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## 'Avenell Way': an ancient track across south Cambridgeshire?

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*'Avenell Way' was part of an ancient track extending c. 24km from Odsey, on the Cambridgeshire/Hertfordshire border, to Cambridge. Probably originating in the Late Iron Age and in use through the Roman period, some sections of the route continued to be used into the medieval and post-medieval period, part being fossilised by the present A10 near Cambridge. A significant section of the trackway near Steeple Morden has been excavated. Two main phases of hollow way were revealed, including a metalled causeway over a former prehistoric channel, in addition to a number of associated timber buildings. Although the earliest pottery recovered by the excavation is of Iron Age date, the main period of use for the hollow ways and adjacent buildings appears to have been during the late 2nd to mid-3rd century AD. The excavation, combined with the wider study of the trackway, has provided significant evidence for the construction, use, maintenance and decline of this rural route.*

### Introduction

Is Avenell Way, an ancient route across south Cambridgeshire? This article proposes that an ancient track, probably originating in the Late Iron Age, once crossed southern Cambridgeshire. Although a considerable body of evidence has been assembled, further investigations are needed to confirm whether it was one complete route and the date of its origin. A route, probably for wheeled vehicles, as well as travellers on foot and horseback, it linked two major route intersections at Odsey near Baldock, and Cambridge (Fig. 1). Before the identification of this route, which was aligned south-west to north-east, archaeologists and historians had not identified any trackways linking the towns of Baldock and Cambridge (e.g. Smith 1987, fig. 1; Medlycott 2011, fig. 7.9). While its original name has been lost, the Pigott's Estate Map of 1804 (Crawford 1937) gives 'Avenell Way' to a small element of the route in the south-western section of Litlington's medieval fields and this name has been used throughout this report.

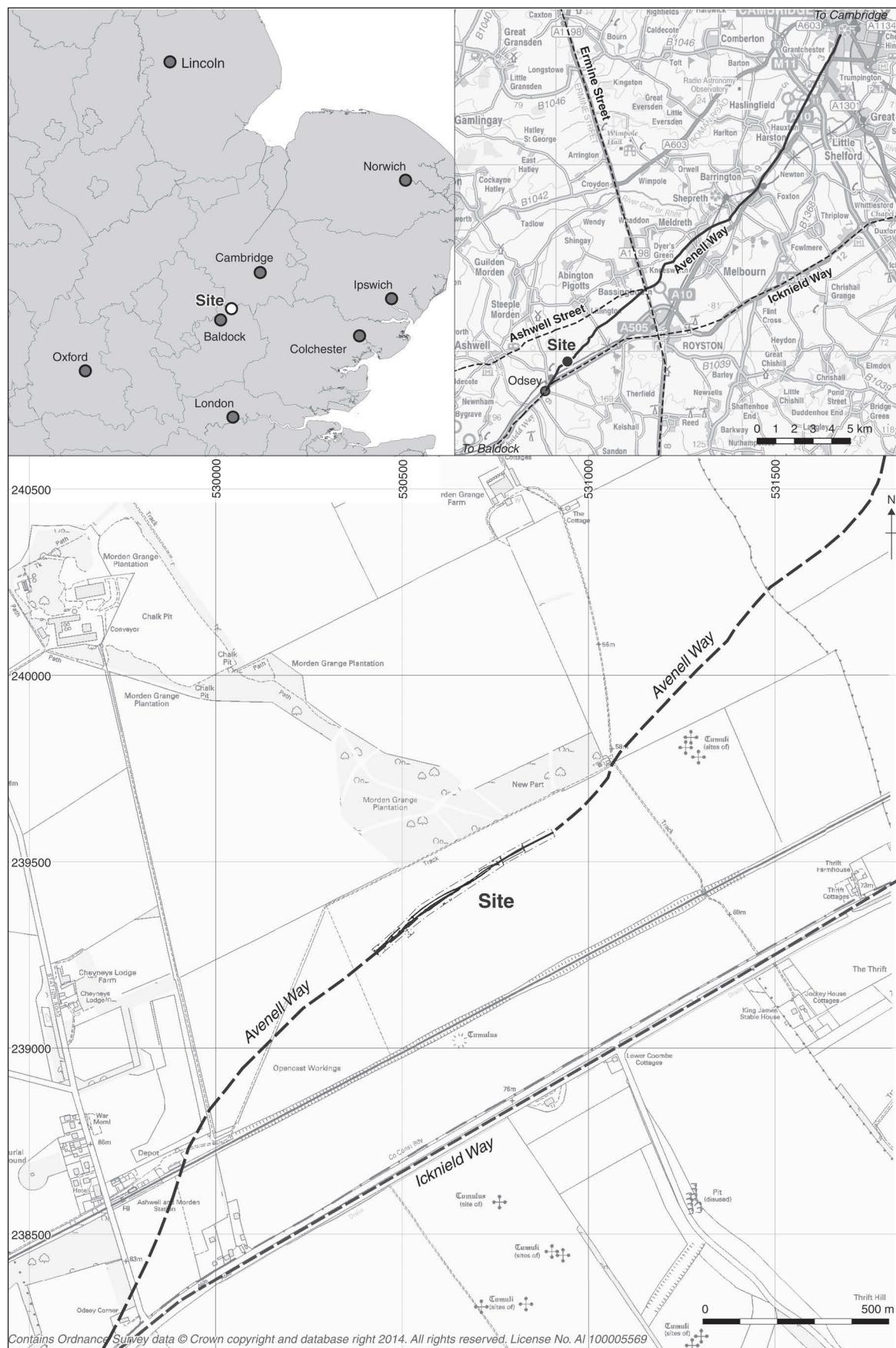
The name Avenell Way probably applied only to the section in Litlington, where its etymology may relate to the hill ('ell') that it crossed. Due to the poor condition of the Estate Map, the name could equally be read as 'Apennell'; indeed a Steeple Morden estate

map of 1782 (CUL Maps.bb.53(1).95.9) shows the track as 'Apon Hill Way', although this may be a misspelling. Avenell was, however, the name of a significant medieval family based in Gamlingay with a manor in Guilden Morden and Wimpole together with landholdings in Steeple Morden, amongst other places. It is possible that the name may derive from this family, who originated from Avenelles in Normandy, although they are not known to have held land in Litlington. In Guilden Morden the manor was originally located in the south of the parish, near Odsey (Calendar of Inquisitions Miscellaneous File 290 (1)). Avenell Way in Litlington may conceivably have been referencing this early land holding, which was close to where the track began.

Study of the track over its entire length, combined with an archaeological excavation along 650m of it near Steeple Morden in Cambridgeshire, has allowed detailed analysis of the nature of the route and its wider context to take place (Figs 2–5). This, in turn, has potential to contribute to research topics relating to developments in the Late Iron Age and Roman periods including settlement expansion, intensified use of the landscape and improved transport and communication networks (Haselgrove *et al.* 2001, 31).

### Geology and Topography

The geology along the 24km long route is predominantly chalk. In some areas, for example within the north-eastern edge of the excavation at Steeple Morden, there are Head deposits (variable clay, sand and gravel) cutting through the chalk, marking the locations of relict channels (British Geological Survey 2001). Topographically the route begins in an area of gently rolling landform at a height of 85m OD near Odsey in the south-west, descending to between c. 80m OD gently sloping ground of the chalk downland to the north of Therfield Heath (c. 55m OD), on to Meldreth and Foxton, where the land lies at between c. 16m and 20m OD. Beyond Foxton the route followed largely flat land, around 15m OD. It then passed slightly north-east, or along the line of the present A10, to Cambridge. Much of the course of the route is under arable cultivation, with some chalk grassland.



