Code: 1C18BOTTT**

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# 1 Executive Summary

- 1.1.1 An archaeological trial trench evaluation was undertaken on land designated as Upper Bottom House Farm Lane, north of Chalfont St Giles, Buckinghamshire (henceforth the Site). The Site code allocated for these works was 1C18BOTTT.
- 1.1.2 The Site is adjacent to Upper Bottom House Lane located between the Colne Valley to the south and the Chilterns to the north. The Site extends south-westwards from the A413 Amersham Road from an access point opposite Harewood Downe House. (NGR SU 97524 94751; Figure 1).
- 1.1.3 The Site comprised several pastoral fields and one arable field, encompassing approximately 13 ha (Site GIS ID No: C10007).
- 1.1.4 The evaluation was targeted on the Site of the Chalfont St Giles Vent Shaft, widening of access, provision of a temporary compound and spoil storage areas and other works as outlined in the Project Plan (Document Ref: 1EW03-FUS-EV-REP-CS02\_CL04-001608).
- 1.1.5 The area in the vicinity of Site has produced little evidence of prehistoric occupation. A possible Roman villa site has been identified at Misbourne Farm (CHA030), 700m south-east of the Site. Several farmsteads of probable medieval origin are recorded surrounding the Site, including Lower Bottom House Farm (CHA031) to the north, and Bottom House Farm Lane is believed to follow the alignment of a medieval holloway. Geophysical investigation of the vent shaft site, LiDAR, multispectral imagery, and aerial photography in conjunction with historical mapping have indicated a few anomalies which have low archaeological potential.
- 1.1.6 A trial trench evaluation comprising 48 trenches across the Site was targeted on geophysical, cropmark and LiDAR imagery and blank areas, was designed to investigate areas of Construction impact. The evaluation was carried out in three phases, in December 2018, June 2019 and December 2019. Of the 48 trenches excavated, three revealed archaeological features, including two ditches and a large quarry pit. Two further trenches revealed palaeochannels to the south of the current River Misbourne.
- 1.1.7 The Site appeared to have been utilised during the post-medieval period for quarrying chalk for possible building material, although not on a large scale, with the landscape seeing very little change: two probable field boundaries were recorded, one of which aligned approximately with an orchard boundary belonging to Harewood Downe House located to the north-east of the Site.

# 2 Project Background and Scheme Design

- 2.1.1 High Speed Two (HS2) is a new railway network proposed by Government to provide a link between London, the West Midlands, the East Midlands, South Yorkshire, Leeds and Manchester. Phase One of HS2 will involve the construction of a new railway

approximately 230km (143 miles) in length between London and the West Midlands. Powers for the construction, operation, and maintenance of Phase One are conferred by the High-Speed Rail (London - West Midlands) Act 2017.

2.1.2 The overall framework within which archaeological work will be undertaken is set out in the Environmental Minimum Requirements (EMR), the Heritage Memorandum, the Code of Construction Practice (CoCP) for HS2 Phase One and the GWSI: HERDS. Accordingly, the nominated undertaker or the Archaeological Contractor are required to implement appropriate and reasonable measures to identify, avoid or where practicable reduce impacts to the significance of heritage assets prior to the start of construction.

2.1.3 The Site is required for the construction of the Chalfont St Giles Vent Shaft, temporary compound, spoil storage areas and associated works. This will be used as the base to manage works on construction of the ventilation shaft.

## 3 Site Location

3.1.1 The Site lies north-west of the town of Chalfont St Giles, south-west of the A413 London Road, along the north-eastern end of Bottom House Lane, Buckinghamshire (NGR SU 97524 94751; Figure 1).

3.1.2 The Site comprised a single land parcel (Site GIS ID No: C10007), which extends across several uncultivated fields and a large open field at the south-west end, covering a total area of c.13 ha.

## 4 Site Geology and Topography

### Geology

4.1.1 The British Geological Survey (BGS) indicates that the bedrock mostly comprises Lewes Nodular Chalk Formation sedimentary bedrock formed approximately 86 to 94 million years ago during the Cretaceous Period in an environment dominated by warm chalk seas. In areas toward the west and north of Site the predominant geology gives way to Seaford Chalk Formation and Newhaven Chalk Formation (undifferentiated), a sedimentary bedrock formed approximately 71 to 89 million years ago in the Cretaceous Period. No superficial deposits are recorded overlying the chalk<sup>1</sup>, which is covered by shallow, freely draining lime-rich soils. The Misbourne valley located at the north-east end of Site had superficial deposits formed by alluvium and colluvium, with Glacial head also recorded within the valley floor and Clay-with-Flints recorded towards the east<sup>2</sup>.

### Topography

4.1.2 The main compound located at the western end of the Site is dominated by a distinct dip in the landscape which runs approximately north to south, the land rising to the east and west of this. The surface elevation along this dip rises from c.95m aOD at the

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<sup>1</sup> British Geological Survey, 2017 Geology of Britain viewer, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

<sup>2</sup> Cranfield Soil and Agrifood Institute 2017 Soilscales, <http://www.landis.org.uk/soilscales/>

southern end to c.115m aOD in the north-west. The adjacent land alongside Bottom House Farm Lane is relatively flat, located at the base of a coomb for most of its length, with the north-eastern end situated within the valley of the River Misbourne. The fields are currently in use for pasture and arable along with a small, enclosed area of ancient woodland to the south of Site.

### Previous Disturbance

- 4.1.3 There is little indication that the Site has undergone significant disturbance, for example, there is no sign of quarrying within the area to be evaluated. There is likely to have been some limited impact from agricultural ploughing since the medieval period to the present.

## 5 Site Background

### 5.1 Archaeological Baseline

- 5.1.1 The *Project Plan for Trial Trench Evaluation at Upper Bottom House Farm, Chalfont St Giles Vent Shaft, Buckinghamshire (AC100/9)* (Document no: 1EW03-FUS-EV-REP-CS02\_CL04-001608) provided a summary of the archaeological baseline to the Site. The Project Plan identified specific GWSI: HERDS research objectives as applicable to this Site and it detailed the scope, aims and methodologies required to address these objectives.
- 5.1.2 An Environmental Statement (ES 3.5.2.8.7) was prepared in 2013, part of this was to provide an evidence base against which the assessment of assets that may be affected by the construction of the Proposed Scheme. It contained information about known and potential heritage assets from a variety of sources and presented a chronological description and discussion of the development of the study area, placing assets within their historical and archaeological context. Assets identified by the environmental statement included CHA031 (Lower Bottom House Farm) which comprised a complex of four Grade II listed agricultural buildings of 18<sup>th</sup> -19<sup>th</sup> century date situated in a medieval to post-medieval agricultural landscape; CHA032 (Upper Bottom House Farm) which comprised a farm complex shown on the 1st Edition OS map; and CHA033 (Hobbs Hole) located to the south-west of the Site which comprised a building shown on 1st Edition OS mapping of 1876. Bottom House Farm Lane itself is thought to follow the line of a medieval Holloway, with CHA034 (Bow Wood) an ancient woodland located on the south-east side of the lane.
- 5.1.3 The site falls within the HS2 Archaeological Character subzone o8-o3 which identified potential remains in this area as including prehistoric settlement remains such as pits and ditches, and unstratified flint tools within the plough soil horizons. However, the Environmental statement acknowledges there is no specific intelligence indicating in-situ archaeological remains survive within the zone. Due to the limited archaeological potential within the areas of excavation around the vent shaft there were no specific research questions relating to heritage assets identified.

## Previous Works

- 5.1.4 The Environmental Statement included the results of a remote sensing survey of the Site and its environs. The remote sensing survey included the interpretation of aerial photographs, hyperspectral imagery, and LiDAR imagery. The LiDAR imagery did note a small number of faints circular, possible depressions in the open field toward the south-western end of Site. Former tracks and land boundaries along with possible ridge and furrow were apparent, indicative of the agricultural land use in the area from the medieval period onwards.
- 5.1.5 Extensive geophysical survey was carried out over the main vent shaft area as part of the 2013 ES (C252-ETM-EV-REP-020-000263\_P02; Figure 2). A number of anomalies were apparent but not likely to be of archaeological interest, with a band of magnetic responses and a number of 'striations' likely to be associated with natural geological features; a series of linear anomalies which run either north-east/south-west and north-west/south-east, are likely to represent former field boundaries, and a very straight linear anomaly towards the north-west boundary of the Site is probably a modern service, possibly a water pipe.

## Archaeological Background

- 5.1.6 It is likely that Palaeolithic hominids moved onto and through the Chilterns utilising the Misbourne valley, as indicated by finds of a Palaeolithic hand axe and two smaller flints to the north of Wheatley Wood (CHA076), some 3.5km to the north-west of Upper Bottom Farm. A further three Palaeolithic hand axes were found in the area of Nortoft Road in Chalfont St Peter and further flint tools at Chalfont St Giles (both outside the CFA8 study area and some distance from the Site); hand axes have been found in nearly all of the dipslope valleys of the Chilterns.
- 5.1.7 The river valleys of the Chilterns, particularly of the River Misbourne, have yielded Mesolithic flint tools. Outside the proposed HS2 route discoveries of Mesolithic flints have been made at Chalfont St Giles and in the Amersham area. Scatters of flint tools and debris recovered from the surface of ploughed fields around Buckinghamshire and within the area of Amersham and the Chalfonts are widely distributed. These scatters reflect both casual finds and systematic programmes such as fieldwalking and archaeological excavation.
- 5.1.8 During the Neolithic period and Early Bronze Age (circa 2,400 to 1,500 BC) ceremonial/burial monuments, such as causewayed enclosures, henges and round barrows were being constructed on the higher plateau/cross ridges. Such features are, however, absent from the Chiltern dipslope and the Misbourne valley. Evidence of Neolithic to Bronze Age activity has been recorded within the HS2 route study area, but some distance from the Site, from discoveries of flint tools north of Wheatley Wood (CHA076); Mopes Farm (CHA005); Horn Hill (CHA008), all more than 3km from the Site; and Misbourne Farm (CHA030), less than 500m south-east of the site, where two putative Bronze Age burnt mounds have also been recorded
- 5.1.9 The Bronze Age pattern of isolated farmsteads shifted in the Iron Age when larger settlements such as hillforts and were constructed. Communities during the Iron Age period favoured the higher ground overlooking the river valleys, although evidence of

Iron Age settlement in the study area is scarce. Investigations at the possible multi-period archaeological site north of Wheatley Wood (CHA076) and more than 3km north-west of the Site, have however, produced Iron Age pottery.

- 5.1.10 Romano-British villas begin to appear in the wider landscape from the late 1st to early 2<sup>nd</sup> century AD and a number are recorded in the Misbourne valley. A possible villa site has been identified at Misbourne Farm (CHA030), a little more than 700m south-east of the Site, based on artefacts found during fieldwalking. Further afield, records of a tessellated floor found. during excavation of Shardeloes Lake (CHA068) and artefacts discovered to the north of Wheatley Wood (CHA076) indicate the presence of another villa c. 3km north-west of the site. The close proximity of these two sites suggests the possibility that all may have been combined within a single large villa estate complex.
- 5.1.11 Evidence of material culture from the early medieval period is sparse within the area of the Chalfonts and Amersham. No archaeological sites of the period are currently known within the surroundings of the Site although Anglo-Saxon inhumations were excavated along with Romano-British inhumations at Mantles Green Meadow to the north of Amersham.
- 5.1.12 The broad pattern of landscape and rural settlement that exists in the area around the Chalfonts and Amersham today was laid out during the early medieval and medieval period. Dispersed settlements and isolated farmsteads surrounded by agricultural hinterland predominated, with scattered manors in the surrounding countryside. The landscape was likely to have been at least partially wooded. The Domesday Book (AD 1086) contains entries for Amersham, Chalfont St Giles and Chalfont St Peter, to the north, south and south east of the Site, and any evidence for early medieval and medieval settlement is most likely to be found in proximity to the historic cores of these three settlements. A number of farmsteads of probable medieval origin are also recorded within the landscape surrounding the Site, including Lower Bottom House Farm (CHA031), immediately to the north, while Bottom House Farm Lane is believed to follow the alignment of a medieval Holloway.
- 5.1.13 Three cultural heritage assets (CHA) lie within the immediate vicinity of the Site, all of which are of post-medieval or early modern date. These are:
- CHA031 at Lower Bottom House Farm, comprising a grouping of four Grade II listed buildings; an early 19th century brick farmhouse, possibly incorporating earlier fabric, a late 18th to early 19th century timber-framed barn, a late 18th to early 19th century timber granary on stone saddles and a late 18th to early 19th century brick stables block. The complex is situated in a relatively quiet medieval to post-medieval agricultural landscape on either side of a medieval holloway.
  - CHA032 at Upper Bottom House Farm, comprising a non-designated farm complex, shown on the 1st Edition OS map.
  - CHA033 at Hobbs Hole, south-west of the Site, comprising a building shown on 1<sup>st</sup> Edition OS mapping of 1876.



## 6 Aims and Specific Objectives

6.1.1 The full aims and objectives for the archaeological trial trenching can be found in Section 3 of the Project Plan (Document no: 1EW03-FUS-EV-REP-CS02\_CLo4-001608). Trial trench investigation provides the most suitable method for the recovery of archaeological evidence to inform the research objectives. Section 4 of the Project Plan provides a methodology and deliverables for the trial trench evaluation.

### 6.2 General Aims

6.2.1 The aims of the trial trenching were to:

- Confirm the presence/absence, extent, and depth of any surviving archaeological remains within the Site
- Determine the nature, date, condition, state of preservation, complexity and significance of any archaeological remains
- Determine the likely range, quality, and quantity of artefactual and environmental evidence present
- Suggest measures, if appropriate and feasible, for further archaeological investigation to mitigate identified significant impacts, and
- Contribute to the delivery of GWSI: HERDS Specific Objectives.

### 6.3 Specific HERDS Objectives

6.3.1 The trial trenching was required to help clarify the location, extent, survival and significance of any heritage assets in the vicinity of the Site and will contribute to the following specific GWSI: Historic Environment Research and Delivery Strategy (HERDS) objectives:

- KC5: Identifying settlement location and developing models for settlement patterns for the Mesolithic, Neolithic and Early Bronze Age.
- KC21: Assess the evidence for regional and cultural distinctiveness along the length of the route in the Romano-British period, with particular regard to the different settlement types encountered along the route.
- KC40: Identify patterns of change within medieval rural settlement from the 11th to mid-14th century.

## 7 Scope and Methodology

### 7.1 Scope

7.1.1 The trial trench evaluation of the Site was undertaken in three phases in December 2018 June 2019 and December 2019. Forty-eight trial trenches were excavated as per the Project Plan. These trenches measured 30m (L) x c.1.9m (W). This included four targeted trenches over anomalies revealed in the geophysical survey which were

identified as of limited archaeological potential (probable field boundaries) in addition to a 2% sample of the Site by area, covering 'blank areas' and modern anomalies revealed in the geophysical survey, such as the probable waterpipe in the north-west of the Site. In addition, 144 test pits were excavated for artefact recovery from the topsoil.

- 7.1.2 A contingency trenching of up to a 1% sample (equivalent of 22 No. 30m x c.2.0m trenches) was available, subject to approval by the Contractor, if further clarification of the archaeological remains was considered necessary to meet the aims of the evaluation.

## 7.2 Methodology

- 7.2.1 The methodology, deliverables, programme, health, safety and environmental requirements, resources and interfaces necessary to deliver the archaeological evaluation was provided in the *Location Specific Written Scheme of Investigation for Trial Trench Evaluation at Upper Bottom House Farm, Chalfont St Giles Vent Shaft, Buckinghamshire (AC100/9)* (Document no: 1EW03-FUS-EV-REP-CS02\_CL04-002519).
- 7.2.2 The trial trench evaluation was undertaken in accordance with specific guidance produced by the Employer, namely the Technical Standard Specification for historic environment investigations (HS2-HS2-EV-STD-000-000035) and the GWSI: HERDS (HS2-HS2-EV-STR-000-000015), and the Project Plan for Trial Trench Evaluation Investigation at Upper Bottom House Farm, Buckinghamshire (AC100/9) (1EW03-FUS-EV-REP-CS02\_CL04-001608).
- 7.2.3 The fieldwork followed the Standard and Guidance: Archaeological Evaluation (ClfA 2014), the Management of Archaeological Projects 2 (English Heritage 1991), the Management of Research Projects in the Historic Environment (MORPHE): Project Managers' Guide (Historic England 2015) and the Technical Standard Specification for historic environment investigations (HS2-HS2-EV-STD-000-000035).

