

Mannings Heath Pipeline, Horsham, West Sussex

NGR: 520154 129136 (east) to 517263 130035 (west)

**Archaeological Evaluation
Written Scheme of Investigation**

Site Code: PMH23

ASE Project no: 220513

February 2023

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Reviewed and approved by:	Leonie Pett	Project Manager	
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1.0 INTRODUCTION

- 1.1 Archaeology South-East (ASE), the contracting division of The Centre for Applied Archaeology at the Institute of Archaeology, University College London, have been commissioned by Clancy Docwra Ltd to undertake an archaeological evaluation on the route of a new water pipeline at Mannings Heath, West Sussex. The scheme runs between Mannings Heath Water Treatment Works (WTW) in the east and Chesworth Lane, Horsham in the west (the scheme, hereafter).
- 1.2 The scheme extends from National Grid Reference (NGR) 520154 129136 (east) to 517263 130035 (west) (Figs. 1 - 4). The route covers a length of approximately 3.5km. Whilst some sections of the pipeline are trenchless, the majority of the pipeline is open cut with a nominal depth of 2m and a 1m wide trench. An easement is included along the length of the scheme of which c.20m will be stripped. A number of construction compounds and access tracks are proposed along the route of the pipeline (Fig. 4). The compounds are likely to be shallow topsoil-stripped with 'type 1' laid.
- 1.3 The proposed pipe route extends between the Mannings Heath WTW in the east across fields to Chesworth Lane in the west. The route crosses a mix of fields and existing roads to the north of The River Arun and is traversed by The Horn Brook tributary. The topography varies across the scheme, but broadly the area lies between 68m aOD in the east (at Gaggle Wood) and 42m aOD in the west.
- 1.4 According to the British Geological Survey 1:50,000 scale geological mapping available online¹, the natural bedrock geology of the Site consists of Weald Clay formation (mudstone) and Upper Tunbridge Wells Sand (interbedded sandstone, siltstone and mudstone). The majority of the route lies over the Tunbridge Wells Sand (DBA, Plate 2.3). Most of the Study Area has no recorded superficial deposits. The pipeline crosses Arun Terrace Deposits, 4 Member (sand and gravel) where the watercourses meet at Kerves Lane.
- 1.5 This scheme falls within the necessary parameters of the General Permitted Development Order benefitting from Southern Water's Permitted Development rights as a Statutory Undertaker. It is understood that no element of the scheme is subject to planning consent.
- 1.5 This document is a Written Scheme of Investigation (WSI) for an archaeological trial trench evaluation prepared on behalf of the client for onward submission to Horsham District Councils Archaeological Advisor prior to the commencement of fieldwork.
- 1.6 All work will be carried out in accordance with this document and the relevant Standards and Guidance of the Chartered Institute for Archaeologists (CIfA 2014a - c), as well as with reference to the Sussex Archaeological Standards (2019).

¹ <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>, accessed July 2022

2.0 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

2.1.1 An archaeological desk based assessment (DBA) has been completed (ASE 2022), and a geophysical survey has subsequently been undertaken (SUMO 2023). The following summary is based on the findings of the DBA with due acknowledgement, and additional data held in the ASE archives where relevant. A summary of the results of the geophysical survey is included at the end of this section. The distribution of heritage assets within the study area is shown on figures 2 and 3. Given the density of Listed Buildings in the Horsham area, not all these assets are individually identified on the plans in this document. Please refer to the DBA for full details. Assets are indicated in the following text by a number in bold, (X), and listed in an appendix to this document.

2.2 Palaeolithic

2.2.1 Palaeolithic evidence mostly derives from deep deposits, where they have been either redeposited or buried in the course of subsequent geological and climatic events. These deposits include river gravels and alluvium along ancient river terraces; colluvial and solifluction deposits in valleys, valley slopes and hollows; aeolian and loessic deposits, such as brickearth; and residual finds spots, mostly on higher ground and associated with clay-with-flint drift, which were either re-exposed through erosion or never covered by Pleistocene deposits. The River Arun is located to the south of the scheme and it is crossed by The Horn Brook Tributary and as such has potential to encounter Arun Terrace Deposits, 4 Member (sand and gravel) where the watercourses meet at Kerves Lane. The potential for alluvial deposits and terrace gravels associated with the River Arun to incorporate Middle/Late Pleistocene deposits has been recognised. Although the presence of Palaeolithic artefacts associated with such deposits from the Upper Arun Valley is rare, they could contain important paleo-environmental and/or faunal remains. There are no Palaeolithic heritage assets recorded on the HER within the Study Area.

2.3 Mesolithic

2.3.1 During the Mesolithic the Weald would have been thickly covered with post-glacial primary forest, however, palaeoenvironmental analysis is now indicating that at least limited, localised clearance was being undertaken from this time (Holgate 2003, 30-31). It seems probable that such activity was intended to encourage game.

2.3.2 The 'West Central Weald' in which the site is situated is considered an important landscape for the study of human prehistory in north-west Europe. Specifically, this importance relates to the 20th century development of a technological framework for understanding the region's post-glacial hunter-gatherers. It was Clark's study of flint assemblages from the area that led to the classification of the 'Horsham Point'- a relatively large and distinctive microlith form (1933). Clark brought the importance of these flints as potential chronological and cultural markers to the attention of the wider public and his work on Mesolithic assemblages from southern Britain identified 'Horsham

Points' within a chronological succession of microlith types (Clark 1932; 1933). The sand geologies of St Leonards Forest east of Horsham would seem to favour Mesolithic activity where large scatters have been found. One Mesolithic findspot comprising maceheads (**56**) is recorded on the HER within the Study Area.

2.4 Neolithic

- 2.4.1 A gradual intensification of woodland clearance is likely for the Neolithic of the Weald; however, such activity was probably still limited and localised in scale. The heavy clays of the region would not have been conducive to early farming and such activity may have largely been restricted to the more tractable soils on the Weald's edge (*i.e.* the Greensand, Downland and Coastal Plain). Exploitation of the Weald may have been undertaken on a largely seasonal basis and may perhaps have included hunting. As in the Mesolithic, the region's rivers would have provided highways into the interior from the coast. Evidence from areas north of the Downs is generally represented by isolated finds of stone axes and some flint tools. One Neolithic findspot, tools found at Needles playing field (**57**), is recorded on the HER within the Study Area.

2.5 Bronze Age

- 2.5.1 In Sussex, the vast majority of Bronze Age occupation has been identified on the Downs and the Coastal Plain. The area north of the Downs is very much a blank area in this period, based on current evidence, with only a few isolated find spots of bronze axes perhaps indicating exploitation of woodland resources, probably associated with woodland camps. The presence of several barrows and barrow cemeteries in the Weald and environmental evidence for agricultural activity indicates that some level of exploitation of the region was taking place during the Bronze Age (Gardiner 1990). A Late Bronze Age burial at Wakehurst Place (Stevens 1998), a Late Bronze Age enclosed settlement with at least one roundhouse at Gatwick (Wells 2005; Yates 2007, 46) and occupation traces found at Wickhurst Green (Margetts 2018) reinforce this. It has been suggested that the Weald may have been more extensively settled than generally thought at this period, with short-lived farmsteads established in clearings and moving on once the soil fertility was quickly exhausted (Gardiner 1990, 43). No Bronze Age activity is recorded on the HER within the Study Area.

2.6 Iron Age

- 2.6.1 Few sites of this period are recorded from north of the Downs, apart from a scatter of hillforts in the High Weald, perhaps associated with increased exploitation of the Wealden iron ores in the Later Iron Age. There are some indications that low-lying locations near watercourses (among others) may have been considered favourable for settlement by the end of the prehistoric period. No Iron Age activity is recorded on the HER within the Study Area, although the first hard evidence of farming in Horsham District was found at Chesworth where an Iron Age loom weight was found, along with other similar material, suggesting a farmstead in this location.