**Figure 1.** Site location with Avenell Way in relation to other routes.

## Background and Methodology

In 2004 Martyn Barber of English Heritage sent aerial photographs showing indications of a prehistoric track in Bassingbourn (Figs 3 and 4) to Sue Oosthuizen and the South-West Cambridgeshire Project (SWCP), but it was not until 2009 that its extent was fully identified (Hurst 2009).

In order to identify the route of Avenell Way, evidence was gathered initially from aerial photographs (see Appendix) supplemented by field-work observations and information gleaned from the Cambridgeshire and Hertfordshire Historic Environment Records (CHER and HHFR) and the National Monuments Record (NMR). Features and finds in the vicinity of the route were also examined for possible relationships to the track, for instance hollow ways and linear features, or possible destinations for travellers indicated by existing settlement. Natural or man-made landscape elements such as hills or prehistoric monuments, which may have acted as markers at strategic points along the route were also considered.

Early maps, such as the various parish Enclosure Maps, the 1804 Ordnance Survey (OS) Drawing, 147 Baldock, the 1836 1st edition OS maps and more modern ones (many held at the Cambridgeshire County Council Archives, Cambridge University Library and the British Library), were also examined for evidence of the track. A paper by OGS Crawford (1937) was particularly important, combining a study of the Pigott Estate Map of 1804, aerial photography and field walking, to discuss the pre-enclosure field system of Litlington. Although not a map, study of the 1563 Field Book of Bassingbourn (Cambridge Record Office (CRO) P11/28/1) provided further clues. Maps were also used to establish the topography, especially boggy areas and any short changes in angle of field boundaries, roads and watercourses, surrounding the track. Short changes have been shown in other parts of south-west Cambridgeshire to indicate places where other tracks or watercourses join or cross them (Hurst 2011 and 2012).

Coinciding with this research, a series of archaeological works was being undertaken by Oxford Archaeology at Station Quarry, Steeple Morden (Fig. 6), where a c. 650m-long section of Avenell Way was examined where it was to be destroyed by three successive extensions to the chalk quarry. Archaeological investigation, initially by Oxford Archaeology (OA) and subsequently by Oxford Archaeology East (OA East) between 2002 and 2012 included aerial photographic assessment (CgMs 2002; Cox 2002), fieldwalking, geophysical survey and trial trench evaluation (OA 2002; OA 2006). This was followed by a 'strip, map and sample' excavation of the second of the three quarry areas in 2007 (Piper 2008; Piper and Norton 2009) and targeted excavation of the third quarry extension to the east in 2012 (Atkins and Graham 2013).

Clear evidence of the trackway, including a cause-way across a former channel, was uncovered by the excavations, along with a number of associated timber

buildings of Roman date. Numerous tree throws of probable prehistoric origin and several post-medieval ditches were also present; these are not further discussed here. The main excavation archive is currently held at OA East's offices under site code STMSQA 12 and will be deposited at the Cambridgeshire county store in due course.

## The route from Odsey to Cambridge (Figs 1, 2–5)

Utilising the methods and resources outlined above it has been possible to trace approximately 79% (Table 1) of the route from Odsey to Cambridge, of which 3.9km has been identified from boundaries shown on maps etc., and c. 15km from cropmarks or soilmarks visible on aerial photographs. The remaining c. 5km was not traceable, much being masked by housing (e.g. at Meldreth and Trumpington) or located in areas close to river crossings or roads such as Ermine Street, the A10 and M11; these unconfirmed sections are shown as dotted lines on Figs 2 and 5 where the scale permits.

Examination of aerial photographs of sections of the track gives no indication of uniformity of size or construction. It was not possible to confidently determine its width, which varies. It is sometimes visible as hollow ways, but, as seen in Steeple Morden Station Quarry (see below), such stretches may have contained multiple tracks. It was not possible to ascertain from the photographs which stretches may have included flanking ditches in the Iron Age/Roman period.

## The south-west section (Figs 2, 3 and 4)

Avenell Way left the Icknield Way, a major prehistoric route made up of numerous tracks, at Odsey. With Highley Hill and its several tumuli to the west, a large bowl barrow just in front of it, Gallows Hill and its tumuli to the east and Penny Loaf Hill to the north (Fig. 2, inset 2a), the start of Avenell Way would have been well marked as the gateway to the Cam Valley, forming an easily recognisable junction in a period before maps were in everyday use.

Baldock, an important Iron Age and Roman settlement, lies c. 8km to the south-west of Odsey and Slip End, a small settlement of contemporary date, is located c. 4.8km to the east, both on the Icknield Way. Whether the Icknield Way was a continuous Neolithic track extending from Norfolk to Wessex is debatable (Harrison 2003), but the section from Baldock to where Royston is now, could have been in use in the Late Iron Age, if not earlier, as a series of tracks used in varying weather conditions or for different purposes.

Close to the springhead of the River Ivel and the Icknield Way in Baldock, several excavations have been carried out and aerial photographs examined. There is evidence of use of the area from the Late Neolithic, with ditches and banks, and settlement sites from the Early Bronze Age, Iron Age, Roman

TL start	TL end	Description	Boundaries, etc.	Aerial Photo (m)	Unknown (m)	Total
295 379	298 386	OSD 147 map	693			
298 386	299 387	Steeple Morden rail station			124	
299 387	299 388	North of station		106		
299 388	301 389	West side of quarry			216	
301 389	310 397	Quarry and rest of field		1260		
310 397	311 399	Steep rise			150	
311 399	314 402	To Litlington parish boundary		440		
314 402	317 406	Across western medieval field		558		
317 406	320 410	Avenell Way -medieval boundary	414			
320 410	321 412	To Royston Road, Litlington		264		
321 412	327 415	S of Limlow Hill		580		
327 415	340 426	Hanging valley - Litlington and Bassingbourn		1680		
340 426	341 427	Hollow way Moules Farm site, Bassingbourn	164			
341 427	347 432	South of Bury Farm, Bassingbourn		769		
347 432	350 434	Across Ermine Street A1198			285	
350 434	351 434	Western field, Kneesworth		226		
351 434	361 447	Kneesworth fields			1730	
361 447	362 448	1885 footpath	134			
362 448	366 451	Meldreth field		539		
366 451	372 458	Meldreth field boundaries	375			
372 458	376 461	Meldreth settlement			370	
376 461	377 462	British Queen field, Meldreth		70		
377 462	378 463	Across River Mel and ditch			139	
378 463	384 466	Meldreth fields to lake		763		
384 466	386 467	Quarry lake			151	
386 467	387 468	To Shepreth parish boundary		102		
387 468	391 469	Western field, Shepreth		418		
391 469	393 470	To hollow way, Shepreth			201	
393 470	394 472	Hollow way south of Frog End, Shepreth	185			
394 472	395 473	To River Shep, Shepreth		207		
395 473	395 473	Ford across River Shep	15			
395 473	396 474	To boundary with angle change, Shepreth			118	
396 474	397 476	To Shepreth Road		177		
397 476	397 476	Across Shepreth Road			23	
397 476	399 478	Across long field east of Shepreth Road		250		
399 478	399 479	To footpath, Brown Spinney			92	
399 479	400 480	Footpath, Brown Spinney	153			
400 480	408 486	Across western field of Foxton		975		
408 486	413 497	A10 & north of A10 on ridge	873			
413 497	415 498	To V shape in Hoffers Brook		216		
415 498	416 499	Across Harston parish boundary			108	
416 499	419 504	Across western field of Harston		566		
419 504	420 506	To A10			282	
420 506	421 507	CCC modern planning map	72			
421 507	421 509	1799 Inclosure map, incl. Bakehouse and Harston Hall boundary	120			
421 509	425 515	Across south of North field			626	
425 515	425 517	Linear mark next to CHER 09647		136		
425 517	427 521	To Rectory Farm, Harston			469	
427 521	428 522	Rectory Farm boundary	119			
428 522	430 527	To Hauxton ford		507		
430 527	430 527	Across River Cam			60	
430 527	435 536	South of M11		1200		
435 536	436 538	Across M11			178	
436 538	438 540	M11 to Shepherds Cottage		270		
438 540	439 542	Shepherds Cottage to area south of BA ring ditch			204	
439 542	439 542	South of BA ring ditch area		81		
439 542	440 547	Medieval headlands in Trumpington Meadows		200		
440 547	442 549	Headlands to Granchester Road			545	
442 549	442 550	Enclosure Map boundary north of Granchester Rd, Trumpington	30			
442 550	443 551	South Trumpington Hall			160	
443 551	447 558	Trumpington Hall & fields to Trumpington Road		796		
447 558	450 563	Close to Trumpington Road			588	
450 565	452 569	Trumpington Rd to Vicars Brook (Botanic Gardens, Cambridge)	584			
<b>79% Identified as boundaries and from aerial photographs</b>			<b>Total kilometres</b>	<b>3.93</b>	<b>15.09</b>	<b>5.09</b>
				16%	63%	21%