### Artefact Recovery

- 7.2.4 During the trenching process, approximately 0.5m<sup>3</sup> of topsoil samples were sieved from test pits at either end of the trench and centrally for the recovery of finds (Figure 8). A total of 144 test pits were sampled across the site the results of which are fully reported in 8.3.1.

### Setting-out

- 7.2.5 All spatial setting out and recording was undertaken in accordance with The Ordnance Survey National Grid and Ordnance Survey Newlyn Datum (ODN) as defined by the OS Active Global Navigation Satellite System (GNSS) network and use of a Virtual reference system.
- 7.2.6 Trenches were located to a horizontal accuracy of +/-500mm with surface levels recorded to an accuracy of 10mmÖk: where 'k' was the total distance levelled in kilometres.

## Machine Excavation

- 7.2.7 Trenches were excavated to either the first archaeological horizon or the natural substrate, whichever was reached first, using a mechanical excavator fitted with a toothless bucket.
- 7.2.8 Each machine was under the constant supervision of a suitably trained, competent and experienced archaeologist.
- 7.2.9 A CAT scanner was used at each 300mm excavated spit to ensure no unidentified buried services were present.
- 7.2.10 Topsoil and subsoil were stripped independently and stored separately on either side of the trench, as per the Technical Standard: Route Wide Soil Resource Plan (HS2-HS2-EV-STD-000-000008).

## Fieldwork Recording

- 7.2.11 A sufficient sample of each feature was excavated to meet the requirements of the GWSI: HERDS.
- 7.2.12 Archaeological recording comprised:
- at least one representative section at 1:20 scale of each evaluation trench, from ground level to the base of the excavation
  - the written record of individual context descriptions on appropriate pro-forma
  - photographs with details recorded in a photo-register
  - linear features identified within the trenches were 50% or 20% excavated, discrete features 50% excavated
  - section drawings of features were made at 1:20 and 1:10 as appropriate
- 7.2.13 A 'Site location plan', indicating Site north was prepared at 1:1250:
- individual 'trench plans' were prepared at 1:100
  - the location of site plans was identified using OSGB coordinates

## Environmental Sampling

- 7.2.14 In line with the Employer's Technical Standard Specification for Historic Environment Investigations (HS2-HS2-EV-STD-000-000035) the following sampling strategy was implemented:
- Archaeological features (pits, boundary ditches and paleochannels)
  - Deposits representing the main phases of activity on Site (to assess whether there were changes in rates of deposition, or material survival over time)
  - Samples were taken to provide dating, palaeo-environmental and site formation information

- 7.2.15 Samples were taken using ten litre plastic buckets (with lids and handles), for the recovery of bulk 'disturbed' environmental samples. Labelling followed the guidance set out in the Technical Standard Specification for Historic Environment Investigations (HS2-HS2-EV-STD-000-000035).

### Backfilling

- 7.2.16 Once recording was completed the trench was backfilled in reverse order (subsoil first then topsoil) and the ground made good.

## 7.3 Change Control

- 7.3.1 The movement of trenches from their original locations, descoping or amendment to methodology was implemented through change control (Figure 2). These were limited to the shortest distance to clear constraints and maintain orientation where possible. During the archaeological investigation three trenches (042, 043 and 045) were moved up to 4m south and east to clear the overhead BT exclusion zones, and Trenches 33 and 34 were moved 9m south-west to avoid an existing field boundary.

# 8 Results of Trial Trench Evaluation

## 8.1 Geological Sequence

- 8.1.1 The natural substrate or archaeological horizon comprised chalks, flint-with-clay and sands.
- 8.1.2 Within most trenches the natural substrate or archaeological horizon was sealed by topsoil and subsoil. Colluvium build up was visible in the central area of the west field where trenches 17, 19 and 25 lay on the lee of the slope within the coomb, and in isolated deposits in trenches 36, 39, 40 and 44 in the centre and east of Site.

## 8.2 Archaeological Results

- 8.2.1 Three trenches of the proposed 48 contained archaeological features, with a further two containing palaeochannels. The remainder were blank (Figure 3).
- 8.2.2 The following section contains a description of the features and deposits excavated during the evaluation. It should be used in conjunction with Appendix 3, which provides detailed descriptions and stratigraphic information for each deposit and cut feature.
- 8.2.3 The results of the positive trenches are discussed below, in numerical order. For the purposes of this report, the conclusion will discuss the results thematically and chronologically.
- 8.2.4 A summary of the findings is in table 1, below.

Table 1: Summary table of findings

| Trench Number | Features | Provisional Date |
|---------------|----------|------------------|
| 001           | Blank    |                  |
| 002           | Blank    |                  |
| 003           | Blank    |                  |
| 004           | Blank    |                  |

|     |                      |               |
|-----|----------------------|---------------|
| 005 | Blank                |               |
| 006 | Blank                |               |
| 007 | Blank                |               |
| 008 | Blank                |               |
| 009 | Blank                |               |
| 010 | 1 x ditch            | Undated       |
| 011 | Blank                |               |
| 012 | Blank                |               |
| 013 | Blank                |               |
| 014 | Blank                |               |
| 015 | Blank                |               |
| 016 | Blank                |               |
| 017 | Blank                |               |
| 018 | Blank                |               |
| 019 | Blank                |               |
| 020 | Blank                |               |
| 021 | Blank                |               |
| 022 | 1 x large quarry pit | Post-medieval |
| 023 | Blank                |               |
| 024 | Blank                |               |
| 025 | Blank                |               |
| 026 | Blank                |               |
| 027 | Blank                |               |
| 028 | Blank                |               |
| 029 | Blank                |               |
| 030 | Blank                |               |
| 031 | Blank                |               |
| 032 | Blank                |               |
| 033 | Blank                |               |
| 034 | Blank                |               |
| 035 | Blank                |               |
| 036 | Blank                |               |
| 037 | Blank                |               |
| 038 | Blank                |               |
| 039 | Blank                |               |
| 040 | Blank                |               |
| 041 | Blank                |               |
| 042 | Blank                |               |
| 043 | Blank                |               |
| 044 | Blank                |               |
| 045 | 1 x palaeochannel    | Undated       |
| 046 | 1 x palaeochannel    | Undated       |
| 047 | 1 x ditch            | Post-medieval |
| 048 | Blank                |               |

### Trench 010 (figures 4 and 9; plate 1)

- 8.2.5 A straight, wide, shallow ditch [201004], 1.1m wide and 0.06m deep, oriented north-west to south-east, was located centrally within the trench. The fill was a firm brown silty clay (201005) with rare stone inclusions and frequent charcoal flecking. No finds were recovered.

### Trench 022 (figures 4 and 9; plate 2)

- 8.2.6 A large deep pit [202204], with a steep, stepped western side and a gradual sloping eastern side, and flat base was located centrally within the trench. Pit [20204] measured, 14.92m long and more than 4.0m wide (within the trench) and contained

four fills. The lower fill was a friable very dark brown silt (202207), with frequent large flint inclusions and charcoal flecking. Nine fragments of 13<sup>th</sup> century pottery was recovered from the soil sample taken from (202207) (see 9.1.2 below). Overlying this was a firm brown silt-clay (202205) with frequent flint and chalk nodule inclusions. The upper fill was a firm brown clay (202206) with rare stone inclusions and charcoal flecking. A single fragment of post-medieval CBM was recovered from (202205).

- 8.2.7 The deliberate backfill of large flint nodules at the base, then overlain by the remains of the chalk up-cast is suggestive that the pit could have originated as a quarry pit, probably for the extraction of chalk for building material and this may have been utilised in the construction of one of the farms or the adjacent buildings along Upper Bottom House Lane. The highly fragmented and abraded nature of the medieval pottery from (C202207) is likely the result of original deposition within an agricultural soil as part of manuring process, prior to final deposition. Although it seems likely that the pit is a post-medieval feature, given the recovery of post-medieval CBM from its upper fill, an earlier, i.e. medieval, origin for it cannot be entirely precluded.

### **Trench 045 (figures 4 and 9; plate 3)**

- 8.2.8 A wide shallow palaeochannel [204504], with gently sloping sides and flat base, 7.75m wide and 0.8m deep, oriented approximately north-west to south-east, located in the south-western end of the trench. The lower fill was a well sorted fine yellow sand (204505), this appeared to be the natural low energy silting of the principle river channel. A later higher energy river channel was apparent centrally with a stony riverbank (204506), overlain by a well sorted fine yellow brown silt-sand (204507). The channel appeared to have receded slightly into a more v-shaped profile with a stony riverbed channel apparent (204508). Dark lenses indicative of vegetation growth was noticeable above the stony layer suggesting periodic dry episodes. The upper fill was a grey brown silt-clay (204509) which is a mix of aeolian detritus and topsoil encroachment within the feature and does not suggest alluvial sorting. This palaeochannel was cutting through the subsoil (204502), suggesting that the subsoil had not been ploughed in antiquity in this location.

### **Trench 046 (figures 5 and 9; plate 4)**

- 8.2.9 A wide shallow palaeochannel [204604], with steep sides and a flat base (with a small flattened v-shaped channel profile in south-west side of base), 6.7m wide and 0.97m deep, oriented approximately north-west to south-east, was located in the southern half of the trench. The sides of the palaeochannel were defined by stone riverbanks in a silt matrix (204605). The basal fill of the palaeochannel was a fine well-sorted light grey sand-silt (204606). This represents the low energy natural silting of the principle channel. Overlying this was a secondary stone bank in a silt matrix (204607) along the north-eastern side. The upper fill was a dark grey brown sand-silt (204608) which was a mix of aeolian detritus and topsoil encroachment. Subsoil (204602) subsequently built up either side of bank deposits (204605).

### **Trench 047 (figures 5 and 9; plate 5)**

- 8.2.10 A straight shallow ditch [204704], with steep sides and a flat base, 0.8m wide and 0.32m deep, oriented approximately east to west, was located toward the centre of the

trench. The fill was a friable grey brown sandy silt (204705) with frequent sub-angular stones inclusions confined largely toward the base. Two small abraded sherds of 13th-16th century pottery were recovered from soil samples taken from the fill (see 9.1.5 below).

- 8.2.11 The ditch may relate to an orchard boundary attached to Harewood Downs House, shown on the First Edition OS Map 1876 and a post-medieval origin for it seems likely, however, an earlier, i.e. medieval, origin for it cannot be entirely precluded.

## 8.3 Artefact Recovery

- 8.3.1 No artefactual material at all was recovered from the sieved topsoil of the 144 test pits excavated across Site (Figure 8). The lack of material may partly be the result of no significant prehistoric or Roman activity within the vicinity of the Site, with none recorded in the trial trenches. While very small fragments of late medieval/early post-medieval pottery have been recovered from one of the archaeological features on site, which it is suggested is related to medieval/post-medieval manuring practices, the lack of material from the topsoil could suggest a long term pastoral regime has been practiced in this area.

# 9 Finds Assessment

## 9.1 Pottery and Burnt Clay

- 9.1.1 Eleven pieces of burnt clay or pottery were recovered from two soil samples (1 and 3) from contexts (202207) and (204705) respectively (Table 2). The total weight was 1.71g. The material was examined using a x20 microscope and given the size of each piece a tentative identification made following the Milton Keynes Archaeological Unit (Mynard 1992; King 1994), Mynard 1994).

Table 2: Summary of Pottery and Burnt Clay

| Soil Sample No. | Trench | FILL No. | Cut No. | Feature | Provisional Date  | Weight (g) | Count | Description   |
|-----------------|--------|----------|---------|---------|-------------------|------------|-------|---|
| 1               | 22     | 202207   | 202204  | PIT     | 13th-15th Century | 1.06       | 9     | Nine fragments of abraded burnt clay or pottery including reduced hard sandy fabric with fine sub-rounded quartz as well as limestone fragments and shell; and a sandy orange fabric with quartz grits, small angular fragments as well as larger sub-rounded ones. |
| 3               | 47     | 204705   | 204704  | DITCH   | 13th-16th Century | 0.65       | 2     | Two sherds of pottery with a thick grey core, buff brown surfaces and sub angular quartz and limestone inclusions   |

## Sample 1 (202207)

- 9.1.2 Sample taken from cut feature 202204 within trench 22. This sample contained 9 fragments of burnt clay or pottery, which weighed 1.06g in total. All were very abraded, and no surfaces were preserved.
- 9.1.3 One piece was of a reduced hard sandy fabric with fine sub-rounded quartz as well as limestone fragments and shell; reminiscent of Fabric MSC2 or MSC3 dating to the 13th century (Mynard 1992).
- 9.1.4 The remaining pieces were in a sandy orange fabric with quartz grits, small angular fragments as well as larger sub-rounded ones. The fabric was reminiscent of 13th-15th century MS2 Medieval Sandy Ware (ibid.).

## Sample 3 (204705)

- 9.1.5 Sample taken from cut feature 204704 within trench 47. This sample contained 2 sherds of pottery, which weighed 0.65g in total.
- 9.1.6 One sherd had both surfaces intact, displaying a thick grey core with buff-brown surfaces. The fabric included sub-angular quartz and limestone. A second sherd appeared to be a heavily abraded fragment of a similar vessel however the surfaces were not intact. Both appear to be 13th- 16th century MS6 Potterspury ware (ibid.).

## Conclusions

- 9.1.7 The highly fragmented and abraded nature of the material is likely the result of original deposition within an agricultural soil as part of manuring process, prior to final deposition. While the sherds indicate limited medieval activity in the area, they should be considered residual and provide only a *terminus post quem* for the associated features. No further analysis of this material is required, and the material could be discarded.

## 9.2 CBM

- 9.2.1 A single irregular fragment of red brick which weighed 16.1g was recovered from context (202205) from cut feature 202204 within trench 22. The complete thickness of the brick was not able to be measured due to the nature of the break, however, the brick was manufactured by hand and likely dated from between C17-C19th. No further analysis of this material is required, and the material could be discarded.

## 9.3 Palaeoenvironmental

### Method Statement

- 9.3.1 A total of four samples were taken from features within trenches 10, 22, 46, and 47, details summarised in table 3 below. The samples were bulk floated and the flots were collected in a 300-micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed in Appendix 6 with other details. Nomenclature within the table follows Stace (2010) for the plant macrofossils and Kerney and Cameron (1979) and Macan (1977) for the mollusc shells. Both charred and de-watered plant remains were



recorded along with some modern roots and arthropod remains. The de-watered remains are denoted within the table by a lower case 'w' suffix.

Table 3: Summary of Samples

| Sample No.   | 1      | 2      | 3      | 4      |
|--------------|--------|--------|--------|--------|
| Context No.  | 202207 | 201005 | 204705 | 204605 |
| Feature No.  | 202204 | 201004 | 204704 | 204604 |
| Feature type | Pit    | Ditch  | Ditch  | PC     |
| Trench       | 022    | 010    | 047    | 046    |
| Date         | P.Med. | U/D    | U/D    | U/D    |

## Results

- 9.3.2 Although charcoal/charred wood fragments are present within all four assemblages, other plant macrofossils are very scarce. Charred plant remains include an indeterminate cereal grain (sample 1, pit [202204]), abraded fragments of hazel (*Corylus avellana*) nutshell (sample 2, ditch [201004]) and two wheat (*Triticum* sp.) glume bases (sample 4, palaeochannel [204604]). De-watered seeds are equally scarce and comprise a dock (*Rumex* sp.) fruit (sample 3, ditch [204704]) and seeds of fat hen (*Chenopodium album*) and stinging nettle (*Urtica dioica*), both from sample 4. Of the charcoal, it is noted that that from sample 1 is mostly abraded (possibly suggesting that it had been exposed to the elements for some period prior to incorporation within the pit fill) whilst that from sample 2 has a flaked appearance possibly indicative of high temperature combustion. Other remains are very scarce.
- 9.3.3 Shells of terrestrial, marsh/freshwater slum and freshwater obligate molluscs are present within all four assemblages, most particularly within samples 1, 3 and 4. Although broadly similar in composition, there are differences which may reflect the differing nature of the features. The assemblage from pit [202204] is dominated by shells of woodland/shade loving species, particularly those associated with damp ground litter rubble and hedgerows. It would, therefore, appear likely that the pit was largely overgrown, with accumulations of loose stones and leaf litter at its base. In contrast, ditch [204704] was probably situated within an open, short turfed grassland habitat, although the feature itself was probably muddy at its base, with some stands of stagnant water. A similar assemblage is also noted from palaeochannel [204604], although in this instance there are more in the way of freshwater obligate species. However, the latter would appear to suggest that the velocity of water within the channel was very limited, with the feature being muddy rather than truly riverine.