2.7 Roman

- 2.7.1 Evidence for Roman activity in the Weald is sparse, and is confined mainly to the arterial network of Roman roads, way-stations and ironworking or industrial sites. Few settlement sites have been found in the Weald (Rudling 1999), occupation favouring the less bleak periphery (Gardiner 1990), which in Sussex became heavily settled, particularly along the Downs and the fertile Coastal Plain.
- 2.7.2 The Weald remained heavily wooded throughout the Romano-British period. The iron industry took advantage of the favourable Wealden landscape, although the evidence is sparse and often destroyed or obscured by later working. Ironworking sites were usually located close to roads or tracks to allow the movement of heavy raw materials and products.
- 2.7.3 Romano-British activity in the Study Area is confined to the western end in the Horsham area and comprises a burial to the west of the pipeline (58) and an isolated coin (59) findspot.

2.8 Early Medieval

- 2.8.1 During the early medieval period, the Weald was largely covered by the great forest of *Andredeswald*, which was known to the Romans as *Sylva Anderida*. The heavily forested nature of the region limited settlement at this period, and the iron-working industry seems to have shrunk in scale in comparison with the Roman period. The Weald was an important area for seasonal, swine pastures established as extra-territorial parcels of land associated with parent manors situated on better soils elsewhere in the region. This initial settlement was probably fairly nomadic in nature but incorporating some small-scale clearance. The clearances gradually coalesced into a series of enclosed estates from which the later parochial and manorial systems evolved. The predominant agricultural regimes at this time comprised pastoralism, supplemented by extensive woodland management. The predominantly north - south alignment of many of the roads within the Weald fossilise the line of many of the early droeways (Brandon 2003, 47), which in turn have acted as templates for distinctive linear co-axial field systems, forming ladder-like patterns in several areas of the Weald. .
- 2.8.2 The name Horsham is first recorded in 947 and 963, long before any known settlement, in a description of 11 detached Wealden pastures in the area belonging to the downland estate of Washington (Gardiner 1995, 40). In the 8th century, the Saxon settlement of Steyning, with its port and important Saxon church, was probably the dominant economic centre². Nearby there was a large Saxon estate based around Washington. Today, there are place names that have Saxon origins all around Horsham, such as Roughey (later spelt Roffey), where “rough” means deer and “hey” means fence. Chesworth was “Ceoldred’s farm”, and this clearly shows that Saxons were working the land there by the 9th century if not long before. This practice was confirmed in land charters, including the first one that mentioned a place where horses

² <https://horshammuseum.org/collections/blog/posts/farming-and-agriculture-in-horsham-part-1-iron-age-to-middle-ages>, accessed July 2022

breed, Horsham. The settlement arose in 947 when the people of Washington, 15 miles to the south, were given additional land for pasture.

- 2.8.3 The West Sussex HER records no early medieval activity within the Study Area.

2.9 Medieval

- 2.9.1 The Study Area lies over the historic parishes of Horsham and Nuthurst. Settlements named in Domesday are more numerous in the south and west of Sussex, lying in the area of fertile land between the coastline and the ridge of the downs, than in the Wealden area to the north (King 1962, 419). Mannings Heath is not named in Domesday because it has later origins dating to the early post-medieval period. During the medieval period much of the Nuthurst parish lay within St. Leonard's Forest, which at that time extended much further to the south-west. In the 15th century, Sedgewick Park formed one bailiwick of the forest. The park had existed by 1248, and in 1326 comprised 400 acres, of which 300 acres was held of Fécamp abbey (Seine Maritime, France)³.
- 2.9.2 The agricultural regime initiated in the early medieval period in the Weald, mainly scattered pastoral activity, continued on into the medieval period. The typical heavy clayey soils of the area rendered much of the land unsuitable for arable farming at this time, as the primitive ploughing technology was unable to cope with these heavier soils. Consequently, an open field agricultural system never developed to any great extent, and those few examples that did exist were enclosed at an early date and have left few traces in the documentary record (Chapman & Seeliger 2001). Many of the scattered landholdings in the region had developed into small settlement foci, many of which still survive as farms in the modern landscape. Horsham Common still survived in 1800 but none of the enclosure maps extend as far south as the Site, suggesting that the area of the Site was not part of this extensive grazing 'common' during this period.
- 2.9.3 The Site is located in a geological area that would have been favourable for iron production, which was a prolific industry within the Weald during the Roman occupation and the Tudor and early Stuart periods. The extensive forests of the area provided wood for charcoal production and the topography favoured the creation of 'Hammer' ponds needed to drive the bellows and the hammers of the iron industry. The name 'Hammerpond Farm' at the eastern end of the Study Area shown on historical mapping (ASE 2022, Fig. 8) hints at the prominence of this industry, and also relates to the nearby ponds, such as Roosthole Pond, Hawkins Pond and perhaps most significantly, Hammer Pond. One ironworking site is recorded on the HER within the Study Area at Birchen Bridge (67) In the east of the Study Area, Hammerpond Road links the two major 16th century iron workings in the forest, Upper Forge at Hammerpond and Lower Forge and furnace at Hawkins Pond.
- 2.9.4 The early medieval manor house of Chesworth Manor, which existed by 1324, occupied the moated site south of the present Chesworth House and lies in

³ <http://www.british-history.ac.uk/vch/sussex/vol6/pt3/pp96-101>, accessed July 2022

close proximity to the scheme. This is a Scheduled Monument, MOATED SITE AND FISHPONDS 15M SOUTH OF CHESWORTH HOUSE (1, HE listing ref. 1021446), located approximately 165m south-west of the proposed pipeline in the Chesworth Farm area (Fig. 2). The listing text describes the monument as follows⁴:

The monument includes a moated site and three associated fishponds lying on the north bank of the River Arun south of Horsham. The moated site and fishponds comprise a rectangular group of features aligned north west - south east, with the fishponds lying on the south east side of the complex. The River Arun forms the south arm of the moat, and the moat island is artificially moated on the other three sides. Both the west and north arms of the moat have been landscaped and canalised, but both the scarp and counterscarp banks of the west arm of the moat and the south scarp of the north arm can be seen standing to about 1.5m high. The east end of the north arm is largely intact. The distance between the outer edges of the banks on the west arm is 19m, and the moat itself is 10m wide. The east arm of the moat is now part of one of the ponds, and there is a shallow depression 0.5m deep where the east end of the central island platform terminates 5m before the most westerly pond. The island platform in the centre of the moat measures about 85m north-west – south-east by 60m north-east – south-west, the ground surface is uneven, but there are no obvious archaeological features visible. The Inspector of Ancient Monuments in 1966 noted that foundations lie 0.25m below the surface. Landscaping at the east end of the site has created five ponds which are now merged into each other. Four of these lie parallel to each other aligned approximately north - south longitudinally and the fifth runs horizontally lengthways across the north side of the two most westerly ponds. The horizontally aligned pond is the remnant of the north arm of the moat at this east end, and one of the longitudinal ponds is the vestigial remains of the east arm of the moat. The fish ponds lie on either side of this east arm of the moat; two to the east and one to the west. The northern pond is about 47m long by 14m wide; the pond which formed the east arm of the moat is amalgamated into the westernmost pond and this expanse of water now measures approximately 37m north-south by 40m east-west. The two remaining ponds to the east measure about 8m east-west by 34m north-south and 11m by 16m. The moated site is that of a C13 moated house. The manor of Chesworth was held in 1281 by William, Lord Braose. Edward I is thought to have stayed at Chesworth in 1299 and Edward II in 1324. It was also held by the Mowbray and the Howard (later Fitzalan-Howard) families, including the Dukes of Norfolk and Earls of Arundel. The manor house which lay on the moated island was in existence by 1324, and possibly by 1299; a drawbridge was mentioned in 1427. It was abandoned in favour of the adjacent Chesworth House in the late C15. The three artificial arms of the moat, the fishponds and a small part of the north-west corner of the island have been modified in the C20 during the construction of ornamental gardens. All above ground structures and hard landscaping such as ornamental steps, bridges, pergolas and sheds are excluded from the scheduling, although the ground beneath is included.