**Table 1.** Lengths of identified and unidentified sections of Avenell Way from aerial photographs, map and boundary evidence.

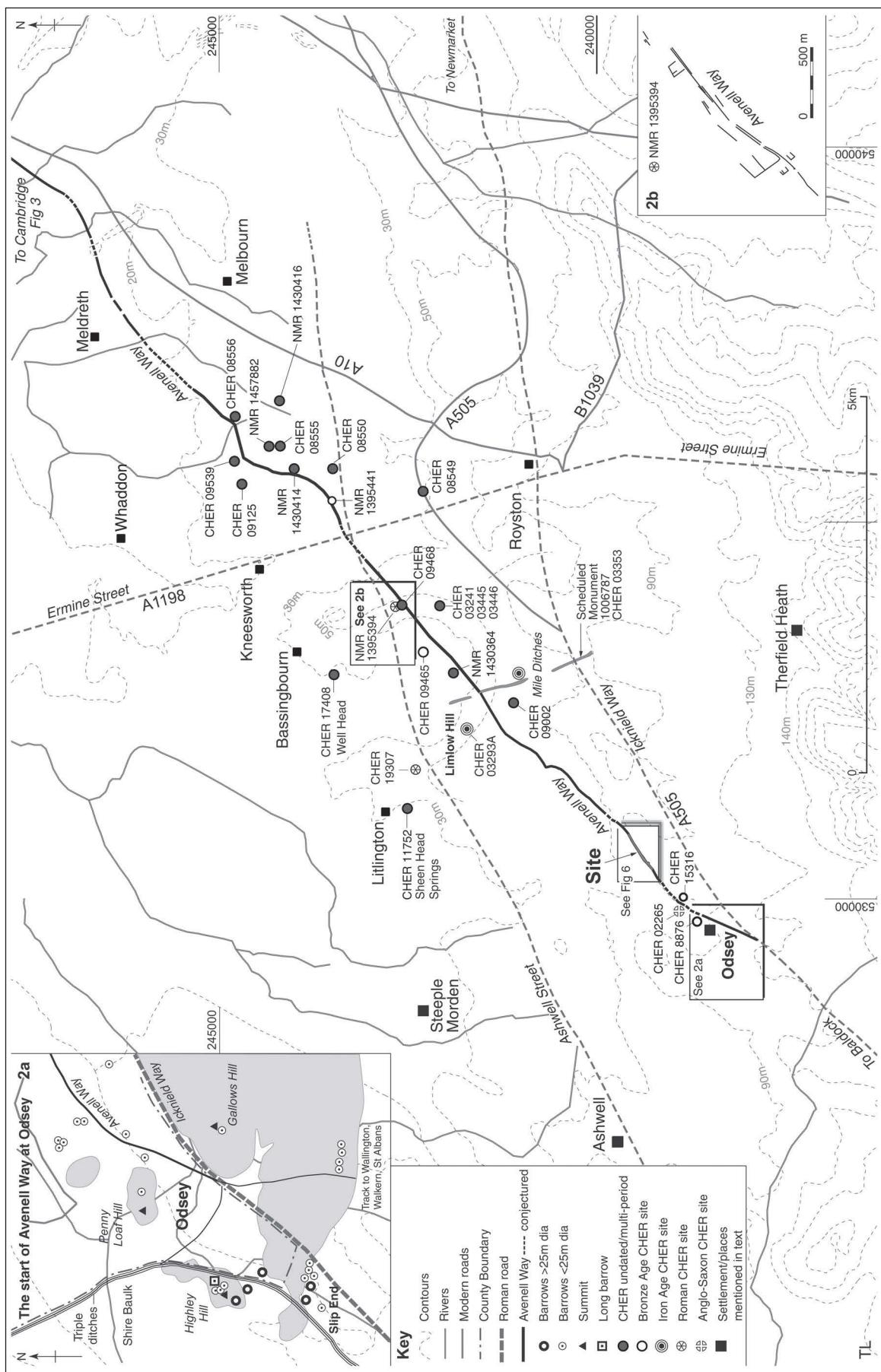


Figure 2. South-western part of Avenell Way in relation to adjacent sites and routes.

and Anglo-Saxon periods (HHER 9449, Moss-Eccardt 1998, NMR 365843, HHER 2470, HHER 6826). In Hertfordshire, excavations along the Icknield Way have provided evidence for an Iron Age date. At Royston there is the Neolithic Long Barrow (HHER40) with a ring of Bronze Age barrows (HHER 4261, 4290) close by, and along the length of the route and further north into the Cam valley is a multitude of Bronze Age ring ditches. An Iron Age enclosure is associated with the Icknield Way at Kelshall (NMR 368234). Slightly further north along the length of the spring-line there is evidence for Iron Age, Roman and later use. It is probable that the Baldock and Royston areas were linked by various paths across Therfield Heath.

The beginning of the route would also have been an easily recognised place as Odsey is located at the intersection of a number of tracks in addition to the Icknield Way. A triple ditch track from Slip End turned north at Odsey along the Shire Balk (later the county boundary) (HHER2317, CHER02714), and may have been a route in the Iron Age and medieval periods. A path from the Icknield Way also led north across the present Odsey Park to join the Balk where the county boundary changed angle at the junction. To the south, a track passed through Wallington, Walkern and Clothall, perhaps reaching as far as the Iron Age and Roman settlements of Welwyn and St Albans (Fox 1923, 155). Excavations in Baldock identified four tracks from the south leading north-eastwards to join the Icknield Way from Baldock towards Odsey (Bryant and Burleigh 1995, figs. 16.2 and 16.3; Burleigh and Fitzpatrick-Matthews 2010, fig. 5), providing further routes south from Odsey.

From Odsey Avenell Way continued for more than half a kilometre roughly in the same direction as the Icknield Way before the latter veered east. The route can be traced by linear features on aerial photographs near the woods surrounding Odsey Grange, and then across two fields towards the Ashwell and Morden railway station. It crosses here between two barrows, the western one is just north of an Anglo-Saxon burial site found in 1923 by Sir Cyril Fox (CHER 02265). Perhaps the barrows were acting as markers, as at this point the track bends to a more east-north-easterly direction as seen on aerial photographs with the track heading for the Steeple Morden quarry site where the recent excavations took place (see below). Beyond the quarry area, the track diverts around a slight rise, before continuing up a short but steep hill. Generally the easiest path appears to have been taken, that is to say, in some sections the track roughly follows the flatter parts, curving slightly to take advantage of these places; in others it follows 'small valleys', even though that takes it away from the overall direction of travel, in yet other cases it kept to the 'ridgeway'. Such changes are often slight but, for laden carts, probably made a difference.