## Conclusions

- 9.3.4 In summary, the paucity of plant material within the current assemblages somewhat precludes any accurate interpretation of environmental conditions, although the mollusc assemblage is marginally more informative (see above). However, the presence of wheat glume bases within the palaeochannel may be of note. Only two are recorded, and both are very abraded, but the production and utilisation of glumed wheat reached a peak during the later prehistoric and Roman periods and had largely ceased by the Middle Saxon period. This may, therefore, suggest that this channel

dates to within that time, although it should be noted that two small macrofossils could easily be residual or intrusive within the feature.

- 9.3.5 As none of the assemblages contain a enough density of material for quantification (i.e. 100+ specimens), no further analysis is recommended. However, a summary of this report should be included within any synthesis of data from the site.

## 10 Assessment and Interpretation of Results

- 10.1.1 The results of the evaluation identified archaeology in three trenches out of 48. The majority of geophysical and LiDAR anomalies were not archaeological in origin, being natural variations in the geology or probable modern features, the exception being anomalies identified as probable field boundary ditches identified in Trenches 10 and 47 and the quarry pit identified in Trench 22.
- 10.1.2 The earliest datable evidence recovered comprised fragments of medieval pottery recovered from the pit in Trench 22 and the ditch in Trench 47. These are abraded fragments and provide probable evidence of medieval manuring practices which suggests the fields within the Site could have been under cultivation since at least that time.
- 10.1.3 The First Edition OS Map 1876 for the area shows the ditch in Trench 047 may relate to an orchard boundary attached to Harewood Downs House, however an earlier origin for it cannot be precluded, the finds evidence indicates that it can be no earlier than the medieval period if so. The date of the ditch in Trench 010 is uncertain. It does not correlate to any known previous boundary on historic mapping and whilst it too could be of post-medieval origin, an earlier origin for it could also be possible.
- 10.1.4 The large quarry pit in Trench 022 has been dated to the post-medieval period based on the finding of a piece of post-medieval tile recovered from its upper fill and it seems likely that the medieval pottery, from its lower fill, was probably residual. The presence of the medieval pottery sherds does mean however that a medieval origin for the pit cannot be entirely precluded. The quarry pit correlated with a dark spot on the geophysical survey interpreted as a riverine corridor in the LiDAR interpretation. The presence of charcoal toward the base of the feature is more indicative of an anthropogenic rather than a natural feature. The LiDAR imagery showed at least two circular depressions toward the west of the Site which may be an area of random chalk extraction pits, although the First Edition OS 1876 and the proceeding second and third edition maps do not note quarrying in this area.
- 10.1.5 The presence of two palaeochannels in Trenches 045 and 046 show the River Misbourne had meandered across the valley floor. The presence of the palaeochannels stratigraphically cutting the subsoil in both trenches indicate that no ploughing to any depth had occurred in this area during antiquity.
- 10.1.6 The specific HERDS objectives for the Site are addressed below. The fieldwork did not produce enough evidence to fulfil these objectives or the route wide HERDS objectives.

Due to the lack of finds and the sparsity and form of the archaeological features, further work on the Site is unlikely to elucidate further on our understanding.

*KC5: Identifying settlement location and developing models for settlement patterns for the Mesolithic, Neolithic and Early Bronze Age.*

- 10.1.7 No Mesolithic, Neolithic or Early Bronze Age features or finds were present on Site. The evaluation recorded two ditches which were undated, however these were straight regular ditches and unlikely to date from these periods.

*KC21: Assess the evidence for regional and cultural distinctiveness along the length of the route in the Romano-British period, with particular regard to the different settlement types encountered along the route.*

- 10.1.8 The Site is in an area which has been purported to belong to a Roman Villa located in the vicinity. The lack of any Roman finds or distinctively Roman forms of ditch indicate low potential for providing further information toward this objective.

*KC40: Identify patterns of change within Medieval rural settlement from the 11th to mid-14th century*

- 10.1.9 The results did not indicate domestic occupation or a settlement present on the Site dating to the 11th to 14th century. The pottery fragments recovered from environmental samples taken from features in Trenches 22 and 47 indicate likely manuring of agricultural soils on the Site during the later medieval period. The Site has low potential with further work to elucidate further on the understanding of this objective when included as part of a wider study.

## 10.2 Recommendations

- 10.2.1 Due to the scarcity of archaeological features across Site and the paucity of artefactual remains, the Site has no potential to contribute to the research objectives set out in the GWSI HERDS and no further work is recommended.

# 11 Consideration of Results in their Wider Context

- 11.1.1 The archaeological features have very little information to offer other than contextual information to the local buildings in the vicinity. Otherwise the valley appears relatively unchanged during human occupation with few boundaries established or moved. Some limited information is provided by the results on the Medieval and Post-medieval agricultural landscapes and thus the broader settlement pattern of isolated farmsteads and rural hamlets between the larger nucleated settlements along the Missbourne and Chiltern dip slope in these periods.

## 12 Statement of Archaeological Potential

- 12.1.1 The sparsity of archaeological features, which furthermore appear to be isolated and mostly undated, hinders any overall characterisation of the Site.
- 12.1.2 The Site therefore has a low potential for a small number of archaeological features relating to post-medieval or undated land division and localised quarrying to provide building materials. The large quarry pit is a single entity and is more than likely associated with the extraction of chalk for building material, probably for one of the buildings in the vicinity. The ditches are relatively shallow and of little potential other than as former field boundaries of probable post-medieval date.
- 12.1.3 These remains are of low potential being of only local significance and offer almost no contribution to the knowledge creation objectives identified for this site. Nor do they contribute to any other knowledge creation objectives detailed in the GWSI HERDS.

## 13 Evaluation of Methodology Used

### 13.1 Summary

- 13.1.1 The trial trench evaluation has demonstrated areas of archaeological activity across the Site and this information can be used to inform an appropriate mitigation strategy.

### 13.2 Strategy Appraisal

- 13.2.1 The trial trench evaluation comprised 48 trenches across the Site. Each measuring 30m (L) x c.1.9m (W). The evaluation also included excavation of a total of 144 test pits, with three trenches excavated within the footprint of each trench.
- 13.2.2 Trial trench evaluation was the most suitable investigation methodology in that it was possible to excavate all the trenches, and within the trenches it was possible to investigate all of the exposed features. A sample of each feature was excavated as per the specifications of the Project Plan.
- 13.2.3 The soil horizons throughout the stratigraphic sequence were variable but clear and well-defined. The trial trench evaluation confirmed the presence, absence, density, date and significance of the archaeological remains present and it is very unlikely that features were not identified. The trenching methodology is therefore judged to be a suitable method of evaluation in this landscape. Features identified by the remote sensing surveys were successfully tested and confirmed to be largely natural features.
- 13.2.4 The test pitting within the footprint of the evaluation trenches provided a representative sample for the presence or absence of finds within the soil overburden for each trench. This exercise enabled a more thorough testing (at a representative scale) of the Ploughsoil horizon for artefactual evidence than would have otherwise been obtained through observation of spoil removed during mechanical stripping of the Trial Trenches. This also gave an additional opportunity to identify material evidence for early prehistoric and early medieval within the topsoil/ploughsoil horizon,

as the archaeological evidence for these periods can often be ephemeral and hard-to detect in excavation. The absence of finds recovered appears to reflect the low level of activity detected in the Trial Trenches. The test pitting only gave a representative sample that totalled approximately 0.45% area of each trench, and it is uncertain how effective a larger sample area might have been in terms of recovering finds. The effectiveness of the strategy in terms of how reliable the finds data from test pits was in giving an indication of past activity is not in the scope of this investigation, and the effectiveness of this strategy cannot be easily understood without further study of this approach.

## 14 Publication and Dissemination Proposals

- 14.1.1 It is anticipated that further work will not be undertaken on the Site. The results of the evaluation of the Site will be disseminated in accordance with the Employer policy as instructed.
- 14.1.2 A copy of the report will be provided to the Contractor in the first instance and then to the Employer for approval. The report will become a public document after a period not exceeding six months, a digital copy of the report will be deposited with the OASIS online archive and the Buckinghamshire Historic Environment Record. On completion of this project an appropriate short article summarising the work will be submitted to the Local Museum Services.

## 15 Archive Deposition

- 15.1.1 All retained finds and archaeo-environmental samples will be treated and conserved in accordance with the English Heritage guidance document A Strategy for the Care and Investigation of Finds (English Heritage, 1995) and the UKIC's document Guidelines for the Preparation of Excavation Archives for Long Term Storage (UKIC, 1990). Should no further work be required, an ordered, indexed, and internally consistent site archive, including digital formats (survey, photography etc) will be prepared and deposited in accordance with Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation (Archaeological Archives Forum 2007) and the HS2 documents: Technical Standard – Historic environment physical archive procedure (HS2-HS2-EV-STD-000-000039) and the Technical Standard – Historic environment digital data management and archiving procedure (HS2-HS2-EV-STD-000-00003). A summary of information from the project has been entered onto the OASIS online database of archaeological projects in Britain.

## 16 Acknowledgements

- 16.1.1 The Archaeological Contractor acknowledges the contributions made by all its staff and specialist contributors, the help and advice provided by the Contractor's HERDS team, and the Employer for commissioning the project.

## 17 Bibliography

| Title  | Reference   |
|--|---|
| AAF 2007. Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation  | Archaeological Archives Forum guidance  |
| ADS 2015. Guidelines for Depositors  | Archaeological Data Service guidance  |
| British Geological Survey. (Natural Environment Research Council) Commissioned Report CR/03/77N  | Geology   |
| ClfA 2014 Standard and guidance for archaeological field evaluation. Chartered Institute for Archaeologists  | Chartered Institute for Archaeologists guidance                                 |
| ClfA, 2014. Standard and guidance for the collection, documentation, conservation and research of archaeological materials.  | Chartered Institute for Archaeologists guidance                                 |
| English Heritage, 2014. Animal Bones and Archaeology. Guidelines for Best Practice.  | Historic England guidance   |
| English Heritage 1991. The Management of Archaeological Projects 2.  | Historic England guidance   |
| English Heritage 1995. A Strategy for the Care and Investigation of Finds.   | Historic England guidance   |
| Historic England, 2015. Management of Research Projects in the Historic Environment (MORPHE): Project Managers Guide   | Historic England guidance   |
| HS2. Generic Written Scheme of Investigation: Historic Environment Research and Delivery Strategy  | HS2-HS2-EV-STR-000-000015   |
| HS2 Location Specific Written Scheme of Investigation for Trial Trench Evaluation at Chalfont St Peter Vent Shaft, Chalfont St Giles Vent Shaft and Amersham Vent Shaft, Chiltern Tunnel, Buckinghamshire (AC100/W5) | 1EW03-FUS-EV-REP-CS02_CL04-002519   |
| HS2 Phase One Environmental Statement, Supplementary Environmental Statements and Geophysical Survey Reports   | ES 3.2.1.10<br>ES 3.5.2.10.4<br>ES 3.5.2.10.5<br>ES 3.5.2.10.6<br>ES 3.5.2.10.7 |

|   |  |
|---|--|
|   | R2016 C252-ETM-EV-REP-020-000263_P02<br>P1C2-ETM-EV-REP-000-000008_P01 |
| HS2. Project Plan for Upper Bottom House Farm Vent Shaft, Chalfont St Giles, Buckinghamshire  | 1EW03-FUS-EV-REP-CS02_CL04-001068                                      |
| HS2, Technical Standard Specification for historic environment investigations.  | HS2-HS2-EV-STD-000-000035  |
| Kerney, M.P. and Cameron R.A.D 1979 <i>A Field Guide to the Land Snails of Britain and North-west Europe</i> . Collins: London.   | Snails   |
| King, N.A. 1994 The medieval and post-medieval pottery in R.J. Zeepvat, J.S. Roberts and N.A. King Caldicotte, Milton Keynes, Buckinghamshire Archaeological Society Monograph Series No. 93, p 197-207 | Pottery  |
| Macan, T.T 1977 British Fresh- and Brackish-Water Gastropods: A Key. <i>Freshwater Biological Association Scientific Publication</i> No. 13   | Gastropods   |
| Mynard, DC and Zeepvat RJ, 1992. Great Linford Bucks Archaeol Soc Monog Ser 3   |  |
| Mynard, D.C. 1992 The medieval and post-medieval pottery in D.C Mynard & R.J. Zeepvat Great Linford, Buckinghamshire Archaeological Society Monograph Series No. 3, p 245-372                           | Pottery  |
| Mynard 1994 Excavations on medieval sites in Milton Keynes, Buckinghamshire Archaeological Society Monograph Series No. 6   | Pottery  |
| SMA 1993. Selection, retention and dispersal of archaeological collections.   |  |
| Stace, C., 2010. <i>New Flora of the British Isles</i> . 3 <sup>rd</sup> edition. Cambridge University Press  | Macro botanical  |
| UKIC 1990. Guidelines for the Preparation of Excavation Archives for Long Term Storage  | United Kingdom Institute for Conservation guidance                     |

## 18 Glossary of Terms and Acronyms

The following terms have been used in this report:

### Terms

|  |  |
|--|--|
| Evaluation   | A form of archaeological investigation involving the excavation of trenches to help determine the character and date of any discovered archaeology   |
| The Contractor   | The organisation undertaking the Enabling Works for Area Central on behalf of the Employer.  |
| Generic Written Scheme of Investigation: Historic Environment Research and Delivery Strategy (GWSI: HERDS) | The framework for delivering all historic environment investigations undertaken as part of the HS2 Phase 1 programme.  |
| The Employer   | The organisation responsible for delivery of HS2 Phase One Scheme and all terms and conditions, policies, procedures, and payments   |
| Location   | A specific HS2 worksite or group of worksites that are being addressed as a combined historic environment investigation programme of assessment, evaluation and investigation.   |
| Location Specific Written Scheme of Investigation (LSWSI)  | Specification document assembling one or more Project Plans within an area of land defined primarily for construction programme purposes.  |
| Project Plan   | Specification document for each specific package of activity (e.g. a survey, desk-based assessment, excavation, recoding project). The plans would respond to the Specific Objectives set out in the GWSI: HERDS and be delivered within an agreed budget. |
| Works  | The specific historic environment assessment, evaluation or investigation works at each  |

### Acronyms

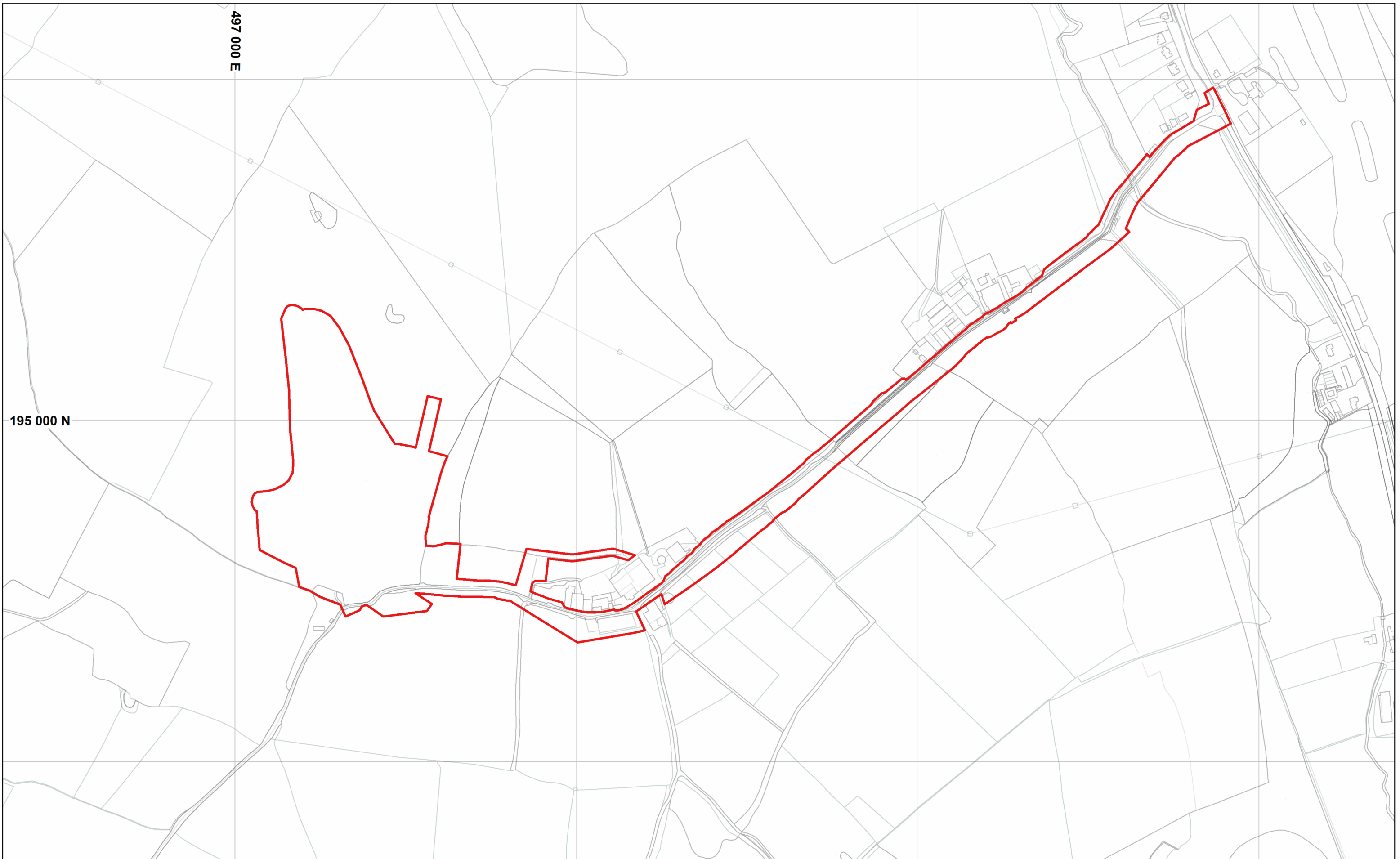
|     |                               |
|-----|-------------------------------|
| AAF | Archaeological Archives Forum |
| ACA | Archaeological Character Area |
| aOD | above Ordnance Datum          |



|       |   |
|-------|---|
| AD    | Anno Domini   |
| ANA   | Archaeological Notification Area                    |
| ASZ   | Archaeological Character Sub-Zone                   |
| BC    | Before Christ                                       |
| BHER  | Buckinghamshire Historic Environment Record         |
| CAT   | Cable Avoidance Tool                                |
| CFA   | Community Forum Area                                |
| ClfA  | Chartered Institute of Archaeologists               |
| CoCP  | Code of Construction Practice                       |
| EMR   | Environmental Minimum Requirements                  |
| ES    | Environmental Statement                             |
| GIS   | Geographic Information Systems                      |
| GNSS  | Global Navigation Satellite System                  |
| ha    | Hectare   |
| HE    | Historic Environment                                |
| HER   | Historic Environment Record                         |
| HERDS | Historic Environment Research and Delivery Strategy |
| ID    | Identification                                      |
| JV    | Joint Venture                                       |
| km    | Kilometre   |
| LiDAR | Light Detection and Ranging                         |