⁴ <https://historicengland.org.uk/listing/the-list/list-entry/1021446?section=official-list-entry>, accessed July 2022

2.9.5 In addition to eight medieval listed buildings (2 – 9 appendix 1), twelve medieval, non-designated heritage assets (60 – 71) are recorded on the West Sussex HER within the Study Area (Appendix 1 and Fig. 3). These sites are summarised as follows:

- (60) Chesworth House Moated Site (also scheduled (1) - The monument includes a moated site and three associated fishponds lying on the north bank of the River Arun south of Horsham. The moated site and fishponds comprise a rectangular group of features aligned north-west – south-east, with the fishponds lying on the south-east side of the complex;
- (61) Horsham medieval town;
- (62) Site of medieval glassworks – Horsham;
- (63) Chesworth Farm historic medieval farmstead, Horsham;
- (64) 10 and 10A Market Square, Horsham - Historic Building Recording - No. 10 and 10A Market Square, Horsham, is one of ten medieval houses with one or two cross-wings that have been identified in the town, surviving in whole or in part;
- (65) 13-15 East Street - interpretative survey - the earliest surviving part of the building was formerly the three-bay crosswing of a medieval house;
- (66) 19, 21, 23 East Street - interpretative survey - a 15th century building which has undergone alterations through to the 20th century;
- (67) Ironworking site - At Birchen Bridge is a possible ironworking site. A bay, with modern weir at its SE end, has been heightened and widened with chalk and flint rubble to carry the main A281 road. At several places at the base of the bay on the south-west side are quantities of forge cinder, and downstream the old watercourse has been dammed up with dumped soil and building rubbish, containing large amounts of forge cinder, possibly from the construction or reconstruction of the weir on the bay. A waterfilled pond is retained and there are two supply dumps on separate streams above, one waterfilled at TQ20452956;
- (68) Amies Mill - a watermill which dates back to at least 1410 when listed as 'Assheles Mille'. A survey of 1650 refers to it as Amies Mill;
- (69) The Former Territorial Army Centre, Denne Road- Archaeological Field Evaluation - consisting of observations and the excavation of four trials trenches revealed a gully of late medieval / post-medieval date and other modern features;
- (70) The Vicarage Garden, Causeway, Horsham - Evaluation - an open area of the Vicarage Garden was excavated and recorded where features including medieval and early post-medieval ditches, pits and possible quarry pits were encountered; and
- (71) Horsham Museum, 9 The Causeway - interpretative survey - an historical interpretive survey was carried out at Number 9 The Causeway, which now houses Horsham Museum.

2.10 Post-medieval

2.10.1 The agricultural landscape around Horsham is in part a fossilised late medieval landscape, comprising small irregular fields carved from the surrounding woodland, much of which has been left as shaws, often managed for

woodland products through coppicing – woodland remained an important resource until modern times (Hudson 1986, 130). Areas of open waste such as Horsham Common were used as common pasture for manorial tenants and for other uses such as military musters, fairs and executions, until enclosed in 1812-13. Some modification of the field pattern, including the grubbing-out of shaws and hedgerows, took place during the 19th century when advances in technology allowed arable farming to be carried out on a much greater scale than before, but particularly in the post-war period with the advent of large agricultural plant. This resulted in the building of isolated barns in fields away from the farm, reflecting the difficulty of carting loads any great distance on clay – although technology could increase crop yields on the clay soils, it could not transport the produce any easier (Dales 1982). Further landscape developments in the wider area included the expansion of Horsham in the 19th and 20th centuries and the construction of the two railway lines in 1848 and 1867.

- 2.10.2 The post-medieval period saw Horsham retaining its function as a market town. The layout remained fundamentally medieval in nature, with piecemeal suburban development on all sides. By 1524, the town had the highest average wealth in Sussex, and was referred to in 1730 as the ‘Metropolis of the Weald’ (Hudson 1986, 132). In 1648 the town played a small part in national events when it was the scene of a Royalist uprising, swiftly crushed by the New Model Army. The later post-medieval period saw a continuing rise in prosperity, partly due to the presence of a large barracks and the holding of assizes in the town, culminating in its status as joint county town of West Sussex (with Chichester) in 1889. By 1939, Horsham had acquired its present function, a dormitory settlement serving London.
- 2.10.3 The ‘Mannings’ placename is thought to have derived from lands called Mannings in 1650 (Daniel-Tyssen 1871, 290) and the latter part ‘heath’ relates to the lowland heath habitat on the periphery of St. Leonards Forest in which the Site was located at that time. The north-eastern corner of Nuthurst parish remained unenclosed heathland in 1724 but had been largely reclaimed before 1795⁵. Mannings Heath, however, continued unenclosed until the later 19th century, although it diminished in size by encroachments in the 18th century and later. By 1841 the heath had shrunk to 26 acres of waste land along the two roads which form the central crossroads of the modern settlement of Mannings Heath.
- 2.10.4 Details of Chesworth House in the post-medieval period are supplied in the DBA. There are a total of forty-three (**10 – 52**) post-medieval listed buildings within the study area, and forty (**72 – 111**) further non-designated heritage assets of post-medieval and modern date, details of which can be obtained from the HER table included in this report (Appendix 1).

3.0 RESEARCH AIMS AND OBJECTIVES

- 3.1 The general objective of the archaeological work is to ensure that any deposits, features, artefacts or ecofacts of archaeological interest exposed by

⁵ <http://www.british-history.ac.uk/vch/sussex/vol6/pt3/pp96-101>, accessed July 2022

the evaluation are recorded, interpreted and reported on to appropriate standards.

3.2 The specific research aims of the project are drawn from the South-East Research Framework and supplemented by questions arising from recent research undertaken within the Wealden area (SERF 2008):

- Can the investigation contribute to knowledge of the 'Middle' Mesolithic industry defined by SERF as "peculiar to the Weald, east of Horsham, not found elsewhere in Britain. Assemblages reflecting this technology include obliquely blunted points, isosceles triangles and large proportions of basally retouched 'Horsham points'? [SERF: Upper Palaeolithic and Mesolithic Periods, 8]
- The use of the Weald in later prehistory: how good is the evidence for occupation or exploitation of the Weald in later prehistory? Was it a barrier to communication? (SERF 2008)
- Can the early medieval Wealden economy be better understood?
- Can the later medieval environment of the area be better understood? Can this be linked to phases of colonisation postulated by landscape historians (e.g. Witney 1976; which should perhaps now be considered as 'recolonisation' or even continuity albeit in modified form)? What was the nature and extent of later medieval woodland management?
- A manorial complex lies in proximity to the scheme. Can early medieval settlements patterns be better understood?
- The Horn Brook crosses the scheme. Can any features relating to water control / iron working be identified?

4.0 METHODOLOGY

4.1 The archaeological evaluation will comprise the machine excavation of c 58 30 x 2m trenches to a total of c. 4% of the accessible scheme area (Figs 4 - 7).

4.2 A Risk Assessment will be produced prior to the commencement of the work. The locations of all the trenches will also be checked with a CAT scanner prior to the commencement of excavation.

4.3 The trenches will be excavated using a suitable mechanical excavator. The trenches will be excavated through undifferentiated topsoil and modern made ground in spits of no more than 0.10m with artefact recovery taking place every scrape until archaeological deposits are encountered or the top of the underlying natural sediments reached. **The excavator will be fitted with a smooth grading bucket** and care will be taken that archaeological deposits are not damaged due to over machining. All machining will stop if significant archaeological deposits are encountered.

- 4.4 The trenches will not be excavated beyond a safe working depth (generally c. 1.2m) unless suitable precautions (i.e. stepping or battering of trench edges, and /or shoring) have been implemented; the indicative depth of 1.2m may be reduced if the trench sides appear to be particularly unstable. All machining will be undertaken under the supervision of a suitably qualified archaeologist.
- 4.5 Any exposed archaeological deposits will then be cleaned by hand and recorded in plan and section. During the evaluation archaeological features/deposits will be excavated enough to characterise them.
- 4.6 On conclusion of the excavation, the spoil will be backfilled by machine, in appropriate sequence, spread evenly and compacted to ensure a surface flush or nearly flush with the ground surface. No reinstatement of the original surface (i.e. turf, hardstanding, etc.) will be undertaken.
- 4.7 Any finds believed to fall potentially within the statutory definition of Treasure, as defined by the Treasure Act 1996, shall be reported to the Finds Liaison Officer. Should the find's status as treasure be confirmed the Coroner, the landowner and the Archaeological Officer will also be informed. A record shall be provided to the Coroner and to the Archaeological Officer of the date and circumstances of discovery, the identity of the finder, and the exact location of the find(s) (OS map reference to within 1 metre, and find spot(s) marked onto the site plan).
- 4.8 If human remains are found they will be left in situ, covered over and protected. The client and the Archaeological Officer will be informed immediately.