After crossing the first of Litlington's medieval fields, the track appears to have turned in an east to west direction for a short distance, possibly to cross a gap in an existing boundary. Then the track followed the named medieval boundary between two

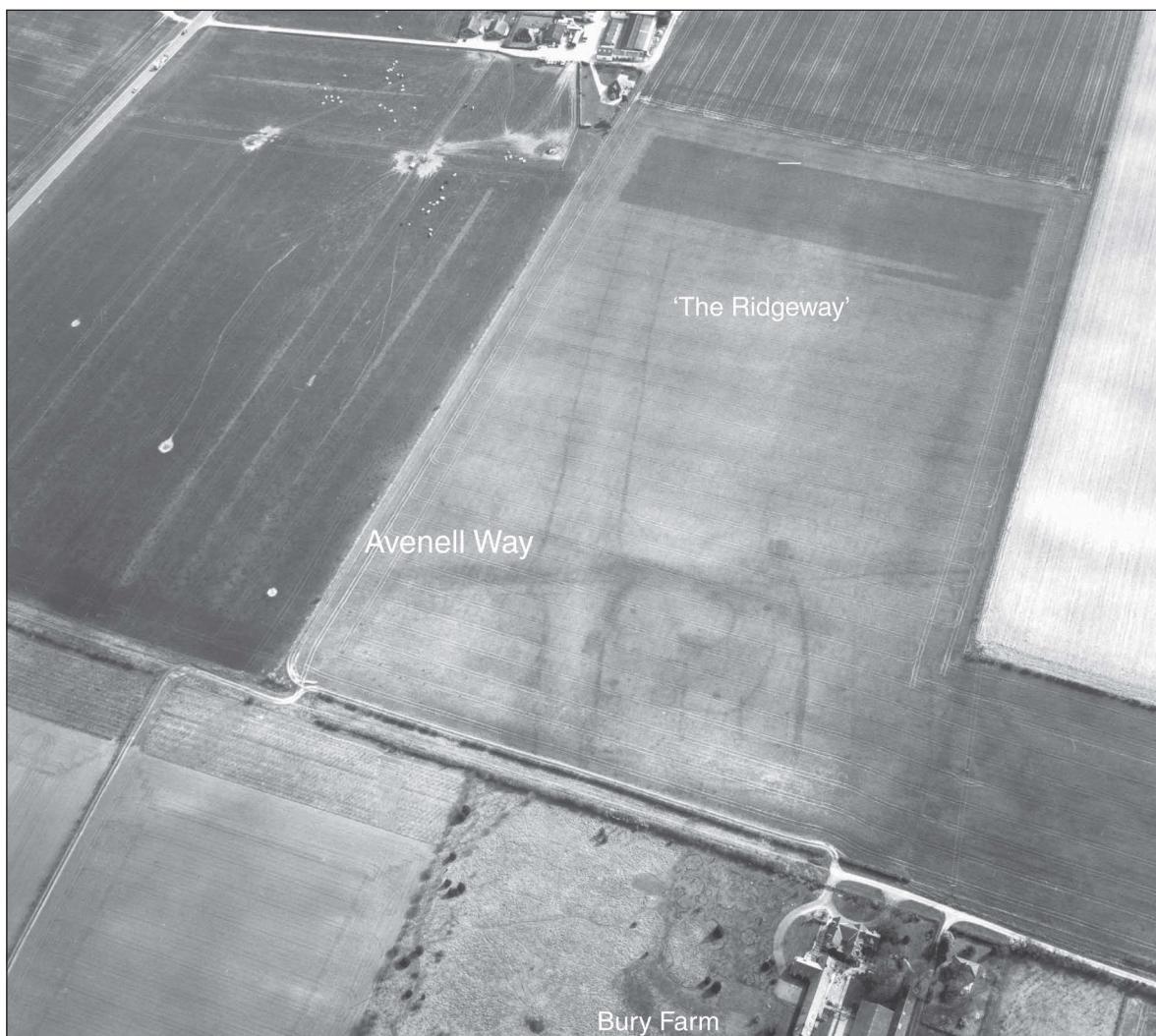
furlongs, 'Avenell Way', heading north-eastwards. Four of the boundaries on the Pigott Estate Map do not follow the roughly north to south alignment of the medieval field system, implying that they may be of a different date than the others. Avenell Way is one, two others were aligned with the medieval road, now a footpath, from the Icknield Way to Litlington village. Where this route crossed the top of Limlow Hill, there is a rampart and ditch of a possible Iron Age hill fort (CHER 03293A; Clark 1939) with an opening on the north side for the track (Crawford 1937). Beyond this the track continued to a high status Iron Age site at Litlington (CHER 11752; Robinson *et al.* 1995), and a later Roman villa (Wessex Archaeology 2010; CHER MCB 19307), so these two parts are likely to be of Iron Age date. And the fourth boundary at odds with the north to south alignment enabled access to Sheen Head Spring, north of Ashwell Street, which is also likely to have been a destination of early date.

Beyond the Avenell Way boundary, the track takes a more easterly route along a straight and narrow valley, keeping close to the 45m contour. Limlow Hill on the north and a triple ditched barrow (CHER 09002), south of the track, would have provided a suitable pair of markers for travellers along this part of the route.

The track crossed the Iron Age Mile Ditches (SM 1006787; CHER 03353; HHER 2207; Fig. 2) at right angles, where the Ditches left the 'Sheen Head Way' to continue their route north. From there Avenell Way then crosses the current parish boundary into Bassingbourn, continuing along the flat valley, where a rectangular enclosure butted against it (NMR 1430364). Although this valley took the track on a more easterly path, just below the ridge, it must have provided a drier and less windy route than the ridge; a hollow way is still visible along this section (NMR 1395158).

The end of the valley was marked by a Bronze Age barrow (CHER 09465) and a possible Iron Age hill-fort to the south, enclosing a Neolithic bank barrow and Bronze Age barrows (CHERs 03241, 03445, 03446), perhaps indicating a change in direction, as from here the track descends in the original north-easterly direction. A wide depression crosses the field diagonally west of the site of Moules Farm (CHER 09468). The way is not named in the Bassingbourn Field Book of 1563 (CRO P11/28/1), but in the furlongs west of Moules Farm the path may be marked by wide strips of several acres called *Pieces of Old Bury Land*, the name given to ancient holdings of the main manor, surrounding strips were generally half or a quarter of an acre. The larger strips might have allowed passage of a diagonal track.

South of the current Bury Farm in Bassingbourn there are extensive cropmarks extending over more than a kilometre, aligned along both sides of the track, possibly representing Iron Age to Roman fields and settlement (Fig. 2b; NMR 1395394). The marks also seem to respect the alignment of the medieval (or earlier) routeway called 'The Ridgeway' (Fig. 3; Hurst 2009, fig. 5; Atkins and Graham 2013, fig. 14)



**Figure 3.** Avenell Way is visible extending left to right across the centre of the photograph, the broad, ditched feature running almost north to south is the medieval boundary named The Ridgeway, a track that was in use into the 20th century. © English Heritage (TL 3543-23-27-MAR 2002. jpg NMR21549 04).

and the ancient route of Ashwell Street.