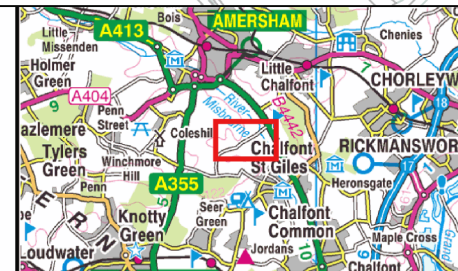
|        |   |
|--------|---|
| m      | Metre   |
| mm     | Millimetre  |
| MORPHE | Management of Research Projects in the Historic Environment |
| mya    | Million Years Ago   |
| NGR    | National Grid Reference                                     |
| No.    | Number  |
| OASIS  | Online Access to the Index of Archaeological Investigations |
| OD     | Ordnance Datum  |
| ODN    | Ordnance Survey Newlyn Datum                                |
| OS     | Ordnance Survey   |
| OSGB   | Ordnance Survey Great Britain                               |
| PROW   | Public Right of Way   |
| UKIC   | United Kingdom Institute for Conservation                   |

## Appendix 1 – Figures



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**Legend**  
 Site extent

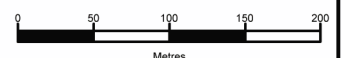


High Speed Two,  
Upper Bottom House Farm  
Figure 1. Site location

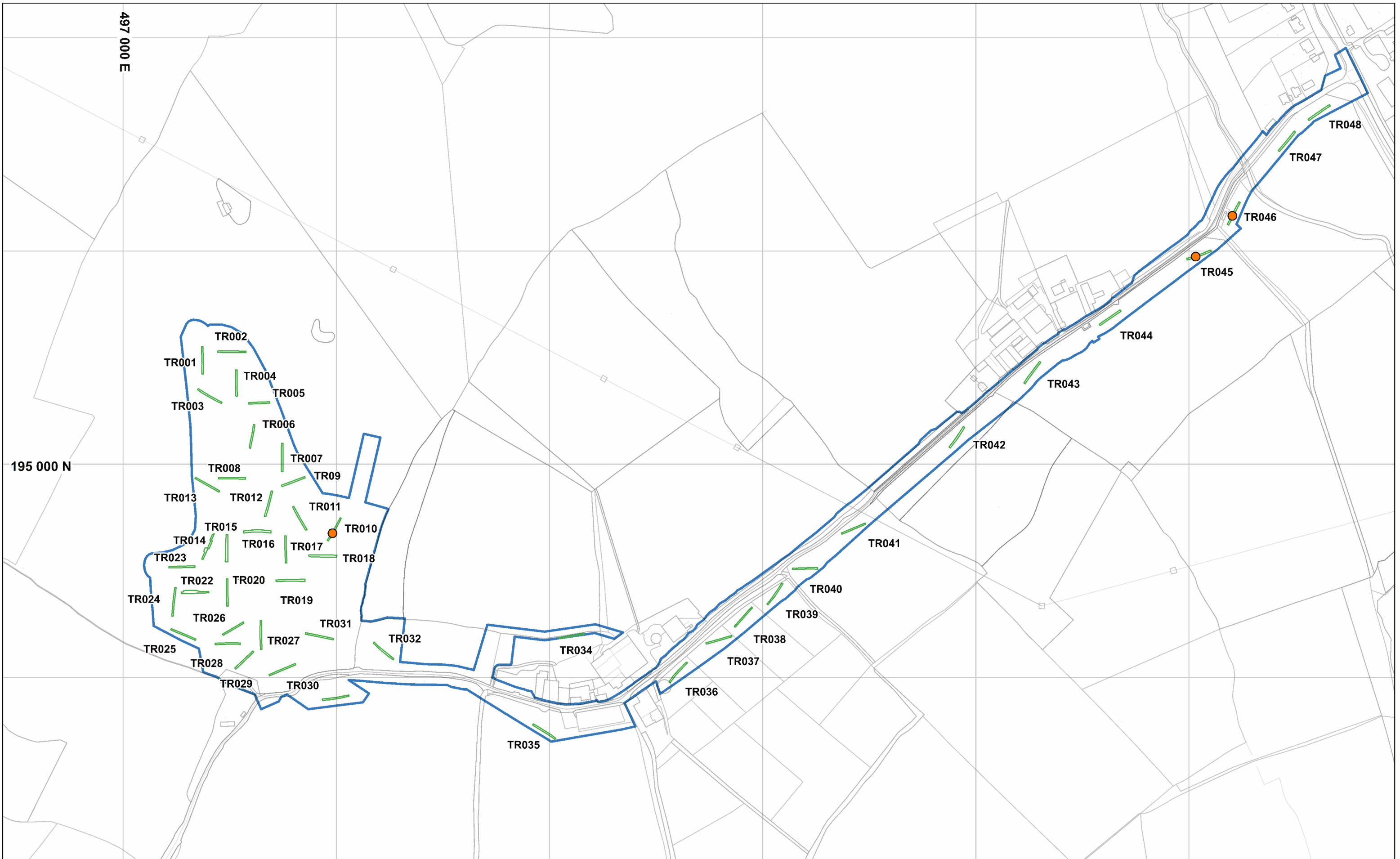
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**HS2**

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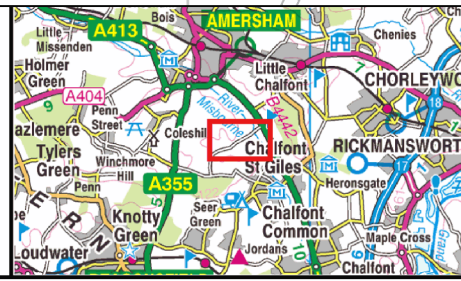
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**Legend**

- Site extent
- Excavated evaluation trench
- Location of undated archaeological feature



High Speed Two  
Figure 2. Location of undated archaeological features

Published

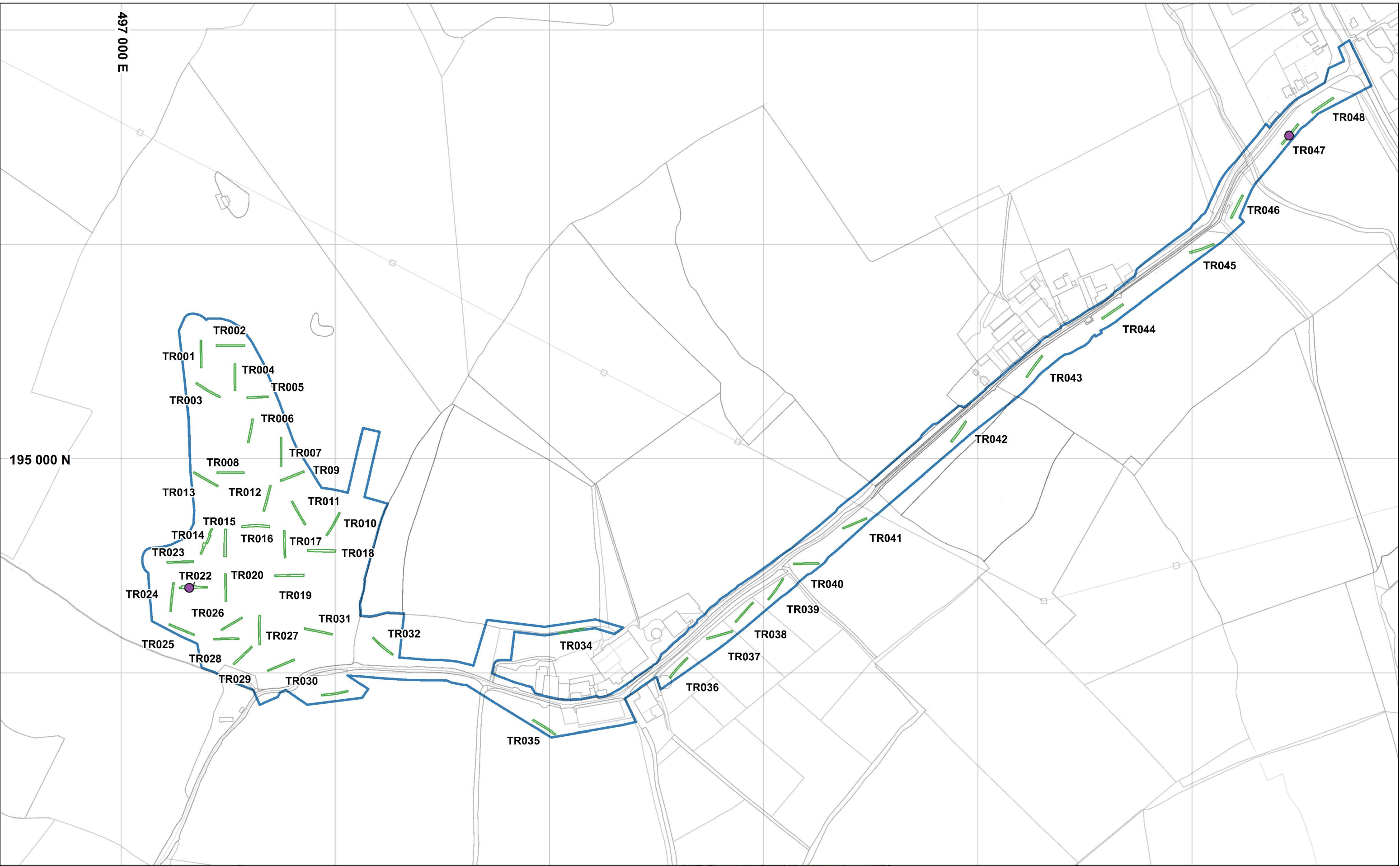
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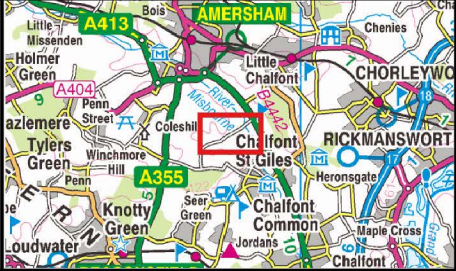
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- Legend**
- Site extent
  - Excavated evaluation trench
  - Location of Medieval to Post-medieval feature



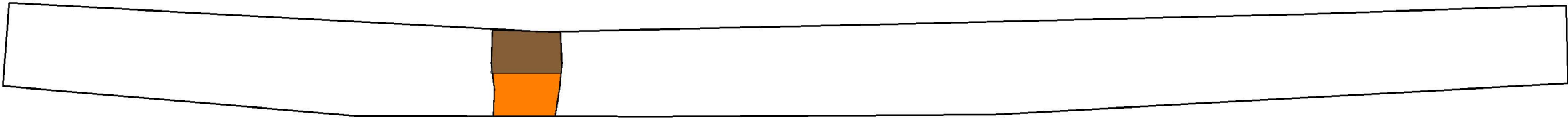
High Speed Two  
Figure 3. Location of Post medieval feature

Published

Scale at A3: 1:4,000

Doc Number: 1EW03-FUS-GI-MAP-CS02\_CL04-000013 Date: 14/02/20

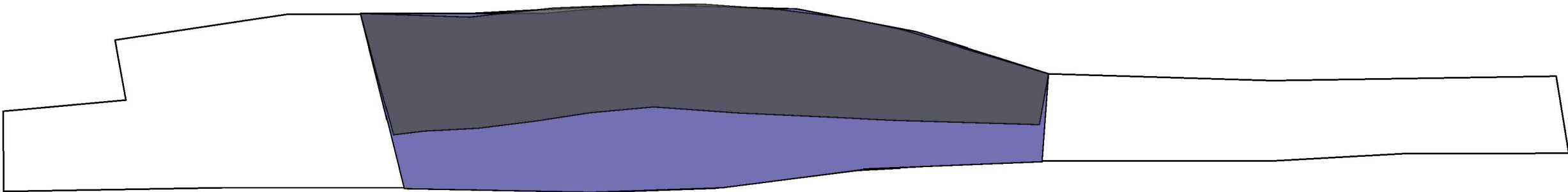
Trench 10



C201004



Trench 22



C202204



Trench 45



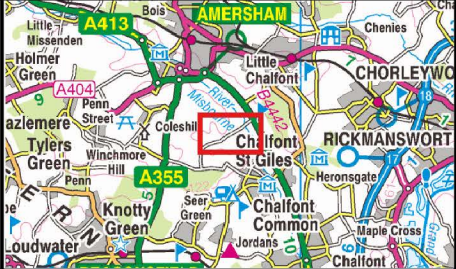
C204504



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Legend

- Excavated evaluation trench
- Undated feature
- Medieval to Post-medieval feature
- Excavated area

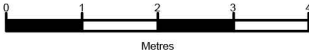


High Speed Two  
Figure 4. Details of trenches 10, 22 and 45

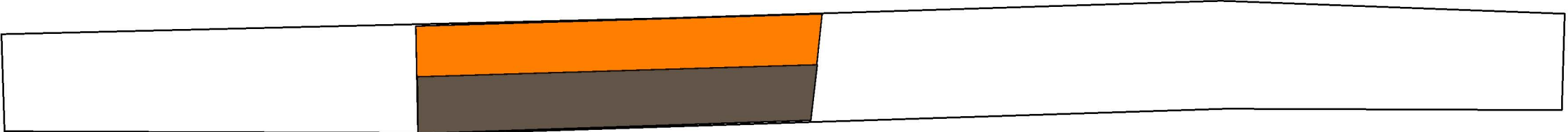
Published

HS2

Scale at A3: 1: 100



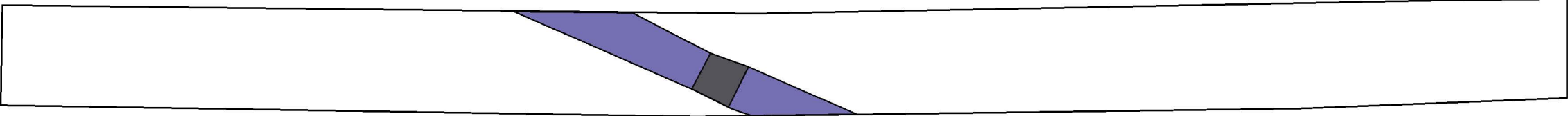
Trench 46



C204604



Trench 47







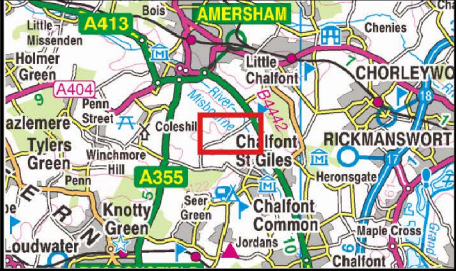
C204704



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Legend

-  Excavated evaluation trench
-  Undated feature
-  Medieval to Post-medieval feature
-  Excavated area