5.0 EXCAVATION AND RECORDING

- 5.1 All recording and analysis will be undertaken in accordance with this document and the Sussex Archaeological Standards unless otherwise agreed in writing by the Archaeological Officer.
- 5.2 The spoil from the excavations will also be inspected by the ASE archaeologist to recover any artefacts or ecofacts of archaeological interest. A metal detector will be used at regular intervals to scan spoil derived from the excavations and at regular intervals during the excavation of archaeological deposits and features.
- 5.3 The Archaeological Officer will be kept informed of progress and given the opportunity to attend site once all the trenches have been opened.
- 5.4 All archaeological features will be recorded according to standard ASE practice. Where practicable, all features will be planned at 1:20 and section drawings will be at 1:10, elevations will also be hand drawn at 1:10. Drawings will be on plastic draughting film. Features and deposits will be described on standard pro-forma recording sheets used by ASE. All archaeological remains will be levelled with respect to Ordnance Survey datum. A full photographic record will be maintained throughout the duration of the evaluation in colour slide, black & white and digital media.

- 5.5 The strategy for sampling archaeological and environmental deposits and structures (which can include soils, timbers, animal bone and human burials) will be developed with reference to Historic England guidelines for environmental archaeology (Historic England 2011) and waterlogged wood (Historic England 2010) and in consultation with the Historic England regional advisor or relevant specialists. Samples will be collected from suitable excavated contexts, including dated/datable buried soils, well-sealed slowly silting features, sealed hearths, sealed features containing evident carbonised remains, peats, waterlogged or cess deposits.
- 5.6 Bulk soil samples (of 40 litres where possible or 100% of the context if smaller) will be taken to target the recovery of plant remains (including wood charcoal and macrobotanicals), fish, bird, small mammal and amphibian bone, and small artefacts. Specialist samples may also be taken to target recovery of pollen (using monolith tins), fish and small bone, molluscs, foraminifera, parasites and insects (in small <20 litre samples) or large mammal bones and marine molluscs (in large samples of ~80-100 litres). When taken, large samples will be extracted wholesale from deposits to maximise the range of bone recovered. As a general rule, waterlogged wood specimens will be photographed and recorded in detail in their original location prior to being lifted or sampled for more detailed assessment. Other scientific dating and geoarchaeological techniques will be considered and employed where appropriate. In all instances deposits with clear intrusive material shall be avoided.

6.0 TREATMENT OF ARTEFACTS AND ECOFACTS

- 6.1 All pottery, bone and worked flint recovered from the excavations will be washed and marked with an appropriate code to identify the site and context. Most ceramic and other building material and burnt flint will be identified, counted, weighed and discarded. Samples will be retained as appropriate. Finds will be bagged in polythene bags according to type and context.
- 6.2 The lithic and ceramic finds will be identified by specialists within Archaeology South-East, and preliminary identification of faunal remains may be undertaken if the nature of the deposits justifies such study. All finds in an unstable condition will be stabilised using passive conservation techniques where appropriate before being deposited with the receiving museum.
- 6.3 Bulk samples will be processed using tank flotation unless considered detrimental to the samples or recovery rate (such as for waterlogged samples). Bulk samples will target recovery of plant remains (charcoal and macrobotanicals), fish, bird, small mammal and amphibian bone, and small artefacts. Waterlogged samples will be wet sieved through nested sieves and stored in wet, cool conditions or dried if considered an appropriate form of conservation for the remains. Specialist samples may also be taken from dry or waterlogged contexts. Such samples will target recovery of pollen (using monolith tins), molluscs, foraminifera, parasites and insects. Larger samples (80-100 litres) will be extracted wholesale from deposits rich in marine molluscs and large mammal bones. As a general rule, waterlogged wood specimens will be recorded in detail in their original location. If removed they will be cleaned, photographed and a thin section sample will be taken for

identification. Specimens will either be stored in wet cool conditions or dried if considered appropriate for the material. In all instances deposits with clear intrusive material shall be avoided.

7.0 TREATMENT OF HUMAN REMAINS AND TREASURE TROVE

- 7.1 In the event that articulated human remains are uncovered environmental health and HE will be informed immediately. If removal is unavoidable the excavation, recording and removal will only take place under the relevant Ministry of Justice licence and local authority environmental health regulations. All non-articulated human bone will be bagged collectively. All articulated human remains that will be unavoidably disturbed by the ground works will be excavated to archaeological standards and recorded appropriately within the limitations of the evaluation. Any human remains that continue beyond the limitations of the main contractor's groundworks may be left *in situ* unless otherwise directed by the Ministry of Justice licence and/or local authority environmental health officers. The remains of each interment will be bagged separately and clearly labelled.
- 7.2 Any finds believed to fall potentially within the statutory definition of Treasure, as defined by the Treasure Act 1996 (amended 2003), shall be reported to the Finds Liaison Officer (based at Barbican House Museum, Lewes). Should the find's status as treasure be confirmed the Coroner, the landowner and the HDC Archaeologist will also be informed. A record shall be provided to the Coroner and to the HDC Archaeologist of the date and circumstances of discovery, the identity of the finder, and the exact location of the find(s) (OS map reference to within 1 metre, and find spot(s) marked onto the site plan).

8.0 REPORTING

- 8.1 Reporting will be undertaken in accordance with the guidelines set out in the *Sussex Archaeological Standards (2019)*.
- 8.2 Within four weeks of the completion of the fieldwork a full report on the results of the field evaluation will be submitted. It will include the local geology and archaeological evidence. It will describe the work undertaken and results of elements described above. It will include a description of archaeological features and tabulated details of finds from each context. A list of environmental samples and any samples taken for dating will also be included. The report will include a plan showing the trench locations. Further plans, sections and photographs of features located and excavated will be included as necessary.
- 8.3 A draft report will be submitted to Clancy in the first instance, then to the Archaeological Officer for approval. Once any necessary changes have been made, the approved final report will be submitted to the client and should be passed to the local planning authority with a further copy submitted to Horsham District Council so that the results may be added to the Historic Environment Record. A short summary of the work will be prepared for the relevant local archaeological journal.

- 8.4 A further digital copy of the report (including plans, illustrations and photographs) will be supplied to West Sussex Historic Environment Record on CD-ROM in a .pdfa format.

9.0 PREPARATION AND DEPOSITION OF THE FINDS AND ARCHIVE

- 9.1 The site archive will be assembled in accordance with the guidelines set out in: '*Archaeological Archives. A guide to best practice*' (Archaeological Archives Forum (AAF) 2011); '*A Standard and Guide to best practice for Archaeological Archiving in Europe*' (Europae Archaeologiae Consilium (EAC) 2013); and '*Standards in the Museum Care of Archaeological Collections*' (Society for Museum Archaeology (SMA) 2020).
- 8.2 The archive, including any artefacts and ecofacts recovered from the fieldwork, will be stored at the ASE office pending deposition at the recipient museum.

10.0 PROJECT MANAGEMENT

- 10.1 The project will be managed by Leonie Pett (fieldwork) and Jim Stevenson (post-excavation).

11.0 HEALTH AND SAFETY

- 11.1 A risk assessment for the project will be prepared prior to the commencement of work. All relevant health and safety regulations will be adhered to.