Although no evidence can be seen as Avenell Way crosses Ashwell Street and then the line of Roman Ermine Street; this is perhaps due to roadworks on both over the years. The track is visible again on aerial photographs where it emerges from the trees in Kneesworth, just south of a spring (Top right of Fig 4). Here the track clipped the outer ditch of a Bronze Age double ring ditch (NMR 1395441; Fig. 4), as it turned in a north-easterly direction, keeping just north of the 35m contour, possibly this was also used as a marker for change.

The route then appears to have diverted from its general north-easterly direction to pass around a series of undated cropmarks (CHERs 08549, 08550, 08555, 08556 and 09125; NMR Nos 1430414, 1430416 and 1457882). These include rectangular enclosures, ring ditches and linear features, possibly representing settlement that was already in existence when the track was created. On turning east again, the track

is marked by the southern edge of a medieval field, showing ridge and furrow (CHER 09539), before crossing south of a spring, and then, half a kilometre further east, a stream. This was the line of a footpath, a slight hollow way, from Kneesworth, still extant in 1903 (OS 2nd edition). Where the track resumed its original north-easterly direction it is marked by the southern edge of another area of ridge and furrow (CHER 08556a), and then by the curved northern boundary of fields in Chiswick End.

No evidence of the route has been found in the area now occupied by Meldreth, except in a field to the east of the High Street, where it can be seen on aerial photographs. After crossing the River Mel the track can be picked up again, skirting a hill to the south. On either side of the track here, several complex features are visible on aerial photographs and recent field walking has produced a considerable quantity of Roman finds (R. Skeen pers. comm.). Crossing the present railway line, Avenell Way then



**Figure 4.** Avenell Way can be traced curving across the Kneeworth fields north of Ashwell Street, where it appears to clip the outer ring of a Neolithic / Early Bronze Age double ring ditch (NMR 1395441) © English Heritage (TL 3442-14 27-MAR-2002 NMR 21593-23.jpg).

diverts slightly south, probably to avoid the large, wet area of LMoor, with Wrights Moor to the north and Rush Moor to the south, to reach the field east of Frog End, Shepreth. No features are visible on aerial photographs for the last 200m before the road and then the track changes angle back to the north-west to continue along a hollow way. A search has not revealed any other linear alignments, other than those noted.

#### *North-eastern section (Fig. 5)*

Avenell Way survives as a hollow way about 50m to the south of, and parallel to, the diagonal stretch of Frog End Road, Shepreth. It then crosses the river, which widens into a pool with gently sloping sides aligned with the track, presumably due to use of the ford. Within 100m the track is crossed by a ditch and modern field boundary, which have short changes of angle at that point. Recent work in South Cambridgeshire has shown such changes often indicate where a track crossed (Hurst 2011 and 2012).

Some 500m further east it passes close to the present footpath through Brown Spinney. This footpath was once the main road linking Shepreth and Foxton and lies just south of Shepreth's Roman villa, an Iron Age settlement and a Romano-British cemetery (CHER CB14689). After crossing the river at the edge of the spinney, the track is again visible on aerial photographs in the field east of the villa, where it takes a slightly curved path, crossing a north to south

aligned prehistoric routeway (Taylor 1997, 49 and 97) just to the south of the present Foxton railway station. The curve might have been the result of rounding a possible Iron Age or Roman settlement (CHER 08626 and findspot CHER 07717). This track is to the south of two Roman tracks leaving the villa site.

The area around the crossroads of the two tracks contains considerable evidence of settlement in the Iron Age, Romano-British and Anglo-Saxon periods (e.g. CHER 04209a-c). From here it is probable that Avenell Way followed the line of the present A10 as it keeps to the ridge. When the end of the ridge is reached it is visible again on aerial photographs as cropmarks (CHER 08636), just 20m north of the present A10 heading to Huffers Brook, the parish boundary between Foxton and Harston since the early 10th century.

The track crosses the brook at a 'V' shape in the boundary 25m north of the present road; this is similar to a river crossing on an ancient route from Harston into Haslingfield. The track then passes the site of Manor Farm, on the south side of the A10, which was occupied from the Iron Age to the Saxon period (CHER 04122). From here the A10 curves slightly to the east, but Avenell Way continues in a straight line to the west of the road, joining it again around Harston's Mill Lane, an area with evidence of Bronze Age, Iron Age and Roman occupation (CHER CB15256).

In Harston the track appears to skirt the western

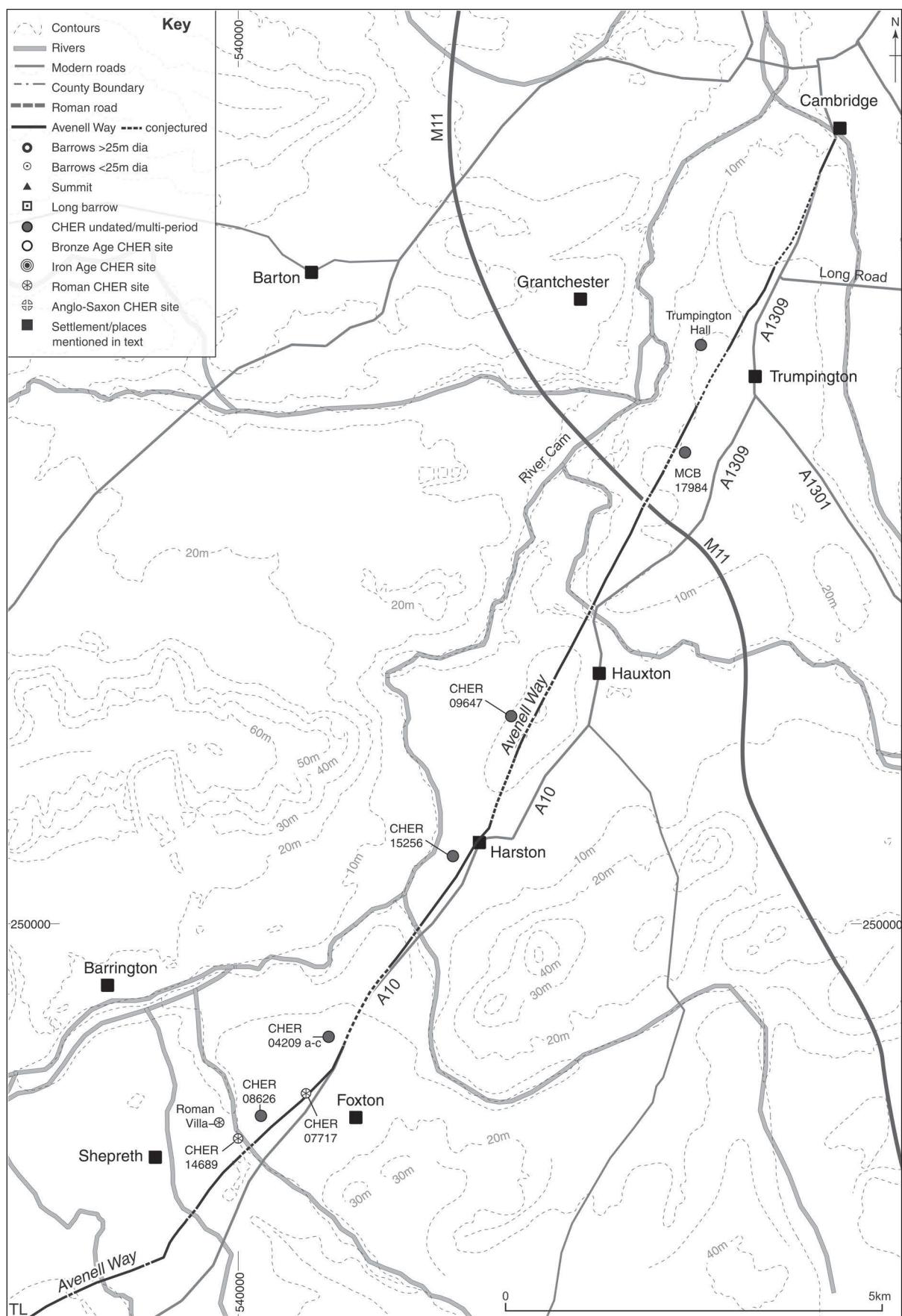


Figure 5. North-eastern part of Avenell Way in relation to adjacent sites.

edge of the medieval green, between Mill Lane and Church Street. The route is marked by a boundary forming the earlier, straighter edge of the A10, then by a boundary shown on the 1799 Inclosure Map (CRO P85/26/1). The 16th century buildings on either side of Church Road here are aligned with the track, as is the boundary hedge of Harston Hall.