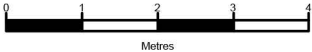


High Speed Two  
Figure 5. Details of trenches 46, 47

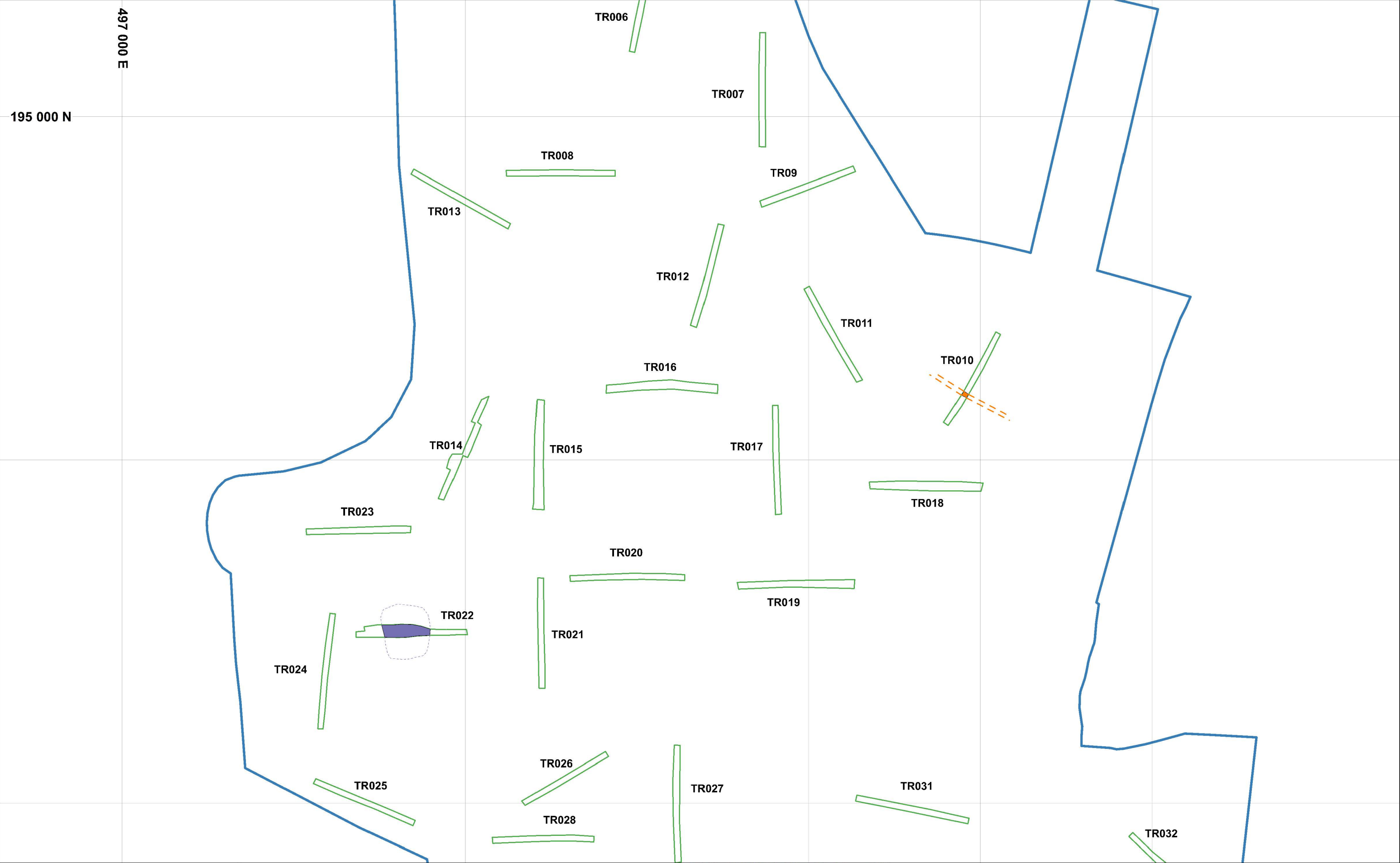
Published

HS2

Scale at A3: 1: 100





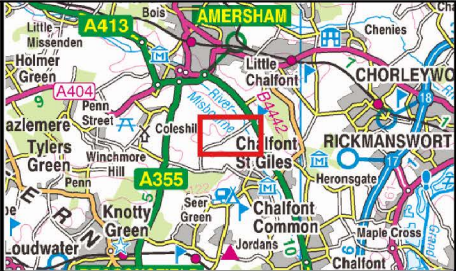


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**Legend**

- Site extent
- Excavated evaluation trench
- Undated archaeological feature
- Medieval to Post-medieval archaeological feature

- Extrapolated archaeological feature - undated
- Extrapolated archaeological feature - Medieval to Post-medieval



High Speed Two  
Figure 6. Projected features

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Scale at A3: 1: 1 000

Doc Number: 1EW03-FUS-GI-MAP-CS02\_CL04-000013 Date: 14/02/20

195 400 N

488 200 E

TR048

TR047

TR046

TR045

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Legend

Site extent

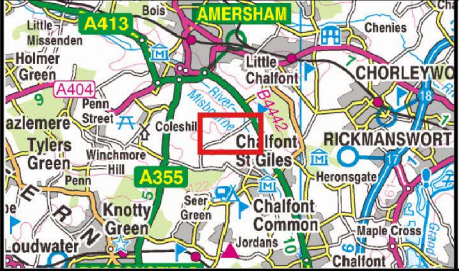
Excavated evaluation trench

Undated archaeological feature

Medieval to Post-medieval archaeological feature

Extrapolated archaeological feature - undated

Extrapolated archaeological feature - Medieval to Post-medieval

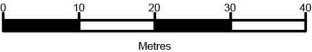


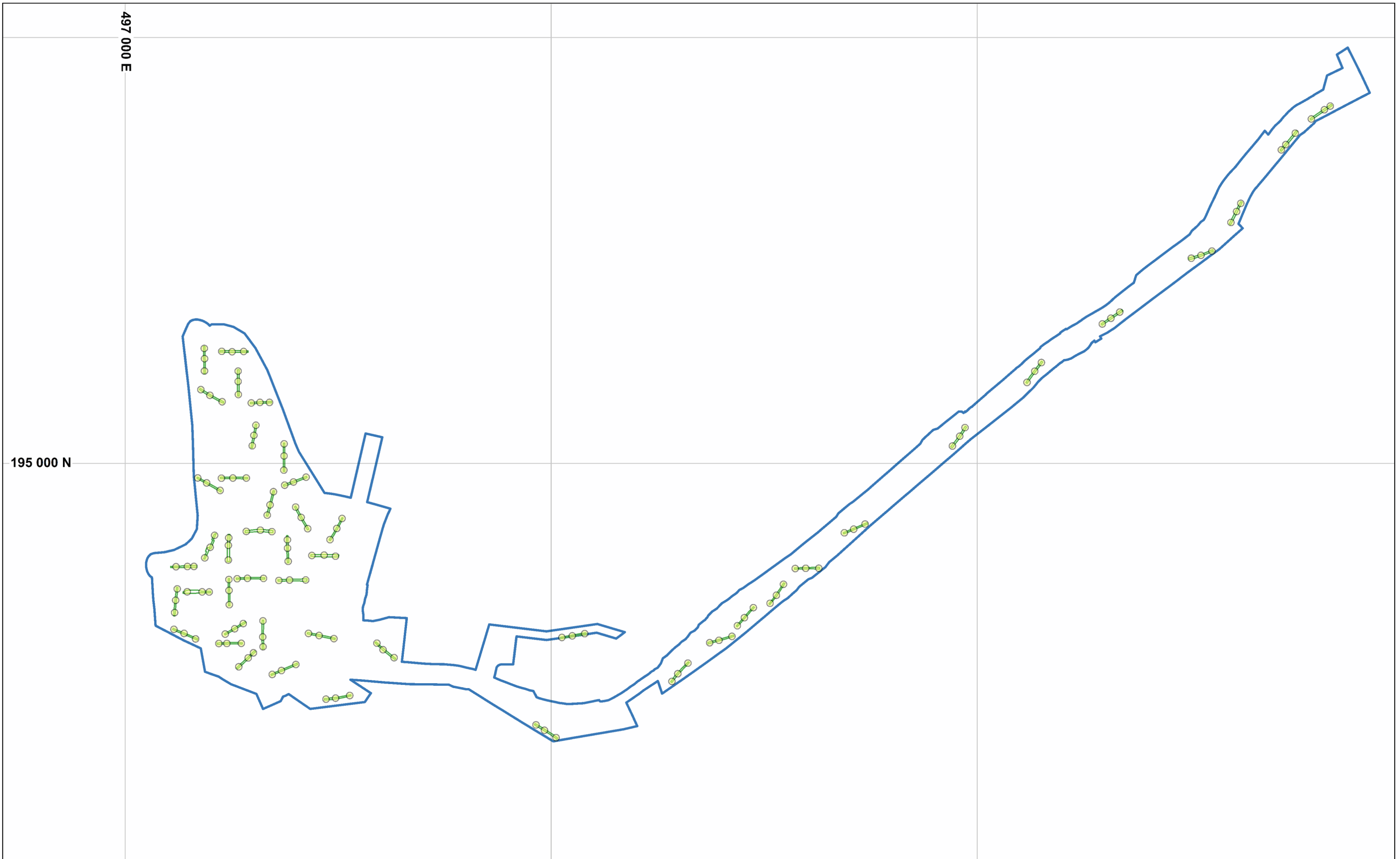
High Speed Two  
Figure 7. Projected features

Published

HS2

Scale at A3: 1: 1 000





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**Legend**

- Site extent
- Excavated evaluation trench
- Location of test pit

High Speed Two  
Figure 8. Location of test pits

*Published*

Scale at A3: 1: 4 000

Doc Number: 1EW03-FUS-GI-MAP-CS02\_CL04-000013 Date: 14/02/20

## Appendix 2 – Plates





Plate 1 - Ditch [201004], facing southeast





Plate 2 - Pit [202204]





Plate 3 - Palaeochannel [204504]





Plate 4 - Palaeochannel [204604]





Plate 5 - Ditch [204704]

## Appendix 3 - Context Register

| Trench | Context No. | Type  | Fill of: | Filled by: | Length (m) | Width (m) | Depth (m) | Description  | Interpretation |
|--------|-------------|-------|----------|------------|------------|-----------|-----------|--|----------------|
| 1      | 101         | Layer | -        | -          | -          | -         | 0.28      | Dark brown silt  | Topsoil        |
| 1      | 102         | Layer | -        | -          | -          | -         | 0.14      | Mid brown silty clay                                   | Subsoil        |
| 1      | 103         | Layer | -        | -          | -          | -         | -         | Orange brown silty clay                                | Natural        |
| 2      | 201         | Layer | -        | -          | -          | -         | 0.24      | Dark brown silt  | Topsoil        |
| 2      | 202         | Layer | -        | -          | -          | -         | 0.16      | Mid-dark brown silty clay, with chalk fleck inclusions | Subsoil        |
| 2      | 203         | Layer | -        | -          | -          | -         | -         | Orange brown silty clay                                | Natural        |
| 3      | 301         | Layer | -        | -          | -          | -         | 0.24      | Dark brown silt, with small angular stone inclusions   | Topsoil        |
| 3      | 302         | Layer | -        | -          | -          | -         | 0.18      | Mid brown silty clay, with chalk fleck inclusions      | Subsoil        |
| 3      | 303         | Layer | -        | -          | -          | -         | 0.1       | Mid Brown silty clay                                   | Colluvial      |
| 3      | 304         | Layer | -        | -          | -          | -         | -         | Orange brown silty clay                                | Natural        |
| 4      | 401         | Layer | -        | -          | -          | -         | 0.22      | Dark brown firm silty clay                             | Topsoil        |
| 4      | 402         | Layer | -        | -          | -          | -         | 0.44      | Mid brown silty clay, with subangular stone inclusions | Subsoil        |
| 4      | 403         | Layer | -        | -          | -          | -         | -         | Orange brown silty clay with chalk                     | Natural        |
| 5      | 501         | Layer | -        | -          | -          | -         | 0.24      | Dark brown silt  | Topsoil        |
| 5      | 502         | Layer | -        | -          | -          | -         | 0.16      | Mid brown silty clay                                   | Subsoil        |
| 5      | 503         | Layer | -        | -          | -          | -         | -         | Orange brown silty clay with chalk                     | Natural        |
| 6      | 601         | Layer | -        | -          | -          | -         | 0.34      | Dark brown silt  | Topsoil        |
| 6      | 602         | Layer | -        | -          | -          | -         | 0.26      | Mid brown silt   | Subsoil        |
| 6      | 603         | Layer | -        | -          | -          | -         | -         | Orange silty clay with chalk                           | Natural        |
| 7      | 701         | Layer | -        | -          | -          | -         | 0.2       | Dark brown clay silt                                   | Topsoil        |
| 7      | 702         | Layer | -        | -          | -          | -         | 0.18      | Orange brown silty clay                                | Subsoil        |
| 7      | 703         | Layer | -        | -          | -          | -         | -         | Orange clay  | Natural        |
| 8      | 801         | Layer | -        | -          | -          | -         | 0.2       | Dark grey brown  | Topsoil        |

| Trench | Context No. | Type  | Fill of: | Filled by: | Length (m) | Width (m) | Depth (m) | Description   | Interpretation |
|--------|-------------|-------|----------|------------|------------|-----------|-----------|---|----------------|
| 8      | 802         | Layer | -        | -          | -          | -         | 0.15      | Mid orange brown silty clay with moderately large flint inclusions                | Subsoil        |
| 8      | 803         | Layer | -        | -          | -          | -         | -         | Orange silty clay with chalk  | Natural        |
| 9      | 901         | Layer | -        | -          | -          | -         | 0.3       | Dark grey loose silt  | Topsoil        |
| 9      | 902         | Layer | -        | -          | -          | -         | 0.25      | Orange brown silt with occasional sub-rounded medium sized pebbles                | Subsoil        |
| 9      | 903         | Layer | -        | -          | -          | -         | -         | Light brown clay with fine chalk inclusions                                       | Natural        |
| 10     | 1001        | Layer | -        | -          | -          | -         | 0.2       | Dark brown silt   | Topsoil        |
| 10     | 1002        | Layer | -        | -          | -          | -         | 0.18      | Mid-dark brown silty clay, with chalk fleck inclusions                            | Subsoil        |
| 10     | 1003        | Layer | -        | -          | -          | -         | -         | Light brown clay with chalk   | Natural        |
| 10     | 1004        | Cut   | -        | 1005       | -          | 1.1       | 0.06      | Cut of flat bottomed, linear feature, possible hedgerow                           | Cut of ditch   |
| 10     | 1005        | Fill  | 1004     | -          | -          | 1.1       | 0.06      | Mid brown firm silty clay with sparse angular stone and charcoal flack inclusions | Fill of ditch  |
| 11     | 1101        | Layer | -        | -          | -          | -         | 0.24      | Dark grey loose silt  | Topsoil        |
| 11     | 1102        | Layer | -        | -          | -          | -         | 0.3       | Orange brown clay silt with occasional medium to large stone inclusions           | Subsoil        |
| 11     | 1103        | Layer | -        | -          | -          | -         | -         | Light brown clay with fine chalk inclusions                                       | Natural        |
| 12     | 1201        | Layer | -        | -          | -          | -         | 0.22      | Dark brown firm clay silt   | Topsoil        |
| 12     | 1202        | Layer | -        | -          | -          | -         | 0.24      | Light orange brown firm silty clay  | Subsoil        |
| 12     | 1203        | Layer | -        | -          | -          | -         | -         | Dark orange brown silty clay with chalk   | Natural        |
| 13     | 1301        | Layer | -        | -          | -          | -         | 0.45      | Dark grey brown silt  | Topsoil        |
| 13     | 1302        | Layer | -        | -          | -          | -         | 0.25      | Mid orange brown silty clay with mid-sized flint inclusions                       | Subsoil        |
| 13     | 1303        | Layer | -        | -          | -          | -         | -         | Mid orange brown silty clay with chalk  | Natural        |
| 14     | 1401        | Layer | -        | -          | -          | -         | 0.2       | Dark brown silt   | Topsoil        |
| 14     | 1402        | Layer | -        | -          | -          | -         | 0.1       | Mid brown silt  | Subsoil        |
| 14     | 1403        | Layer | -        | -          | -          | -         | -         | Light brown orange silt clay with chalk inclusions                                | Natural        |
| 15     | 1501        | Layer | -        | -          | -          | -         | 0.2       | Dark grey brown silt clay with occasional small stone inclusions                  | Topsoil        |