12.0 INSURANCE

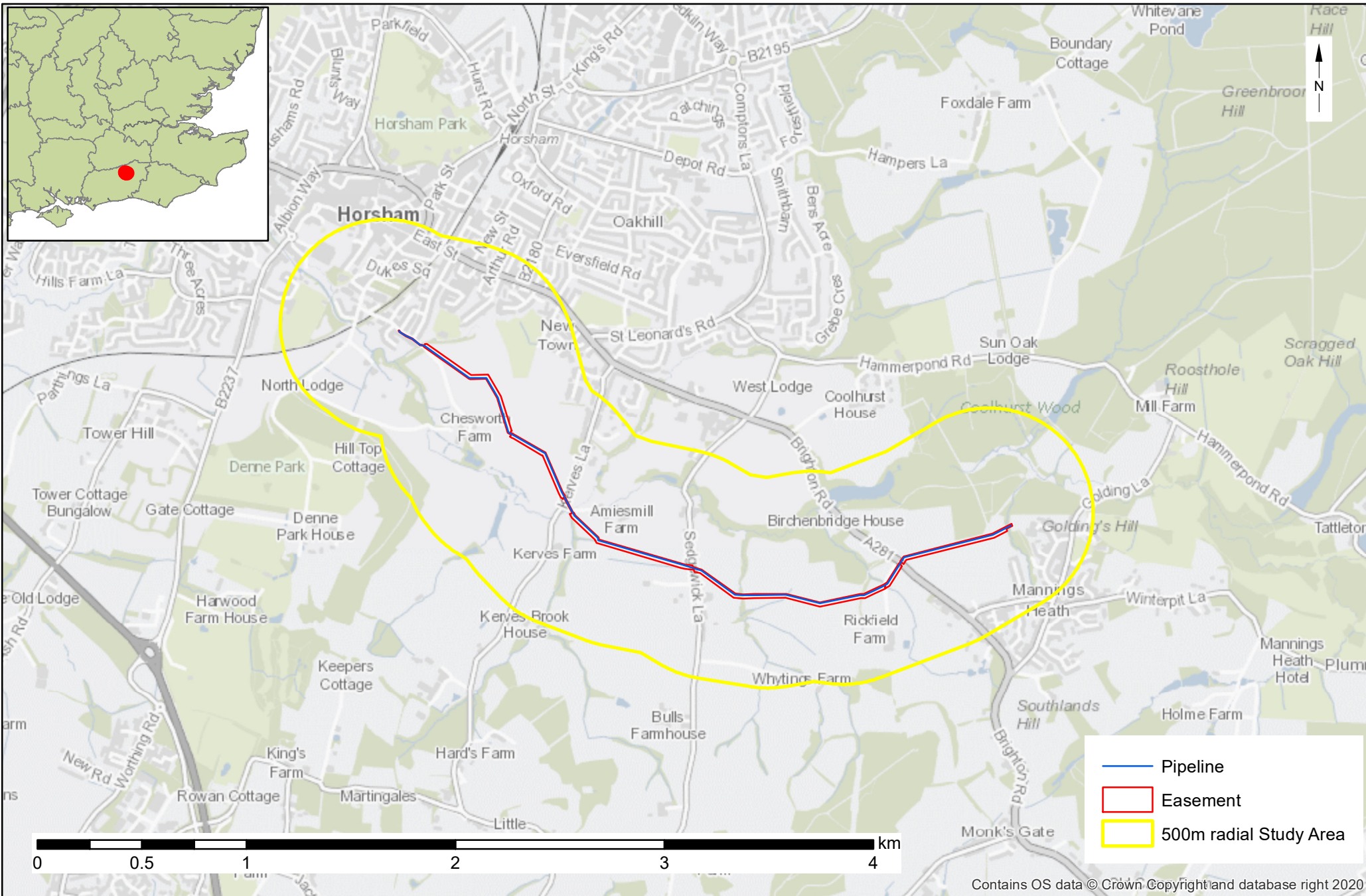
- 12.1 Archaeology South-East is insured against claims for: employer's liability to the value of £50,000,000 each and every loss, any one occurrence; primary public/products liability to the value of £50,000,000 any one occurrence and in the aggregate for products liability, with an extension for no-fault compensation up to £15,000,000 in the aggregate; professional indemnity to the value of £15,000,000 any one occurrence and in the aggregate.