Although there is no direct evidence, the track probably then crossed a stream and continued across the south part of North Field. As it approaches the back boundary of the High Street closes, a line on the same alignment of the track (although 50m further east) is shown on the Inclosure Map and the track is again visible on an aerial photograph as it crops the corner of a rectangular feature (CHER 09647) before passing east and then west of two small hills. From here it follows the western boundary of Rectory Farm and a headland, before descending to Hauxton Ford a few metres to the west of the present bridge. Tracks can be seen from here heading north-eastwards towards a slight hill where 'Shepherd's Cottage' sits, beyond the M11.

From there to the slightly higher ground around Trumpington church, only one section of aerial photographic evidence has been found for the route, where it approaches the line of the dismantled railway. There are, however, a number of features which may indicate the remainder of its course. It is likely that it kept close to the 15m contour, rather than the river, since places such as Lingey Fen and Byron's Pool next to the Cam would have been boggy at times. It appears that Bronze Age burial mounds were used as markers elsewhere on the route, such as at Steeple Morden and Kneesworth. The remains of one such monument were recorded in this locality during archaeological investigations at Trumpington Meadows. The ring ditch (MCB17984) was described as being on "a gravel 'spur' which jutted out towards the river, providing a visually dramatic setting" (Brudenell and Dickens 2007, 65). The authors suggested that this burial mound continued to play a pivotal role in the landscape throughout the Iron Age. The excavations revealed evidence for considerable multi-period settlement and also identified the long headland visible on aerial photographs and geophysical surveys as being of medieval date. The latter was described as aligning "very well with Haigh's Ridgeway, an early route north of the village heading towards Cambridge" (Haigh 1975, in Brudenell and Dickens 2007, 3). This is the probable route of Avenell Way. Interestingly, Fox noted that the name 'The Ridgeway' was still in use in c. 1580 (Fox 1923, 113). Further excavations (Brudenell and Dickens 2007; Ladd 2013) close to the church and Anstey Hall Farm, also show a linear feature following a similar alignment to the track's. On the north side of Grantchester Road, opposite the church, an angled property boundary on Trumpington's Enclosure Map of 1804 (CRO R60/24/2/70(a)) also aligns with the route. It may be that these features followed the line of the 'The Ridgeway' which in turn followed the earlier route of Avenell Way.

In the grounds of Trumpington Hall, Avenell Way is again visible on aerial photographs. The northern boundary of the hall grounds is formed by another (east to west aligned) ancient route from Red Cross to Grantchester and beyond. Excavation at Clay Farm, Trumpington (Phillips forthcoming) provided evidence of the ancient route east of Trumpington Road. The crossing of Avenell Way and this track is close to a bend where a barrow may once have stood (Taylor 1997, 127) and presumably the bend may mark the point where the tracks diverted around it.

Beyond Trumpington Hall the route is once again traceable on aerial photographs, which show it deviating slightly east probably to avoid crossing a stream which flows towards River Farm. Further north there is no aerial photographic evidence to indicate the route but at this point it passes so close to the A1307 that this is perhaps not surprising, due to roadworks over the years. The route joins the present Trumpington Road into Cambridge, at a bend just north of Bentley Road, and continues to Vicars Brook.

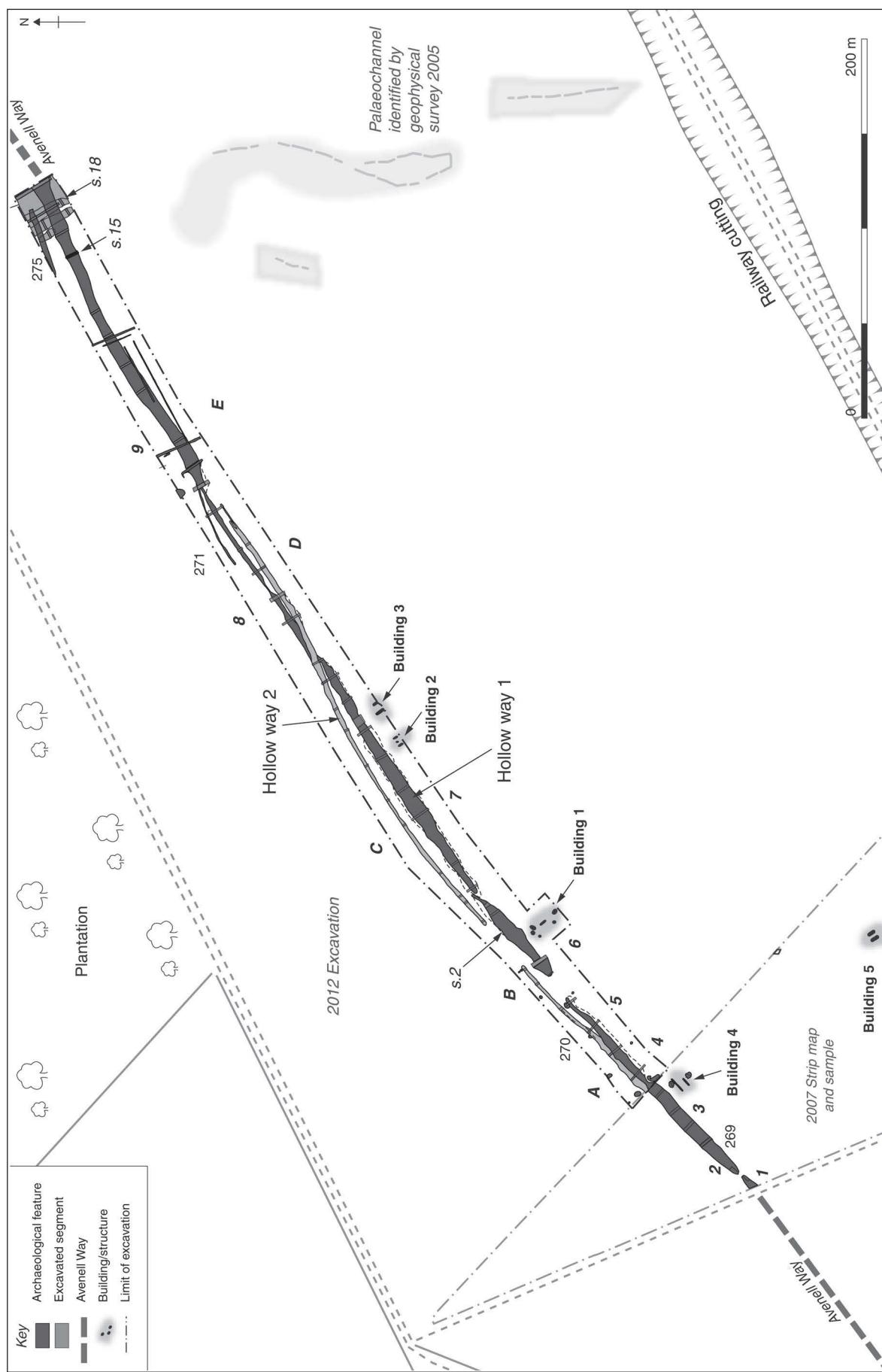
The extension of the roughly straight line from Hauxton Mill ford into Cambridge may indicate the possible continuation of the route, although, due to modern expansion of the city, no aerial photographic evidence is currently available for this stretch. Following Trumpington Road to the corner with Brooklands Avenue, it must have forded the river into the present Botanic Gardens, known as *Ford Field* in 1270 (Stokes 1908). This name, however, probably relates solely to the present path of Trumpington Road which turns left, heading for the Great Bridge and Castle Hill. This sharp, 45°, change in angle suggests that originally the route continued straight ahead to meet the River Cam near the present footbridge on Stourbridge Common, and the medieval or earlier ferry crossing to Chesterton. The areas of Trumpington, south and east of the church; the Latham and Chaucer Roads area, close to the Botanic Gardens; Stourbridge Common and Chesterton, were settled from the Late Iron Age onwards, with many connections by land and river to other major settlements, they may have been the settlements around modern Cambridge which marked the end of the route.