| Trench | Context No. | Type  | Fill of: | Filled by: | Length (m) | Width (m) | Depth (m) | Description   | Interpretation |
|--------|-------------|-------|----------|------------|------------|-----------|-----------|---|----------------|
| 15     | 1502        | Layer | -        | -          | -          | -         | 0.1       | Dark orange brown silty clay with occasional small stone inclusions                         | Subsoil        |
| 15     | 1503        | Layer | -        | -          | -          | -         | -         | Light orange brown silty clay with common chalk and flint                                   | Natural        |
| 16     | 1601        | Layer | -        | -          | -          | -         | 0.2       | Dark grey brown silt  | Topsoil        |
| 16     | 1602        | Layer | -        | -          | -          | -         | 0.4       | Dark orange brown silt clay with moderate quantities of small to mid-sized stone inclusions | Subsoil        |
| 16     | 1603        | Layer | -        | -          | -          | -         | -         | Dark orange brown silty clay with chalk and flint   | Natural        |
| 17     | 1701        | Layer | -        | -          | -          | -         | 0.23      | Dark grey brown silt  | Topsoil        |
| 17     | 1702        | Layer | -        | -          | -          | -         | 0.31      | Dark orange brown clay silt   | Subsoil        |
| 17     | 1703        | Layer | -        | -          | -          | -         | 0.38      | Dark grey brown silt clay with frequent chalk and flint inclusions                          | Colluvial      |
| 17     | 1704        | Layer | -        | -          | -          | -         | 0.18      | Dark orange brown clay silt   | Colluvial      |
| 17     | 1705        | Layer | -        | -          | -          | -         | -         | Dark orange brown clay silt   | Natural        |
| 18     | 1801        | Layer | -        | -          | -          | -         | 0.25      | Dark grey brown silt  | Topsoil        |
| 18     | 1802        | Layer | -        | -          | -          | -         | 0.1       | Mid brown orange with moderate quantities of mid-sized stone inclusions                     | Subsoil        |
| 18     | 1803        | Layer | -        | -          | -          | 0.75      | 0.2       | Mid-light brown orange silt clay  | Clay layer     |
| 18     | 1804        | Layer | -        | -          | -          | -         | -         | Light brown clay with frequent chalk inclusions   | Natural        |
| 19     | 1901        | Layer | -        | -          | -          | -         | 0.2       | Dark grey brown silt clay with occasional small stone inclusions                            | Topsoil        |
| 19     | 1902        | Layer | -        | -          | -          | -         | 0.15      | Dark orange greyish brown silt clay   | Subsoil        |
| 19     | 1903        | Layer | -        | -          | -          | -         | 0.1       | Mid orange grey brown silt clay with small flint inclusions                                 | Colluvial      |
| 19     | 1904        | Layer | -        | -          | -          | -         | 0.1       | Dark orange-grey brown silt clay with frequent small flint                                  | Colluvial      |
| 19     | 1905        | Layer | -        | -          | -          | -         | 0.2       | Mid orange-grey brown silt clay with frequent small flint                                   | Colluvial      |
| 19     | 1906        | Layer | -        | -          | -          | -         | 0.4       | Dark grey brown silt clay with occasional large flint nodules                               | Colluvial      |
| 19     | 1907        | Layer | -        | -          | -          | -         | -         | Mid grey brown flinty gravel  | Natural        |

| Trench | Context No. | Type  | Fill of: | Filled by: | Length (m) | Width (m) | Depth (m) | Description  | Interpretation      |
|--------|-------------|-------|----------|------------|------------|-----------|-----------|--|---------------------|
| 20     | 2001        | Layer | -        | -          | -          | -         | 0.3       | Dark grey brown silt   | Topsoil             |
| 20     | 2002        | Layer | -        | -          | -          | -         | 0.15      | Mid orange brown silt with occasional mid-sized chalk and flint inclusions                           | Subsoil             |
| 20     | 2003        | Layer | -        | -          | -          | -         | -         | Chalk  | Natural             |
| 21     | 2101        | Layer | -        | -          | -          | -         | 0.2       | Dark grey brown silt   | Topsoil             |
| 21     | 2102        | Layer | -        | -          | -          | -         | 0.1       | Mid orange brown silt clay with occasional small chalk and flint inclusions                          | Subsoil             |
| 21     | 2103        | Layer | -        | -          | -          | -         | -         | Chalk  | Natural             |
| 22     | 2201        | Layer | -        | -          | -          | -         | 0.2       | Dark grey brown silt   | Topsoil             |
| 22     | 2202        | Layer | -        | -          | -          | -         | 0.4       | Mid brown silt with occasional small chalk and flint inclusions                                      | Subsoil             |
| 22     | 2203        | Layer | -        | -          | -          | -         | -         | Chalk  | Natural             |
| 22     | 2204        | Cut   | -        | 2205/2206  | -          | 14.92     | 0.86      | Cut of large quarry pit, with a steep sloping western side, flat base and gradual sloping east side. | Cut of Pit          |
| 22     | 2205        | Fill  | 2204     | -          | -          | 14.92     | 0.23      | Firm brown silt clay with frequent flint and chalk nodule inclusions                                 | Fill of pit         |
| 22     | 2206        | Fill  | 2204     | -          | -          | 7.4       | 0.6       | Firm brown clay with rare stone inclusions and charcoal flecking                                     | Upper fill of pit   |
| 22     | 2207        | Fill  | 2204     | -          | -          | 8.6       | 0.36      | Dark brown friable silt with large flint and charcoal fleck inclusions                               | Primary fill of pit |
| 23     | 2301        | Layer | -        | -          | -          | -         | 0.28      | Dark grey brown silt   | Topsoil             |
| 23     | 2302        | Layer | -        | -          | -          | -         | 0.65      | Light brown orange silt with common mid-sized chalk inclusions                                       | Subsoil             |
| 23     | 2303        | Layer | -        | -          | -          | -         | -         | Chalk  | Natural             |
| 24     | 2401        | Layer | -        | -          | -          | -         | 0.18      | Dark grey brown silt   | Topsoil             |
| 24     | 2402        | Layer | -        | -          | -          | -         | 0.08      | Mid grey brown silty clay with flint and gravel inclusions   | Subsoil             |
| 24     | 2403        | Layer | -        | -          | -          | -         | -         | Light brown silt with common chalk and flint nodules   | Natural             |
| 25     | 2501        | Layer | -        | -          | -          | -         | 0.26      | Dark brown silt  | Topsoil             |
| 25     | 2502        | Layer | -        | -          | -          | -         | 0.34      | Mid brown silty clay with frequent chalk flecks  | Subsoil             |

| Trench | Context No. | Type  | Fill of: | Filled by: | Length (m) | Width (m) | Depth (m) | Description   | Interpretation           |
|--------|-------------|-------|----------|------------|------------|-----------|-----------|---|--------------------------|
| 25     | 2503        | Layer | -        | -          | -          | -         | 0.11      | Mid brown silty clay  | Colluvial                |
| 25     | 2504        | Layer | -        | -          | -          | -         | -         | Mid-light brown silty clay and chalk  | Natural                  |
| 26     | 2601        | Layer | -        | -          | -          | -         | 0.2       | Dark brown silt   | Topsoil                  |
| 26     | 2602        | Layer | -        | -          | -          | -         | 0.1       | Mid brown silt clay   | Subsoil                  |
| 26     | 2603        | Layer | -        | -          | -          | -         | -         | Mid orange silt clay with chalk   | Natural                  |
| 27     | 2701        | Layer | -        | -          | -          | -         | 0.18      | Mid brown firm silty clay with occasional flint   | Topsoil                  |
| 27     | 2702        | Layer | -        | -          | -          | -         | 0.7       | Orange brown firm silty clay  | Subsoil                  |
| 27     | 2703        | Layer | -        | -          | -          | -         | -         | Orange clay and gravel  | Natural                  |
| 28     | 2801        | Layer | -        | -          | -          | -         | 0.2       | Dark grey brown silt clay with occasional small inclusions                                  | Topsoil                  |
| 28     | 2802        | Layer | -        | -          | -          | -         | 0.7       | Mid orange brown silty clay   | Subsoil                  |
| 28     | 2803        | Layer | -        | -          | -          | -         | -         | Chalk   | Natural                  |
| 29     | 2901        | Layer | -        | -          | -          | -         | 0.1       | Dark grey brown silty clay  | Topsoil                  |
| 29     | 2902        | Layer | -        | -          | -          | -         | 0.2       | Mid orange brown silty clay with occasional small pebbles                                   | Subsoil                  |
| 29     | 2903        | Layer | -        | -          | -          | -         | 0.1       | Dark brownish grey silty clay   | Colluvial                |
| 29     | 2904        | Layer | -        | -          | -          | -         | -         | Flint gravel  | Pleistocene glacial till |
| 30     | 3001        | Layer | -        | -          | -          | -         | 0.7       | Dark grey brown silt  | Topsoil                  |
| 30     | 3002        | Layer | -        | -          | -          | -         | 0.2       | Dark orange brown silt clay with moderate quantities of small to mid-sized flint inclusions | Subsoil                  |
| 30     | 3003        | Layer | -        | -          | -          | -         | -         | Orange silt clay with frequent stone inclusions   | Natural                  |
| 31     | 3101        | Layer | -        | -          | -          | -         | 0.25      | Dark grey loose silt  | Topsoil                  |
| 31     | 3102        | Layer | -        | -          | -          | -         | 0.3       | Orange brown clay silt occasional medium to large stone inclusions                          | Subsoil                  |
| 31     | 3103        | Layer | -        | -          | -          | -         | -         | Orange silt clay with frequent stone inclusions   | Natural                  |
| 32     | 3201        | Layer | -        | -          | -          | -         | 0.25      | Grey-red brown clay silt with occasional mid-sized flint nodules                            | Topsoil                  |

| Trench | Context No. | Type  | Fill of: | Filled by: | Length (m) | Width (m) | Depth (m) | Description   | Interpretation |
|--------|-------------|-------|----------|------------|------------|-----------|-----------|---|----------------|
| 32     | 3202        | Layer | -        | -          | -          | -         | 0.24      | Dark red brown clay silt with occasional mid-sized flint nodules                | Subsoil        |
| 32     | 3203        | Layer | -        | -          | -          | -         | -         | Red brown clay silt with occasional large flint nodules                         | Natural        |
| 33     | 3301        | Layer | -        | -          | -          | -         | 0.28      | Black brown silt with occasional mid-sized flint nodules                        | Topsoil        |
| 33     | 3302        | Layer | -        | -          | -          | -         | 0.44      | Dark red brown clay silt with occasional large flint nodules                    | Subsoil        |
| 33     | 3303        | Layer | -        | -          | -          | -         | -         | Red brown clay silt with occasional large flint nodules and degraded chalk      | Natural        |
| 34     | 3401        | Layer | -        | -          | -          | -         | 0.09      | Grey brown compact sandy silt and gravel with mid-sized flint nodules           | Topsoil        |
| 34     | 3402        | Layer | -        | -          | -          | -         | 0.36      | Dark red brown compact silt clay with mid-sized flint nodules                   | Subsoil        |
| 34     | 3403        | Layer | -        | -          | -          | -         | 0.2       | Dark grey brown compact sandy silt and gravel with mid-sized flint nodules      | Colluvial      |
| 34     | 3404        | Layer | -        | -          | -          | -         | 0.2       | Dark brown compact sandy clay silt with mid-sized flint nodules                 | Colluvial      |
| 34     | 3405        | Layer | -        | -          | -          | -         | -         | Red brown compact sandy silt clay with mid-sized flint nodules                  | Natural        |
| 35     | 3501        | Layer | -        | -          | -          | -         | 0.28      | Dark grey brown compact sandy silt and gravel with mid-sized flint nodules      | Topsoil        |
| 35     | 3502        | Layer | -        | -          | -          | -         | 0.26      | Dark brown compact sandy clay silt with large flint nodules                     | Subsoil        |
| 35     | 3503        | Layer | -        | -          | -          | -         | -         | Red brown compact sandy silt clay with large flint nodules and degraded chalk   | Natural        |
| 36     | 3601        | Layer | -        | -          | -          | -         | 0.24      | Dark brown compact sandy silt with large flint nodules                          | Topsoil        |
| 36     | 3602        | Layer | -        | -          | -          | -         | 0.22      | Dark red brown compact sandy clay silt with large flint and small chalk nodules | Subsoil        |
| 36     | 3603        | Layer | -        | -          | -          | -         | 0.2       | Dark brown compact sandy clay silt and large flint nodules                      | Colluvial      |
| 36     | 3604        | Layer | -        | -          | -          | -         | -         | Red brown compact sandy clay silt with large flint nodules                      | Natural        |
| 36     | 3605        | Layer | -        | -          | -          | -         | 0.4       | Dark brown compact sandy clay silt with very large flint nodules                | Subsoil        |
| 37     | 3701        | Layer | -        | -          | -          | -         | 0.22      | Dark grey brown compact sandy silt and gravel with large flint nodules          | Topsoil        |

| Trench | Context No. | Type  | Fill of: | Filled by: | Length (m) | Width (m) | Depth (m) | Description   | Interpretation |
|--------|-------------|-------|----------|------------|------------|-----------|-----------|---|----------------|
| 37     | 3702        | Layer | -        | -          | -          | -         | 0.44      | Dark brown compact sandy clay silt with large flint nodules   | Subsoil        |
| 37     | 3703        | Layer | -        | -          | -          | -         | -         | Red brown compact sandy clay silt with large flint nodules  | Natural        |
| 38     | 3801        | Layer | -        | -          | -          | -         | 0.26      | Dark grey brown compact sandy silt and gravel with large flint nodules  | Topsoil        |
| 38     | 3802        | Layer | -        | -          | -          | -         | 0.42      | Dark red brown compact sandy clay silt with large flint nodules   | Subsoil        |
| 38     | 3803        | Layer | -        | -          | -          | -         | -         | Red brown compact sandy clay silt with large flint nodules  | Natural        |
| 39     | 3901        | Layer | -        | -          | -          | -         | 0.28      | Dark grey brown compact sandy silt and gravel with large flint nodules  | Topsoil        |
| 39     | 3902        | Layer | -        | -          | -          | -         | 0.5       | Dark red brown compact sandy clay silt with large flint nodules   | Subsoil        |
| 39     | 3903        | Layer | -        | -          | -          | -         | 0.45      | Red brown compact sandy clay silt with large flint nodules  | Colluvial      |
| 39     | 3904        | Layer | -        | -          | -          | -         | -         | Red brown compact sandy clay silt with very large flint nodules and patches of degraded chalk                   | Natural        |
| 40     | 4001        | Layer | -        | -          | -          | -         | 0.3       | Dark brown compact sandy silt and gravel with mid-sized flint nodules   | Topsoil        |
| 40     | 4002        | Layer | -        | -          | -          | -         | 0.26      | Dark brown compact sandy clay silt with large flint nodules   | Subsoil        |
| 40     | 4003        | Layer | -        | -          | -          | -         | 0.42      | Red brown compact sandy clay silt with large flint nodules  | Colluvial      |
| 40     | 4004        | Layer | -        | -          | -          | -         | -         | Yellow-red brown compact sandy clay silt with large flint nodules, rounded gravel and patches of degraded chalk | Natural        |
| 41     | 4101        | Layer | -        | -          | -          | -         | 28        | Dark brown compact sandy silt with mid-sized flint nodules  | Topsoil        |
| 41     | 4102        | Layer | -        | -          | -          | -         | 49        | Dark brown compact sandy clay silt with large flint nodules   | Subsoil        |
| 41     | 4103        | Layer | -        | -          | -          | -         | -         | Red brown compact sandy clay silt with large flint nodules, rounded gravels and sandy patches                   | Natural        |
| 42     | 4201        | Layer | -        | -          | -          | -         | 0.2       | Grey brown friable sandy silt with moderate quantities of small to mid-sized rounded stone and flint inclusions | Topsoil        |