Archaeology South East
March 2023

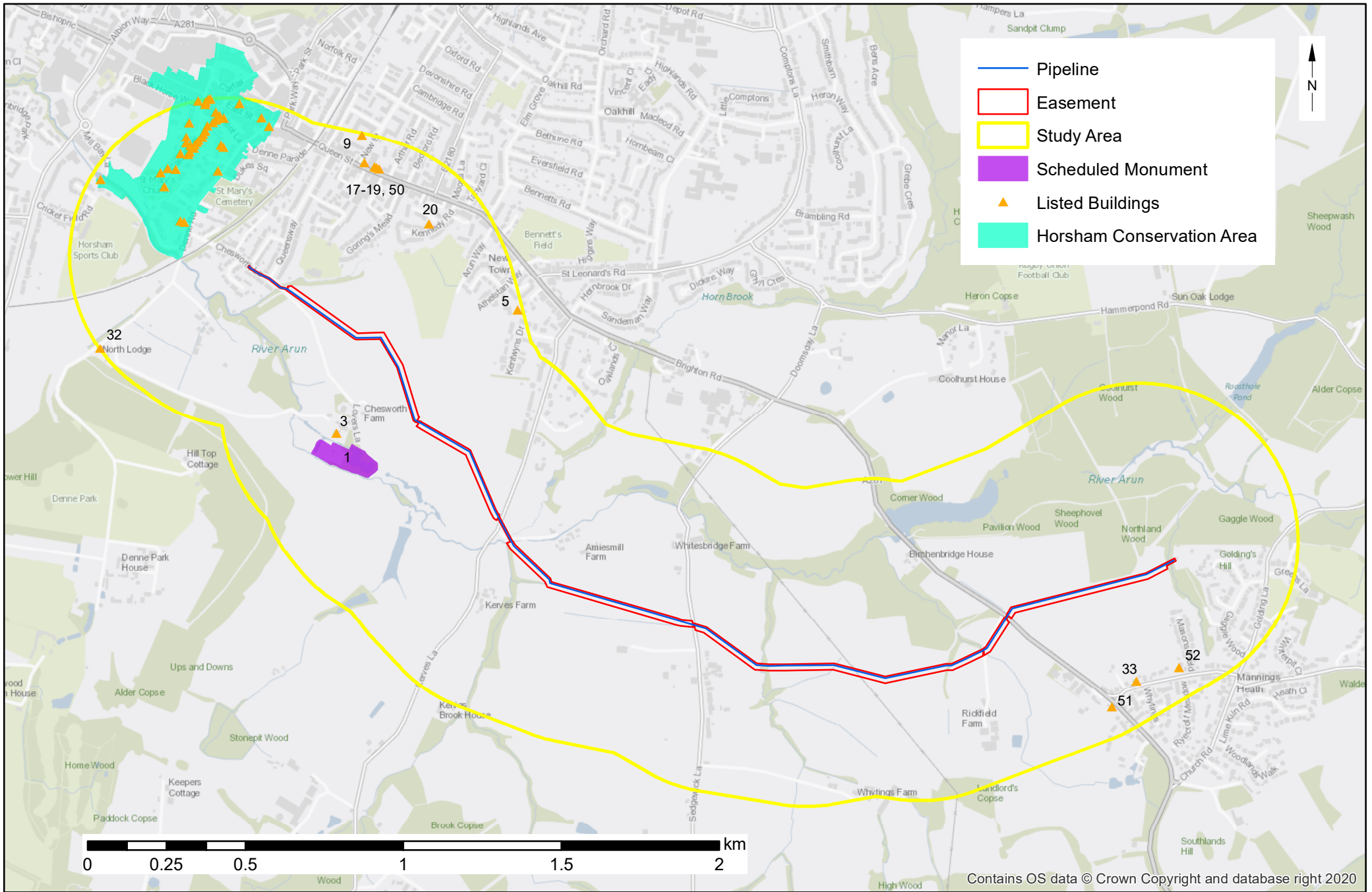
References

- ASE 2007. *Post-Excavation Manual 1: Finds and Environmental Deposition and Processing Guidelines*
- ASE 2022 *Mannings Heath WTW to Chesworth Lane, West Sussex, Historic Environment Desk-Based Assessment (Heritage Statement)*, ASE unpublished report no: 2022208
- Brandon, P., 2003. *The Kent & Sussex Weald*. Phillimore.
- Chapman, J. and Seeliger, S. 2001: *Enclosure, Environment and Landscape in Southern England*. Stroud: Tempus.
- ClfA 2014a. *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*
- ClfA 2014b. *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*
- ClfA 2014c. *Standard and Guidance for Archaeological Field Evaluation*
- Clark, J.G.D. 1932: *The Mesolithic Age in Britain*. Cambridge: Cambridge University Press
- Clark, J.G.D. 1933: 'The classification of a microlithic culture: the Tardenoisian of Horsham', *Archaeological Journal*, vol 90, 52-77
- Dales, R., 1982. *The Older Houses of Warnham* (Warnham Historical Society)
- Gardiner, M. 1990. 'The archaeology of the Weald: a survey and a review', *Sussex Archaeological Collections*, vol. 128, 33-53
- Historic England 2010 *Guidelines on the recording, sampling, conservation and curation of waterlogged wood*
- Historic England 2011: *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation (second ed.)*. English Heritage
- Historic England 2015: *Management of Research Projects in the Historic Environment*
- Holgate, R. 2003: 'Late Glacial and Post-Glacial Hunter-Gatherers in Sussex', in D. Rudling (ed.) *The Archaeology of Sussex to AD 2000*, King's Lynn: Heritage Marketing and Publications Ltd, 29-38
- Hudson, T.P. (ed.) 1986: *A History of the County of Sussex: Victoria County History Volume VI, part 2*. London
- King, S.H., 1962. Sussex, in Darby, H.C. & Campbell, E. M. J. (eds.). *The Domesday Geography of South-East England*. CUP.

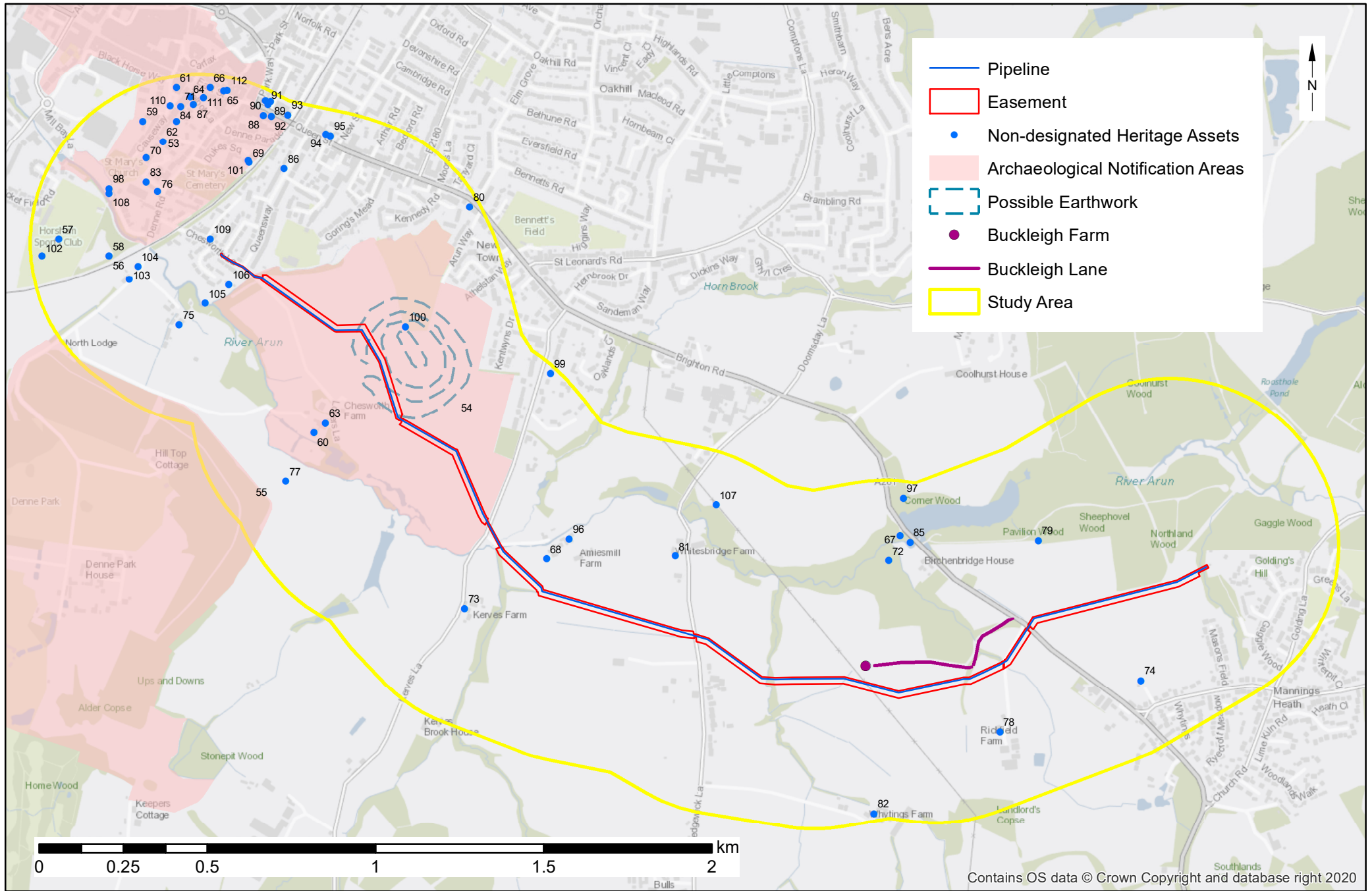
- Margetts, A. 2018 *Wealdbæra: Excavations at 'Wickhurst Green', Broadbridge Heath and the landscape of the West Central Weald*. ASE/SCAU Spoilheap monograph series
- Rudling, D. 1999. Roman Sussex, in Leslie, K. & Short, B. (eds), *An Historical Atlas of Sussex*. Chichester: Phillimore.
- Stevens, S., 1998. *An Archaeological Investigation at the Site of the Millennium Seed Bank, Wakehurst Place, Ardingly, West Sussex (Stage 2)*. Unpublished ASE Report 758.
- SERF 2013 (revised 2019): Resource Assessment and Research Agenda, *South East Research Framework*. Kent County Council
- Witney, K. P., 1976. *The Jutish Forest: A Study of the Weald of Kent from 450 to 1380 A. D.* London: Athlone Press
- Wells, N.A. 2005: 'Excavation of a Late Bronze Age enclosure at Gatwick Airport, 2001', *Sussex Archaeological Collections*, vol. 143, 47-69
- WSCC, ESCC 2019, *Sussex Archaeological Standards*