#### *The Excavations at Steeple Morden (Figs 6–13)*

The trackway, represented by at least two phases of intermittent hollow way, was intensively sampled by means of 1m-wide hand-excavated slots spaced at intervals of between 10m and 15m (Fig. 6). In addition, the remains of five timber buildings were revealed to the south of the trackway (Fig. 13); where dated, these all appear to be Roman.

#### *The trackway and associated elements*

Perhaps the earliest element associated with the track was a ditch or hollow way (275) that was revealed for a distance of c. 46m on a roughly south-west to north-east alignment in the north-eastern corner of the exca-



vation. Measuring up to 2.7m wide and between 0.19m to 0.40m deep, this feature, like the hollow ways to the south with which it ran broadly parallel, cut across the prehistoric channels to the east. A single Late Iron Age pottery sherd was recovered from the sole fill; the earliest pottery recovered by the excavation.

#### *Hollow way 1*

The earlier of the two main tracks, although intermittent in plan, traversed the entire length of the excavated area (Figs 6 and 7). It was far from homogeneous along its length, comprising nine distinctly different elements or segments (numbered 1–9 on Fig. 6). These varied from deep, wide lozenge-shaped depressions (segments 3, 6, 7 and 9; Fig. 6) to shallow linear scoops (segments 1, 4 and 8). Between these were two or three places (segments 2 and 5) where no hollow ways or depressions were present, with the longest gap being 15m long (segment 5).

In addition, the north-eastern end of segment 6, about a third way along the track, appeared to narrow and kink slightly northwards about a metre away from segment 7, creating a further apparent break in the hollow way. It is not certain whether these breaks were intentional or a result of variable erosion/truncation (see Discussion). In segment 7 the width of the hollow way varied significantly from 4.18m to 10.4m and, although grouped together into a single segment, it may represent a number of smaller hollows.

Overall the hollow way was up to 10.4m wide and

0.9m deep and invariably had gently sloping sides with a gradual break of slope and a wide, generally flat base. Wheel-ruts were found in a number of localised areas (e.g. segment 7), cutting the base of the hollow way (Fig. 8; Fig. 12, S.2, 15 and 18). The ruts were all similar, displaying a U-shaped profile with widths of between 0.08m and 0.18m. In three sections the distances between pairs of ruts could be measured and were found to be 1.40m and 1.70m. The longest stretch was along the centre/base of segment 9, where a pair of wheel-ruts was recorded for a distance of c. 50m; these were, on average, spaced between 1.40m and c. 1.60m apart (Fig. 12). Occasionally the largest areas of rutting had been repaired with a hard compact silt/sand tempered with small stones and flint. Shallow swathes of dense loose chalk (c. 0.05m thick) were present on one or both sides of the hollow way in segments 6 and 7 and may have been the result of traffic erosion (Fig. 13).

Up to five main deposits were found to infill the hollow way. The earliest fills were largely consistent, being mostly composed of chalk fragments in a sandy silt matrix. The overlying silts, probably washed into the hollow way after the track went out of use, varied only in slight changes in colour (generally getting darker towards the top of the sequence) and frequency of chalk inclusions.

Very few finds were recovered, mostly comprising occasional abraded Roman pottery sherds and fragments of animal bone, the majority of which were



*Figure 7. Hollow way 1 (darker fill) and 2 (paler fill), looking east from crane.*



Figure 8. Detail of wheel ruts cutting across Hollow way 1, looking south from crane.

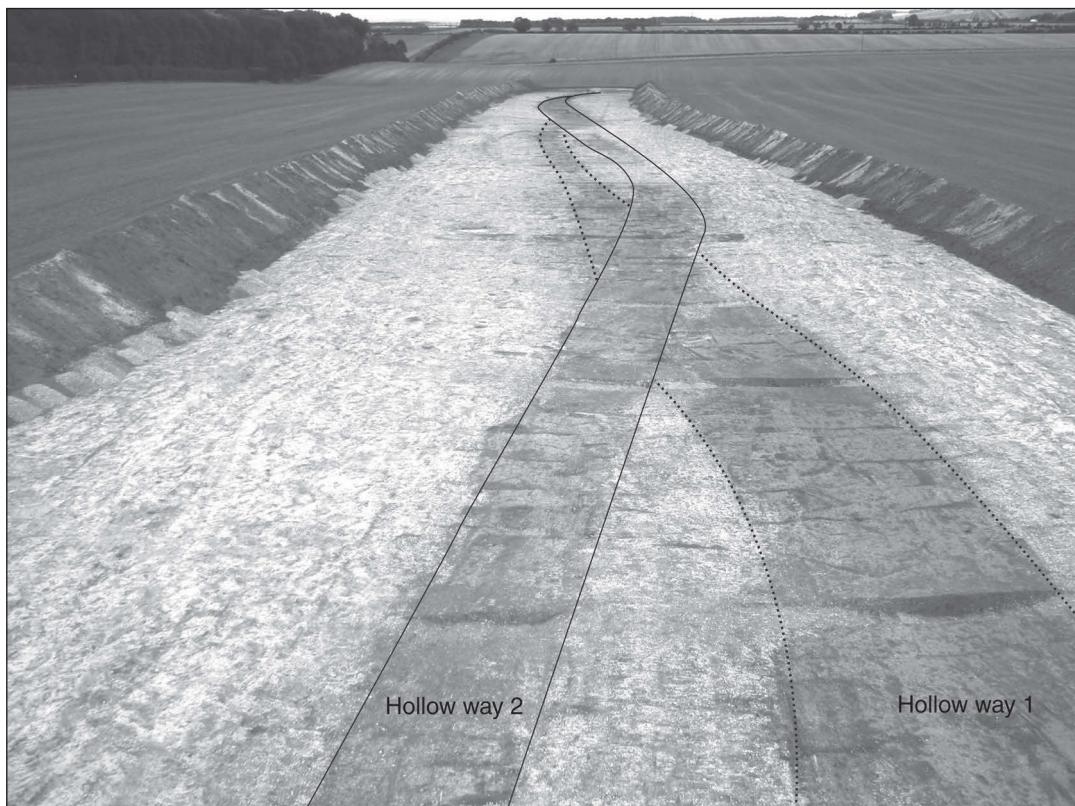


Figure 9. Detail of Hollow way 2 crossing over Hollow way 1, looking north-east from crane.

recovered from those sections nearest to Buildings 3 and 4. One of the larger assemblages, comprising 29 Roman pottery sherds representing 12 different vessels, was found in segment 7 from both the primary silting and the later infilling deposits. Several of the sherds dated from the 2nd to 4th century and include 12 sherds from a single Nene Valley folded beaker which was made after AD 170 (Wadeson 2013).