| Trench | Context No. | Type  | Fill of: | Filled by:                       | Length (m) | Width (m) | Depth (m) | Description   | Interpretation |
|--------|-------------|-------|----------|----------------------------------|------------|-----------|-----------|---|----------------|
| 42     | 4202        | Layer | -        | -                                | -          | -         | 0.32      | Red brown friable sandy silt with frequent small to large sub angular and rounded stone inclusions                  | Subsoil        |
| 42     | 4203        | Layer | -        | -                                | -          | -         | -         | Orange brown firm sandy silt with frequent small to large stone inclusions  | Natural        |
| 43     | 4301        | Layer | -        | -                                | -          | -         | 0.26      | Dark grey brown friable sand silt with frequent rounded stone and subangular flint                                  | Topsoil        |
| 43     | 4302        | Layer | -        | -                                | -          | -         | 0.32      | Red brown friable sandy silt with abundant large subangular flint inclusions and rounded stones                     | Subsoil        |
| 43     | 4303        | Layer | -        | -                                | -          | -         | -         | Orange brown firm sandy silt with frequent small to large sub angular flint and round stone inclusions              | Natural        |
| 44     | 4401        | Layer | -        | -                                | -          | -         | 0.22      | Dark grey brown friable sandy silt with moderate small to large sub angular flint and rounded stone inclusions      | Topsoil        |
| 44     | 4402        | Layer | -        | -                                | -          | -         | 0.24      | Red brown friable sandy silt with moderate small to large flint and rounded stone inclusions                        | Subsoil        |
| 44     | 4403        | Layer | -        | -                                | -          | -         | -         | Dark red brown friable sandy silt with abundant small to large flint and rounded stone inclusions                   | Natural        |
| 44     | 4404        | Layer | -        | -                                | -          | -         | 0.66      | Dark orange brown friable sandy silt with occasional large subangular flint and mid-sized rounded stone inclusions. | Colluvial      |
| 45     | 4501        | Layer | -        | -                                | -          | -         | 0.26      | Grey brown friable sandy silt with moderate small to medium sub rounded flint and stone inclusions                  | Topsoil        |
| 45     | 4502        | Layer | -        | -                                | -          | -         | 0.32      | Orange brown friable sandy silt with frequent small to large rounded stones and flint nodules                       | Subsoil        |
| 45     | 4503        | Layer | -        | -                                | -          | -         | -         | Orangey brown friable sandy silt with abundant up to large rounded stone and flint nodule inclusions                | Natural        |
| 45     | 4504        | Cut   | -        | 4505/4506/<br>4507/4508/<br>4509 | -          | 7.75      | 0.8       | NW - SE oriented channel, with gentle sloping sides and a flat base   | Palaeochannel  |

| Trench | Context No. | Type  | Fill of: | Filled by:              | Length (m) | Width (m) | Depth (m) | Description   | Interpretation              |
|--------|-------------|-------|----------|-------------------------|------------|-----------|-----------|---|-----------------------------|
| 45     | 4505        | Fill  | 4505     | -                       | -          | -         | 0.78      | Well sorted fine yellow sand  | Lower fill of palaeochannel |
| 45     | 4506        | Fill  | 4505     | -                       | -          | -         | 0.44      | Grey brown silty clay with rare small to mid-sized rounded stone inclusions   | Fill of palaeochannel       |
| 45     | 4507        | Fill  | 4505     | -                       | -          | -         | 0.24      | Light grey yellow gravel silt   | Fill of palaeochannel       |
| 45     | 4508        | Fill  | 4505     | -                       | -          | -         | 0.2       | Dark yellow brown silt sand   | Fill of palaeochannel       |
| 45     | 4509        | Fill  | 4505     | -                       | -          | -         | 0.48      | Grey brown silt clay with rare small to mid-sized rounded stone inclusions  | Fill of palaeochannel       |
| 46     | 4601        | Layer | -        | -                       | -          | -         | 0.33      | Grey brown friable sandy silt with moderate small to medium sub rounded flint and stone inclusions                          | Topsoil                     |
| 46     | 4602        | Layer | -        | -                       | -          | -         | 0.4       | Light grey brown friable sandy silt with frequent small to large rounded stones and flint nodules                           | Subsoil                     |
| 46     | 4603        | Layer | -        | -                       | -          | -         | -         | Light grey brown friable sandy silt with occasional mid-sized rounded stone and flint nodule inclusions                     | Natural                     |
| 46     | 4604        | Cut   | -        | 4605/4606/<br>4607/4608 | -          | 2.6       | 0.9       | NW - SE oriented channel, with gentle sloping sides, a flat base and a small v-shaped channel profile in the SW of the base | Palaeochannel               |
| 46     | 4605        | Fill  | 4604     | -                       | -          | 6.7       | 0.5       | Mid grey brown silt stone matrix  | Fill of palaeochannel       |
| 46     | 4606        | Fill  | 4604     | -                       | -          | 2.74      | 0.36      | Fine well sorted grey sand  | Fill of palaeochannel       |
| 46     | 4607        | Fill  | 4604     | -                       | -          | 2         | 0.4       | Mid grey brown silt stone matrix  | Fill of palaeochannel       |
| 46     | 4608        | Fill  | 4604     | -                       | -          | 2.8       | 0.54      | Dark grey brown sandy silt  | Fill of palaeochannel       |
| 47     | 4701        | Layer | -        | -                       | -          | -         | 0.27      | Dark grey brown friable sandy silt with rare small rounded stones   | Topsoil                     |
| 47     | 4702        | Layer | -        | -                       | -          | -         | 0.36      | Grey brown friable sandy silt with mid-sized stones and flint   | Subsoil                     |
| 47     | 4703        | Layer | -        | -                       | -          | -         | -         | Light grey friable silt with frequent up to large flint nodules and rounded stones  | Natural                     |
| 47     | 4704        | Cut   | -        | 4705                    | -          | 0.8       | 0.32      | E-W oriented straight shallow ditch with steep sides and a flat base  | Cut of Linear               |

| Trench | Context No. | Type  | Fill of: | Filled by: | Length (m) | Width (m) | Depth (m) | Description   | Interpretation |
|--------|-------------|-------|----------|------------|------------|-----------|-----------|---|----------------|
| 47     | 4705        | Fill  | 4704     | -          | -          | 0.8       | 0.32      | Grey brown friable sandy silt with common up to large subangular stone inclusions towards the base                | Fill of linear |
| 48     | 4801        | Layer | -        | -          | -          | -         | 0.2       | Grey brown friable sandy silt with moderate quantities of small to mid-sized rounded stone inclusions             | Topsoil        |
| 48     | 4802        | Layer | -        | -          | -          | -         | 0.46      | Orange brown firm sandy silt with frequent small to large stone and flint inclusions and occasional sandy patches | Subsoil        |
| 48     | 4803        | Layer | -        | -          | -          | -         | -         | Red brown firm sandy silt with frequent small to large stone and flint inclusions and occasional sandy patches    | Natural        |

## Appendix 4 – Oasis Form

# OASIS DATA COLLECTION FORM:

## England

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### Printable version

**OASIS ID: hs2infra1-383652**

#### Project details

|  |  |
|--|--|
| Project name                           | Upper Bottom House Farm, Chalfont St. Giles, Bucks   |
| Short description of the project       | A trial trench evaluation comprising 48 trenches across the Site, targeted on geophysical, cropmark and LiDAR imagery and blank areas, was designed to archaeologically investigate the Site. Three trenches revealed archaeological features, including two undated ditches and a large post-medieval quarry pit. Two further trenches revealed palaeochannels to the south of the current River Misbourne. |
| Project dates                          | Start: 14-12-2018 End: 18-12-2019  |
| Previous/future work                   | Yes / No   |
| Any associated project reference codes | 1C18BOTT - Sitecode  |
| Type of project                        | Field evaluation   |
| Current Land use                       | Cultivated Land 1 - Minimal cultivation  |
| Monument type                          | DITCH Uncertain  |
| Monument type                          | QUARRY PIT Post Medieval   |
| Methods & techniques                   | ""Targeted Trenches""  |
| Development type                       | Rail links/railway-related infrastructure (including Channel Tunnel)   |
| Project location                       |  |
| Country                                | England  |
| Site location                          | BUCKINGHAMSHIRE CHILTERN CHALFONT ST GILES Upper Bottom House Farm   |
| Study area                             | 13 Hectares  |
| Site coordinates                       | SU 97524 94751 51.642621166217 -0.590441298676 51 38 33 N 000 35 25 W Point  |

|                               |   |
|-------------------------------|---|
| Project creators              |   |
| Name of Organisation          | INFRA   |
| Project brief originator      | Fusion  |
| Project design originator     | INFRA   |
| Project director/manager      | David Bonner  |
| Project supervisor            | Louis Stafford  |
| Project archives              |   |
| Physical Archive Exists?      | No  |
| Digital Media available       | "GIS","Images raster / digital photography","Spreadsheets"  |
| Paper Media available         | "Context sheet","Matrices","Plan","Report","Section"  |
| Project bibliography          |   |
| 1                             |   |
| Publication type              | Grey literature (unpublished document/manuscript)   |
| Title                         | AWHe C2a Fieldwork Report for Trial Trench Evaluation at C10007 Upper Bottom House Farm Vent Shaft - Chalfont St. Giles - Buckinghamshire (AC100/9) |
| Author(s)/Editor(s)           | Stafford, L.  |
| Date                          | 2020  |
| Issuer or publisher           | INFRA   |
| Place of issue or publication | Cardiff   |
| Entered by                    | Rachel Morgan (rachel.morgan@rubiconheritage.com)   |
| Entered on                    | 4 February 2020   |

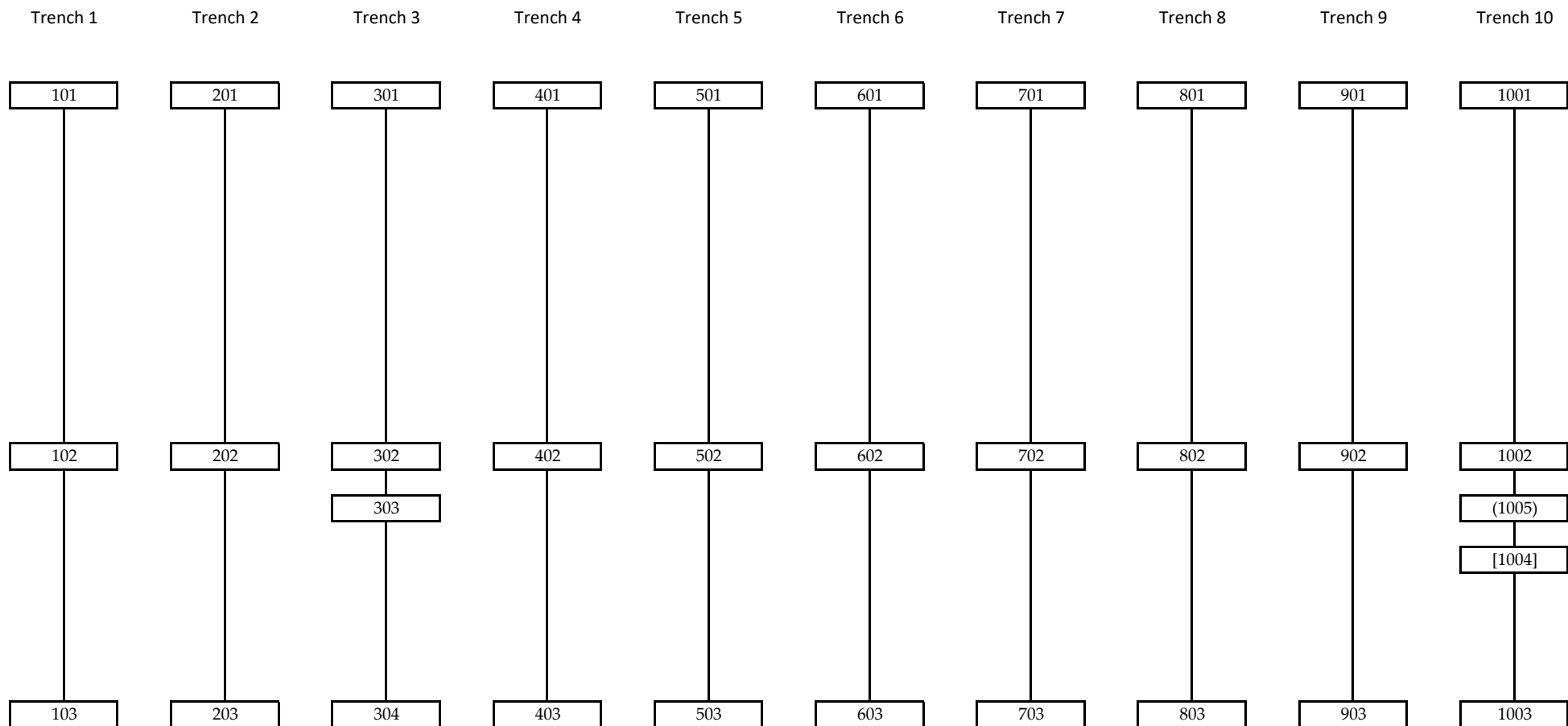
## OASIS:

Please e-mail [Historic England](#) for OASIS help and advice

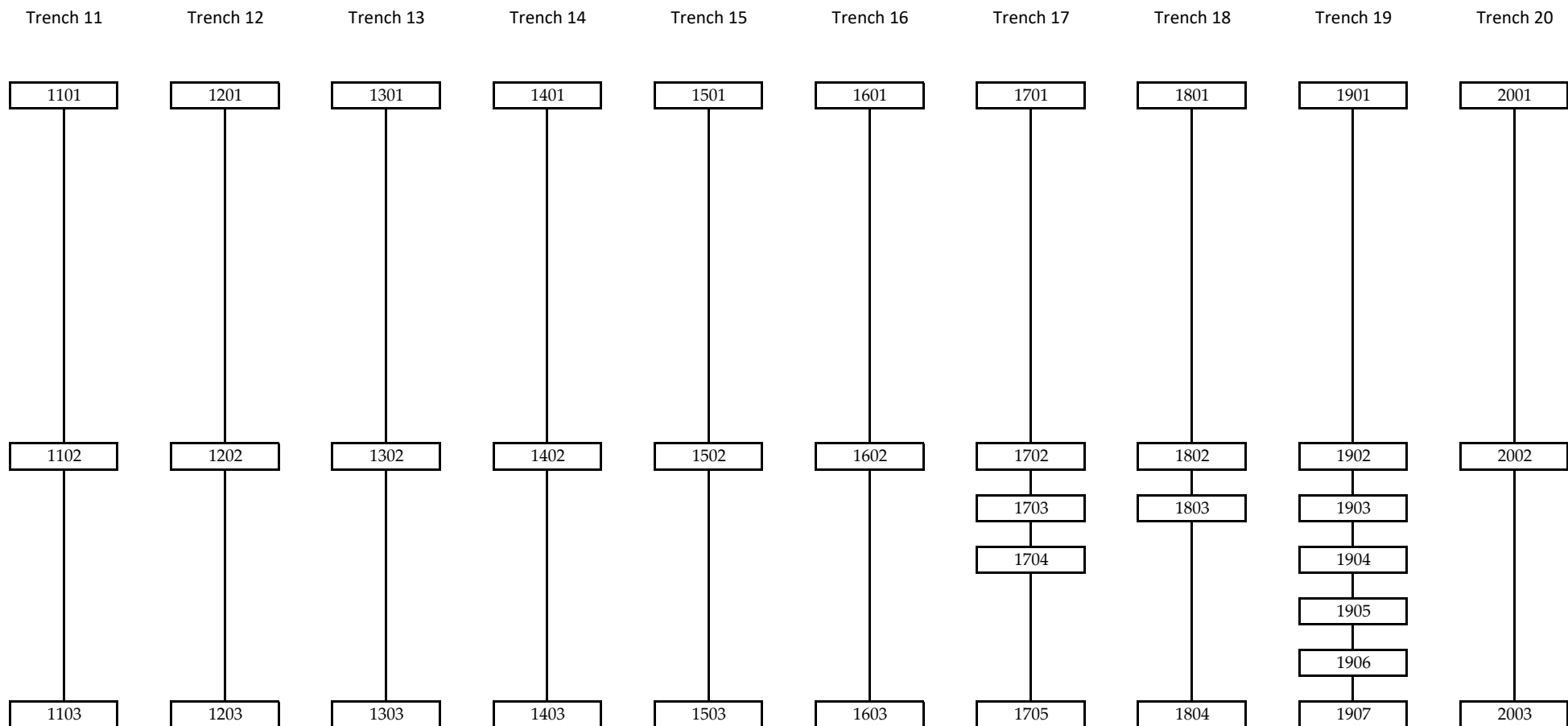
© ADS 1996-2012 Created by [Jo Gilham and Jen Mitcham, email](#) Last modified Wednesday 9 May 2012