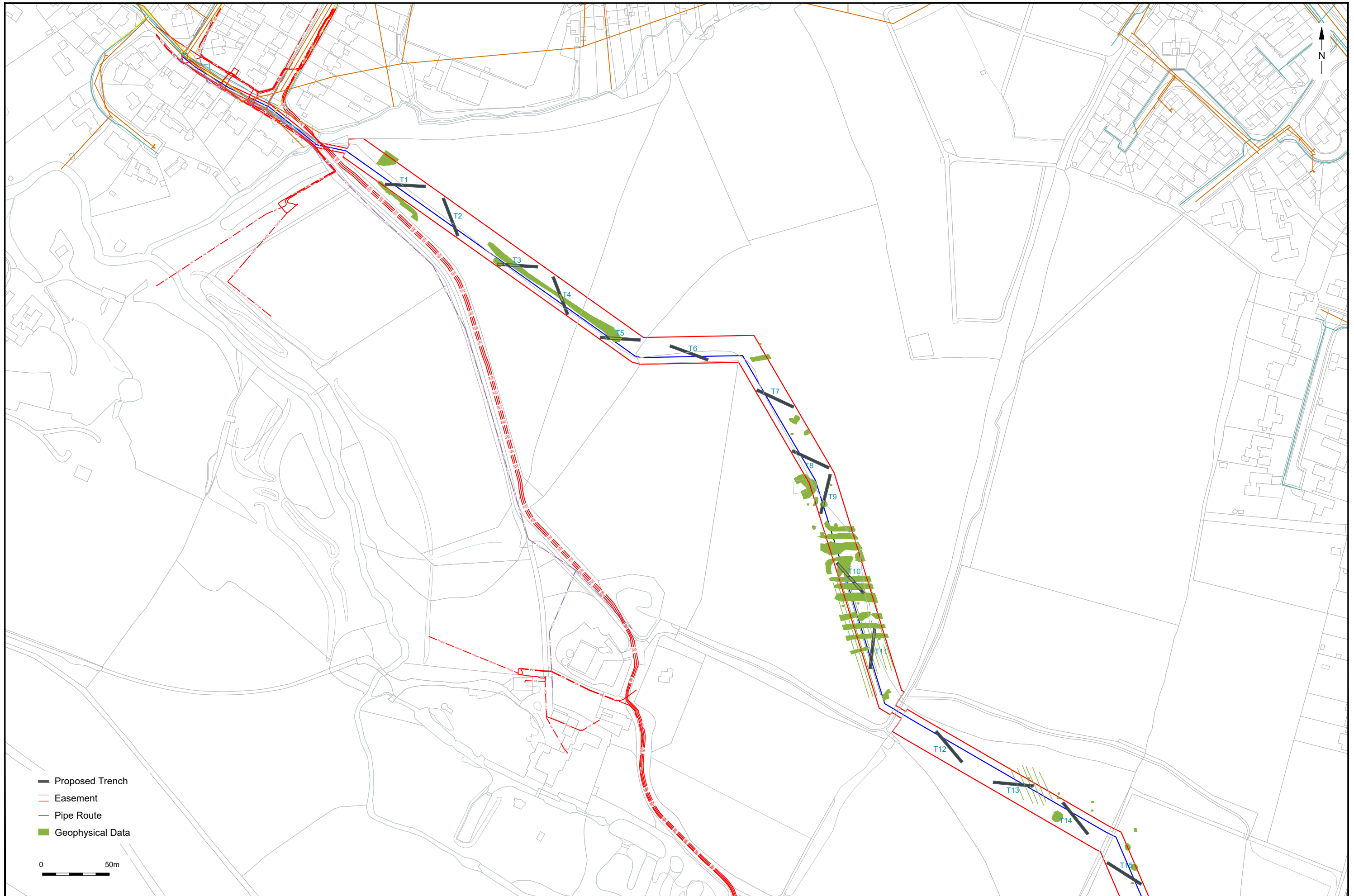
© Archaeology South-East		Mannings Heath WTW to Chesworth Lane, West Sussex	Fig. 1
Project Ref: 220513	February 2023	Location of Site and Study Area	
Report Ref: WSI	Drawn by: KLGR		



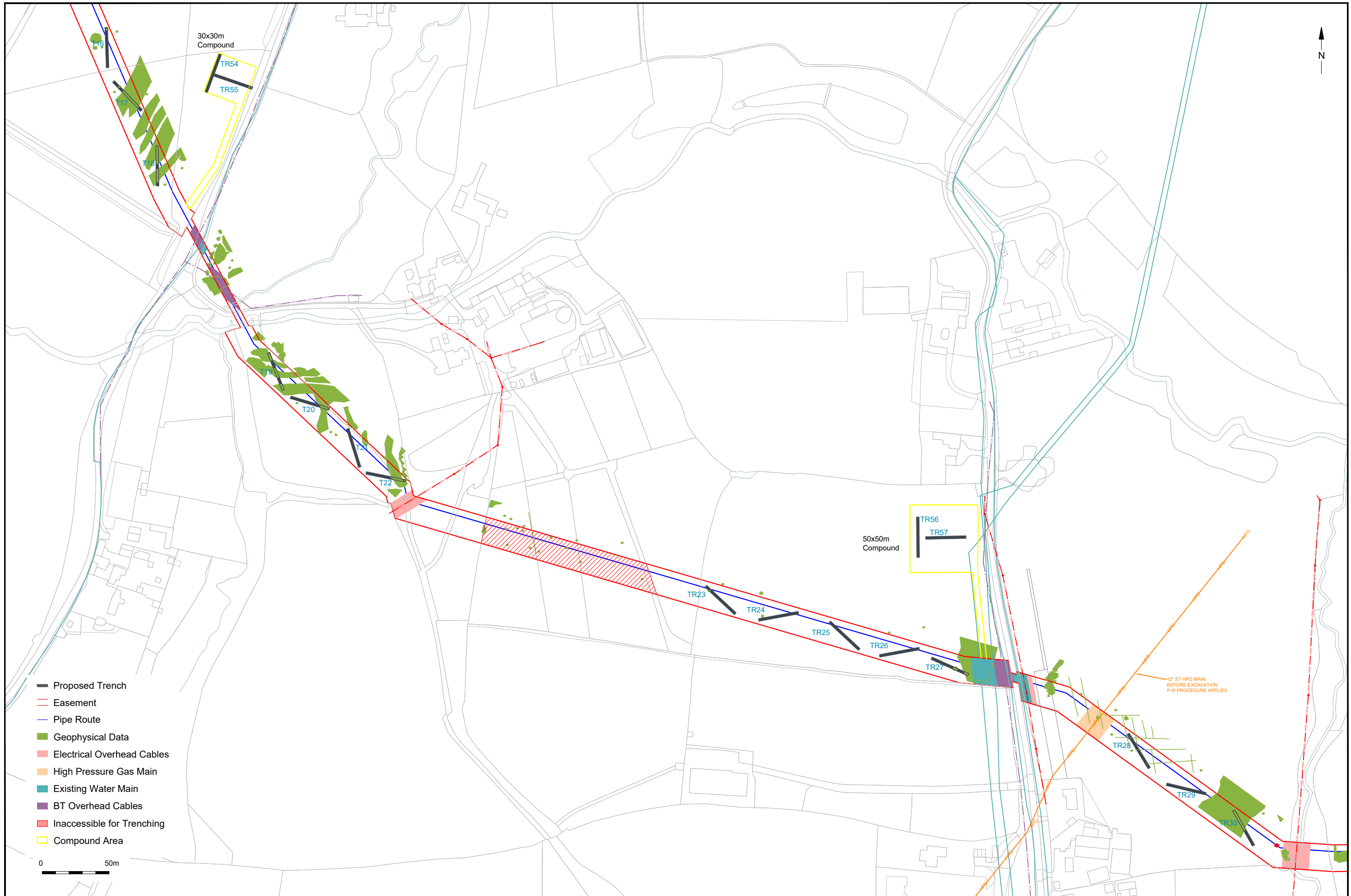
© Archaeology South-East		Mannings Heath WTW to Chesworth Lane, West Sussex	Fig. 2
Project Ref: 220513	February 2023	Designated Heritage Assets	
Report Ref: WSI	Drawn by: KLGR		



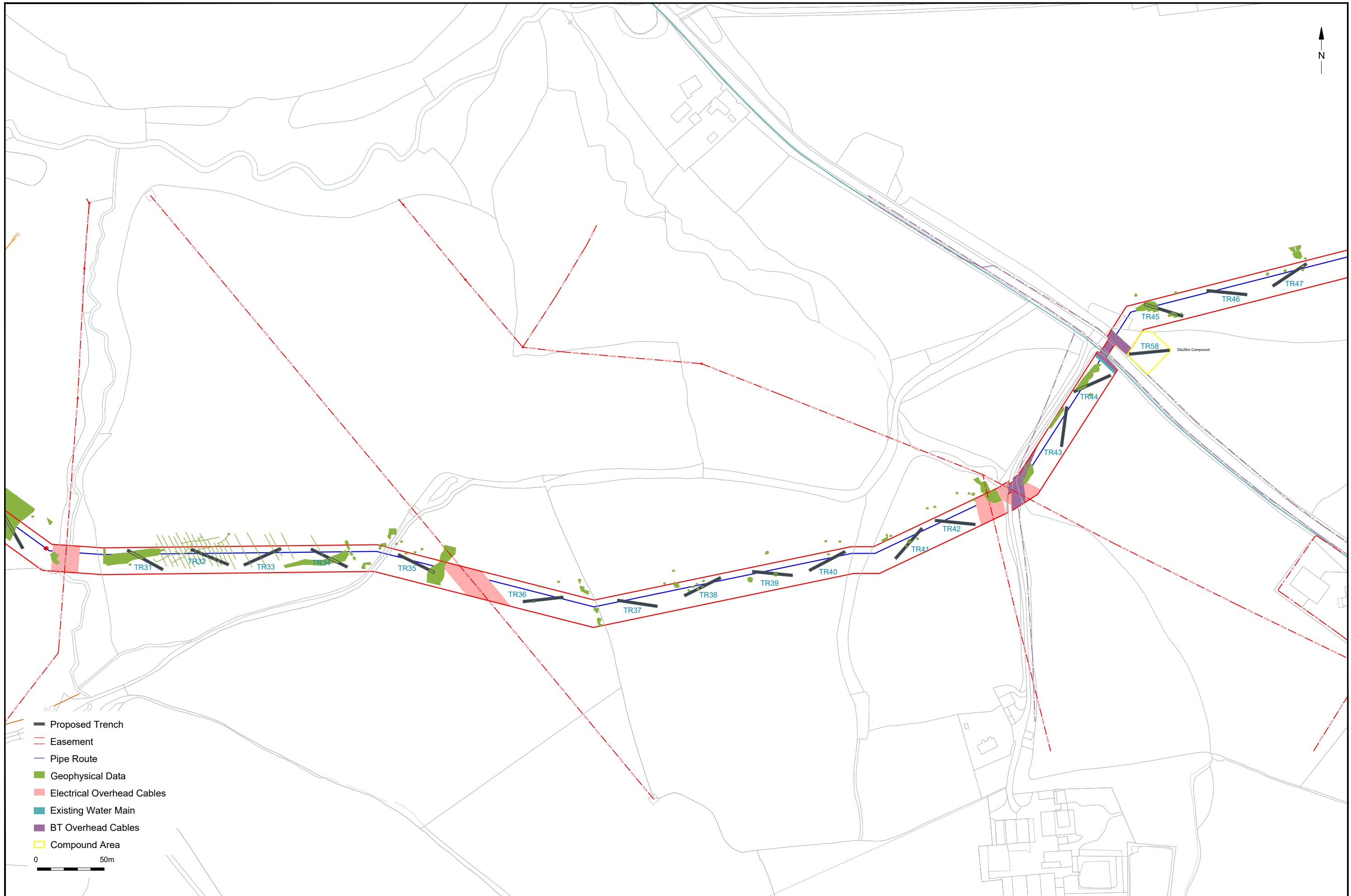
© Archaeology South-East		Mannings Heath WTW to Chesworth Lane, West Sussex	Fig. 3
Project Ref: 220513	February 2023	Non Designated Heritage Assets	
Report Ref: WSI	Drawn by: KLRG		



© Archaeology South-East		Mannings Heath WTW to Chesworth Lane, West Sussex	Fig.4
Project Ref: 220513	February 2023	Route Section 1 - Proposed Location of Trenches 1-15	
Report Ref: WSI	Drawn by: ARC		



© Archaeology South-East		Mannings Heath WTW to Chesworth Lane, West Sussex	Fig.5
Project Ref: 220513	February 2023	Route Section 2 - Proposed Trenches 16-30	
Report Ref: WSI	Drawn by: ARC		



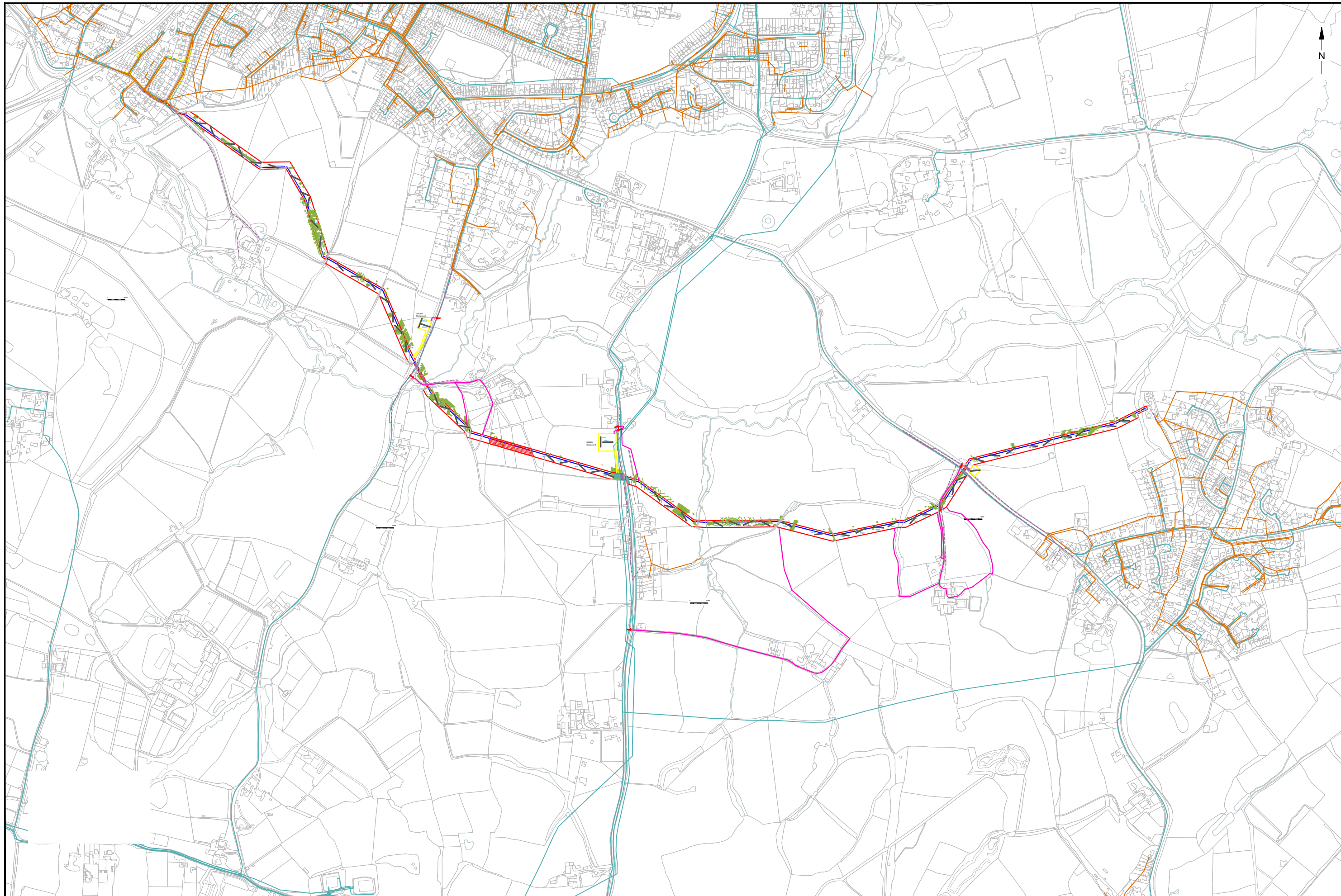
© Archaeology South-East		Mannings Heath WTW to Chesworth Lane, West Sussex	Fig.6
Project Ref: 220513	February 2023	Route Section 3 - Proposed Trenches 31-47	
Report Ref: WSI	Drawn by: LG		



- Proposed Trench
- - - Easement
- Pipe Route
- Geophysical Data
- Electrical Overhead Cables
- Existing Water Main
- BT Overhead Cables
- Compound Area

0 50m

© Archaeology South-East		Mannings Heath WTW to Chesworth Lane, West Sussex		Fig.7
Project Ref: 220513	February 2023	Route Section 4 - Proposed Trenches 45-53		
Report Ref: WSI	Drawn by: ARC			



© Archaeology South-East		Mannings Heath WTW to Chesworth Lane, West Sussex	
Project Ref: 220513	February 2023	Route Section 1 - Overall Plan	-
Report Ref: WSI	Drawn by: ARC		