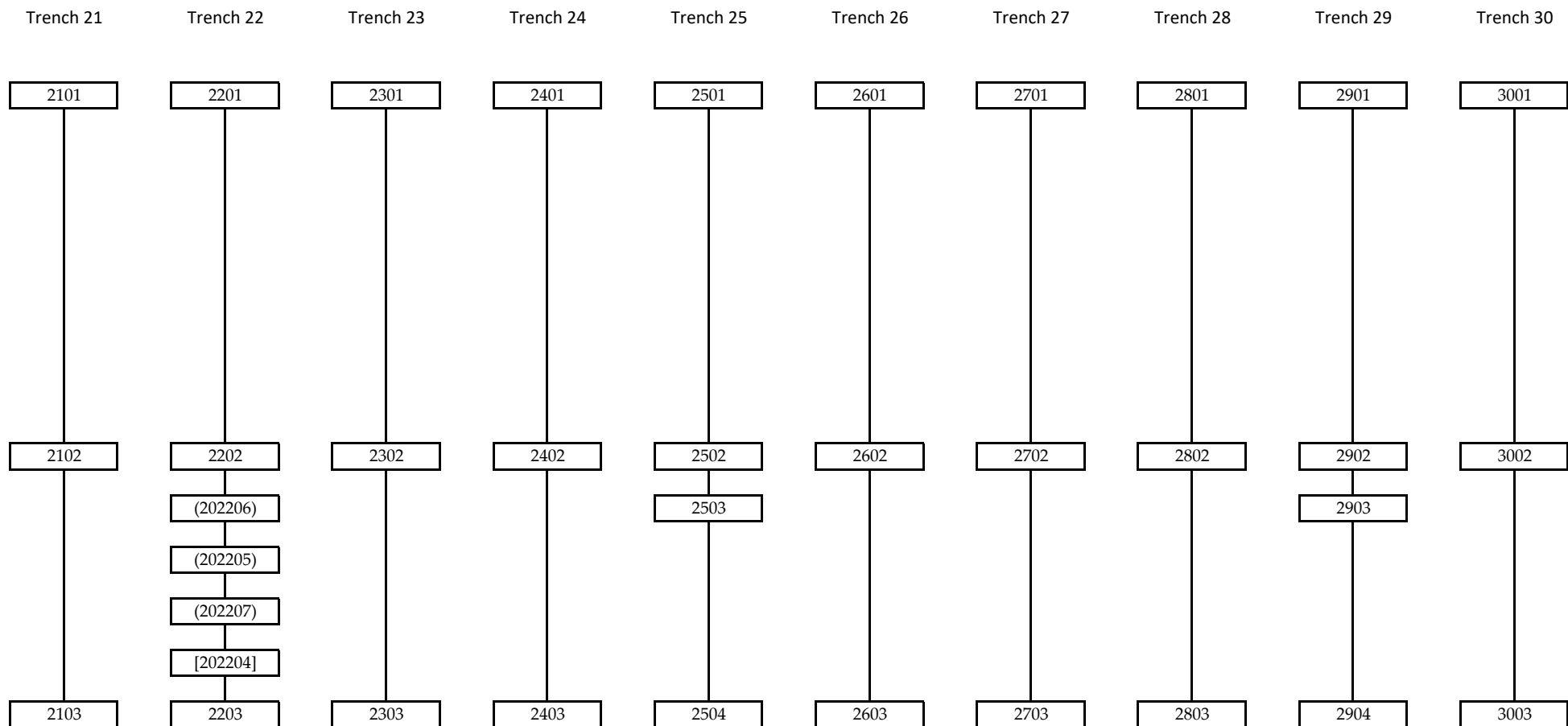
Cite only: <http://www.oasis.ac.uk/form/print.cfm> for this page

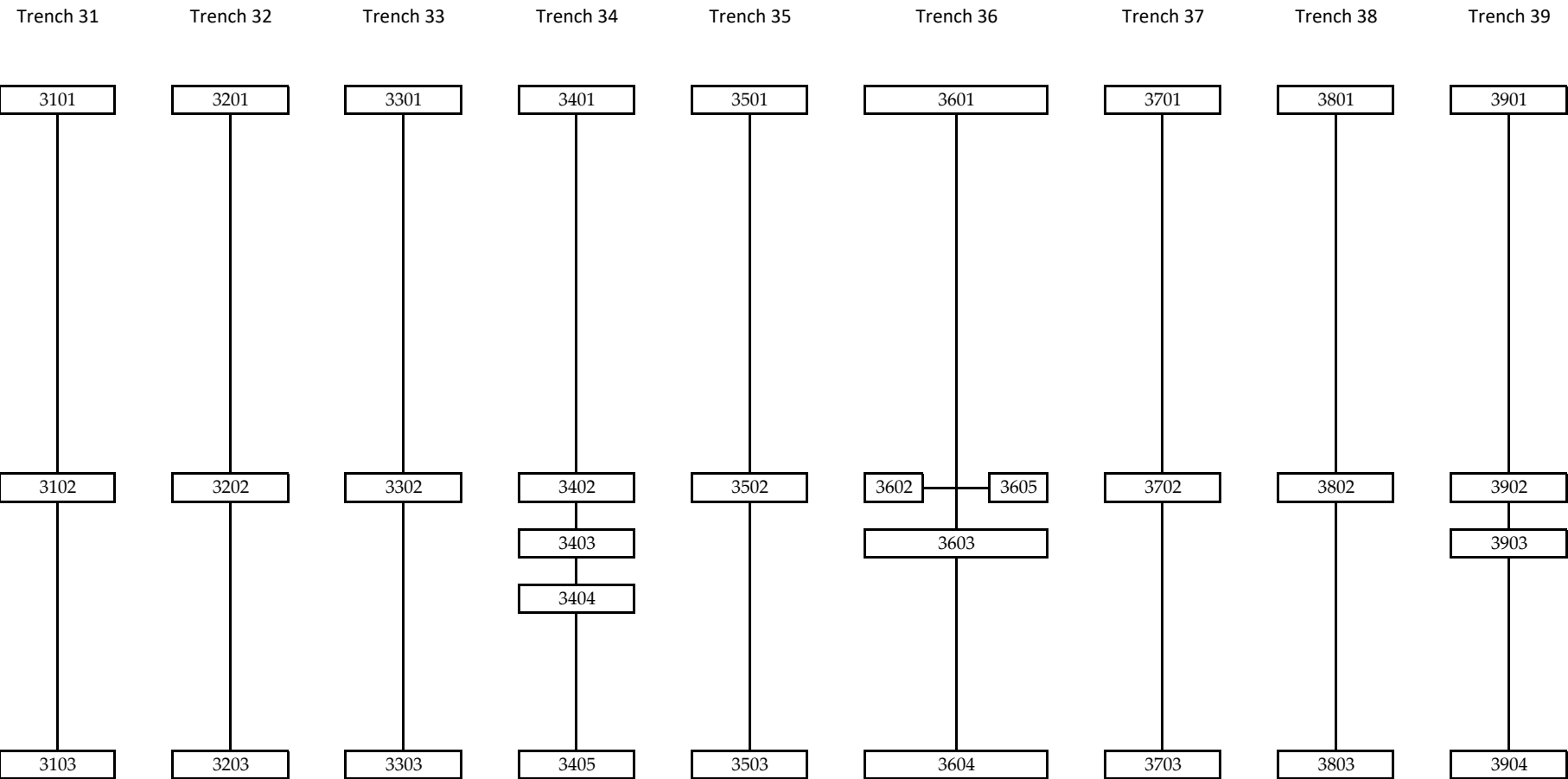
## Appendix 5 – Harris Matrix

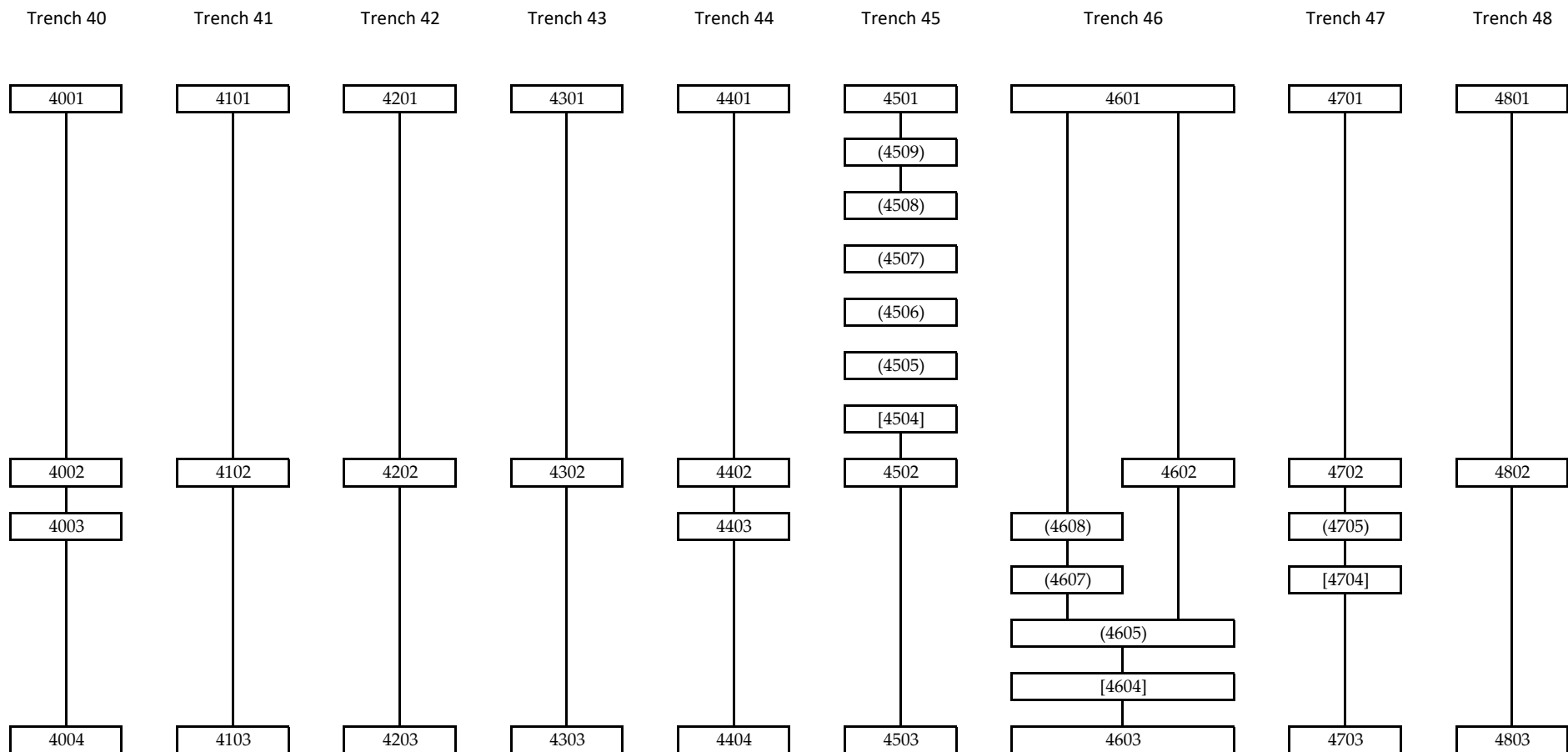












## Appendix 6 – Palaeoenvironmental Data

### Key to Table

x = 1 – 10 specimens    xx = 11 – 50 specimens    xxx = 51 – 100 specimens    xxxx = 100+ specimens

w = de-watered    cf = compare    fg = fragment    ss = sub-sample

PC = palaeochannel    P.Med = Post-medieval    U/D = undated

| Sample No.                           | 1       | 2      | 3      | 4      |
|--------------------------------------|---------|--------|--------|--------|
| Context No.                          | 202207  | 201005 | 204705 | 204605 |
| Feature No.                          | 202204  | 201004 | 204704 | 204604 |
| Feature type                         | Pit     | Ditch  | Ditch  | PC     |
| Trench                               | 022     | 010    | 047    | 046    |
| Date                                 | ?P.Med. | U/D    | U/D    | U/D    |
| <b>Cereals</b>                       |         |        |        |        |
| <i>Triticum</i> sp. (glume bases)    |         |        |        | x      |
| Cereal indet. (grain)                | x       |        |        |        |
| <b>Dry land herbs</b>                |         |        |        |        |
| <i>Chenopodium album</i> L.          |         |        |        | xw     |
| <i>Rumex</i> sp.                     |         |        | xw     |        |
| <i>Urtica dioica</i> L.              |         |        |        | xw     |
| <b>Tree/shrub macrofossils</b>       |         |        |        |        |
| <i>Corylus avellana</i> L.           |         | x      |        |        |
| <b>Other plant macrofossils</b>      |         |        |        |        |
| Charcoal <2mm                        | xxxx    | xxxx   | x      | xx     |
| Charcoal >2mm                        | xx      | xxx    | x      | x      |
| Charcoal >5mm                        | x       | x      |        | x      |
| Charred root/stem                    | x       |        |        |        |
| <b>Other remains</b>                 |         |        |        |        |
| Black porous/tarry material          | x       | x      |        | x      |
| Eggshell                             |         |        |        | x      |
| Fish bone                            |         |        | xcf    |        |
| Buff/white mineral concretions       | x       |        | x      |        |
| Small coal frags.                    |         | x      |        | xx     |
| <b>Mollusc shells</b>                |         |        |        |        |
| <b>Woodland/shade loving species</b> |         |        |        |        |
| <i>Acanthinula aculeata</i>          | xx      |        |        |        |
| <i>Acicula fusca</i>                 | x       |        |        |        |
| <i>Aegopinella</i> sp.               | xx      |        | x      | x      |
| <i>Azeca goodalli</i>                | x       |        |        |        |
| <i>Carychium</i> sp.                 | xxxx    |        | x      | x      |
| <i>Clausilia</i> sp.                 | x       |        |        | x      |
| <i>Discus rotundatus</i>             | xxx     |        | x      | x      |
| <i>Ena</i> sp.                       | x       |        |        |        |
| <i>Helicigona lapicida</i>           | xxfg    |        |        |        |

|                                      |                |                |                |             |
|--------------------------------------|----------------|----------------|----------------|-------------|
| <i>Macrogastra rolphii</i>           | xx             |                |                |             |
| <i>Oxychilus</i> sp.                 | x              |                | x              | xcf         |
| <i>Punctum pygmaeum</i>              | x              |                | x              | x           |
| <i>Vitrea</i> sp.                    | xx             |                |                | x           |
| <b>Open country species</b>          |                |                |                |             |
| <i>Helicella itala</i>               | x              |                | x              |             |
| <i>Pupilla muscorum</i>              |                |                | x              | xx          |
| <i>Vallonia</i> sp.                  | x              | x              | xxx            | xx          |
| <i>V. excentrica</i>                 |                |                | x              |             |
| <i>V. pulchella</i>                  | xcf            |                | xcf            | xcf         |
| <i>Vertigo pygmaea</i>               | x              | x              |                | x           |
| <b>Catholic species</b>              |                |                |                |             |
| <i>Cepaea</i> sp.                    | x              |                | x              | x           |
| <i>Cochlicopa</i> sp.                | xx             |                | x              | xx          |
| <i>Nesovitrea hammonis</i>           | xcf            |                | x              | x           |
| <i>Trichia hispida</i> group         | x              |                | xx             | xxx         |
| <b>Other</b>                         |                |                |                |             |
| Limacid plates                       | x              |                | x              | x           |
| <b>Marsh/freshwater slum species</b> |                |                |                |             |
| <i>Anisus leucostoma</i>             |                |                | xx             | xx          |
| <i>Lymnaea</i> sp.                   |                |                | x              |             |
| <i>L. glabra</i>                     |                |                | xcf            |             |
| <i>L. stagnalis</i>                  |                |                |                | x           |
| <i>Succinea</i> sp.                  |                |                | x              | xx          |
| <b>Freshwater obligates</b>          |                |                |                |             |
| <i>Pisidium</i> sp.                  |                |                |                | x           |
| <i>Planorbis planorbis</i>           |                |                |                | x           |
| <b>Sample volume (litres)</b>        | <b>1055</b>    | <b>1055</b>    | <b>1055</b>    | <b>1055</b> |
| <b>Volume of flot (litres)</b>       | <b>&lt;0.1</b> | <b>&lt;0.1</b> | <b>&lt;0.1</b> | <b>0.1</b>  |
| <b>% flot sorted</b>                 | <b>100%</b>    | <b>100%</b>    | <b>100%</b>    | <b>100%</b> |