#### *Hollow way 2 and causeway*

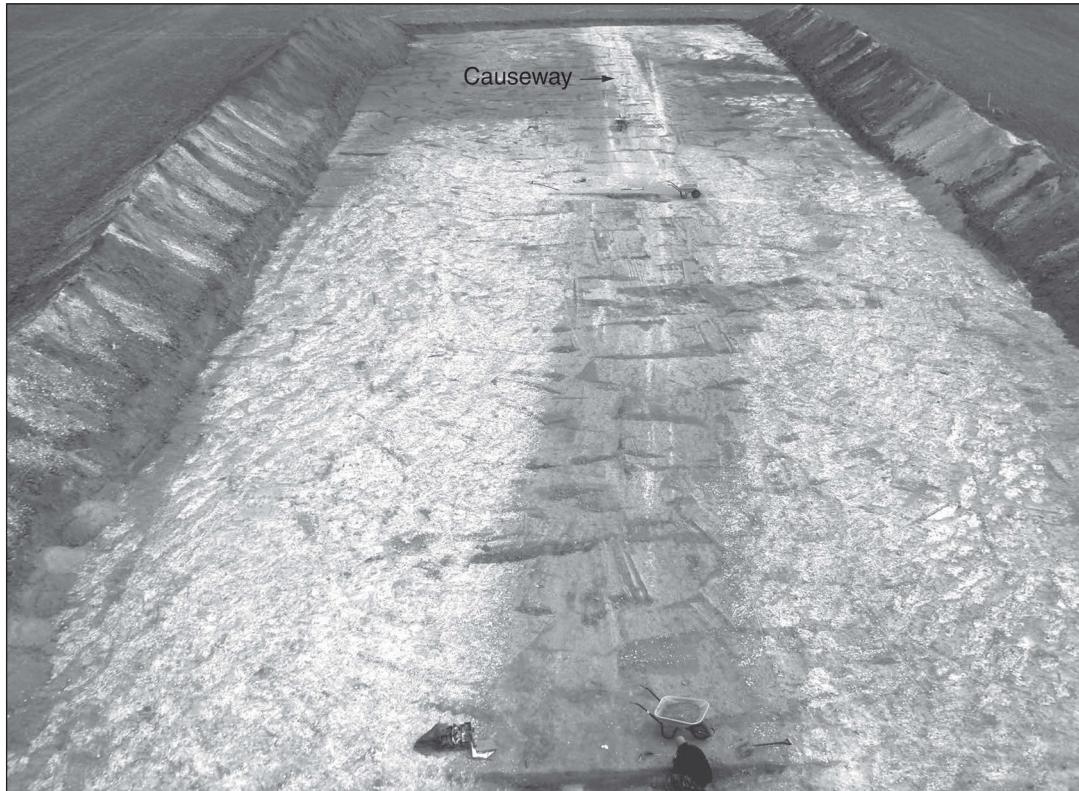
The second hollow way was present along the whole length of the 2012 excavation area but was not seen in the 2007 area to the south-west (Fig. 6). Somewhat sinuous in plan, this hollow way displayed a broadly similar orientation to the earlier hollow way, although it was generally shallower, narrower and more consistent in width than its precursor. Initially running to the north of Hollow way 1 the later track, which was distinguishable by its paler fill, cut across the earlier track and then ran to the south of it before merging with its eastern extent (Figs 6, 7 and 9). This second hollow way also displayed a sharper outline in plan, which may suggest a shorter period of use.

Five segments (A to E) have been assigned to this hollow way, to reflect differences along its length (Fig. 6). As with the earlier hollow way, this phase of track was intermittent, with a number of apparent gaps or breaks being present between the main hollows, for example segment B, which represents a 29m-wide gap adjacent to Building 1.

In general the hollow way measured between c. 2m–3m wide, although it widened to 4m on the curve/bend within segment C; it was very shallow at between 0.03m and 0.23m deep. A single pale greyish brown sandy silt fill with varying concentrations of redeposited chalk nodules was present along its length, which may have provided a firm surface but probably represents the gradual erosion of the natural chalk.

Segment A formed the south-western (93m) part of the hollow way, to the north-east of which was a break (segment B) beyond which it recommenced as segment C. This latter segment curved slightly away from the earlier track, but after some 80m began to bend back towards it, where the hollow widened to c. 4m. This curve may imply a deliberate diversion around the earlier track at this point. Beyond this, segment D comprised the section where the hollow way crossed the earlier trackway and then continued for over 100m to the south and parallel to it until another apparent break. To the north-east of this break the two hollow ways appeared to merge (segment E) for a distance of c. 180m, the latter c. 70m of which comprised a causeway with a metalled surface (Fig. 10).

Although elsewhere along the hollow way silting appears to have occurred naturally over time, it is possible that efforts were made to fill in the former hollow way along the entire segment including the causeway area. This would have built the track up, making the route less steep. The causeway was con-



**Figure 10.** North-eastern end of hollow ways with causeway across palaeochannels showing wheel ruts backfilled with chalk, looking east, taken from crane.

structed on top of the infill and was more than 4.4m wide and 0.28m thick, surviving best at the eastern baulk of the excavation where it was noticeably convex in profile (Fig. 11). Here it measured 5.4m wide and survived to a height of 0.42m but is likely to have been higher before being truncated by modern ploughing. The make-up of the surface here comprised a lower 0.2m thick deposit of dark grey brown firm silty sand with occasional small stones overlain by a paler 0.22m-thick layer of very firm gravelly sand (Fig. 12, S.18).

Wheel-ruts were recorded cutting this surface (Fig. 10) and were visible for approximately 68m, with up to six parallel ruts surviving in places. The wheel-ruts were all U-shaped and between 0.14m and 0.42m wide and 0.08m to 0.26m deep (Fig. 12, S.15), with the distances between them varying from 0.8m to 1.6m. They were filled by a mixture of compacted silt sand and small chalk pieces implying that attempts had been made to keep the surface level by the addition of hard materials as ruts occurred.

A small quantity of pottery was recovered from five of the sections across the causeway, most of which is Roman and dates to the 2nd century AD or later. A single medieval sherd and a medieval key, both presumably intrusive, were also present. The hollow way as a whole produced only 17 small sherds, the earliest of which is a piece from an Early Roman platter (AD 43–110) while the latest is from a 3rd to 4th century AD colour coated vessel (Wadeson 2013).

### Ditch 271

Located immediately to the north of and on a similar orientation to the hollow ways was a shallow ditch (271; Fig. 6), which varied between 0.95m and 2.05m wide and up to 0.13m deep. Revealed for a distance of c. 44m before curving southwards to meet the track and terminating, the ditch contained four sherds of Roman pottery that are not closely datable.

### Buildings

Four of the probable buildings were positioned adjacent or close to the south side of Hollow way 1, ranged over a distance of c. 300m, while the fifth was found 120m to the south of the track (Figs 6 and 13). One of the buildings was parallel and the remaining four were set at right angles to the track, suggesting that they were associated. No internal features survived.

Four of the five buildings were in the form of paired beamslots of a similar size (Fig. 13) although the fifth (Building 1) had just a single beamslot surviving. Dimensions of four of the buildings can be calculated by measuring the external widths across the pairs of beamslots (between 3.8m and 5.6m), and the external lengths (between 3.3m and 4.8m). The depths of beamslots of four of the buildings (1–3 and 5) varied between 0.07m and 0.28m deep with the fifth (Building 4) being notably deeper at 0.46m. Their sides were either vertical or steep and their bases flat. All five had single sandy silt backfills with

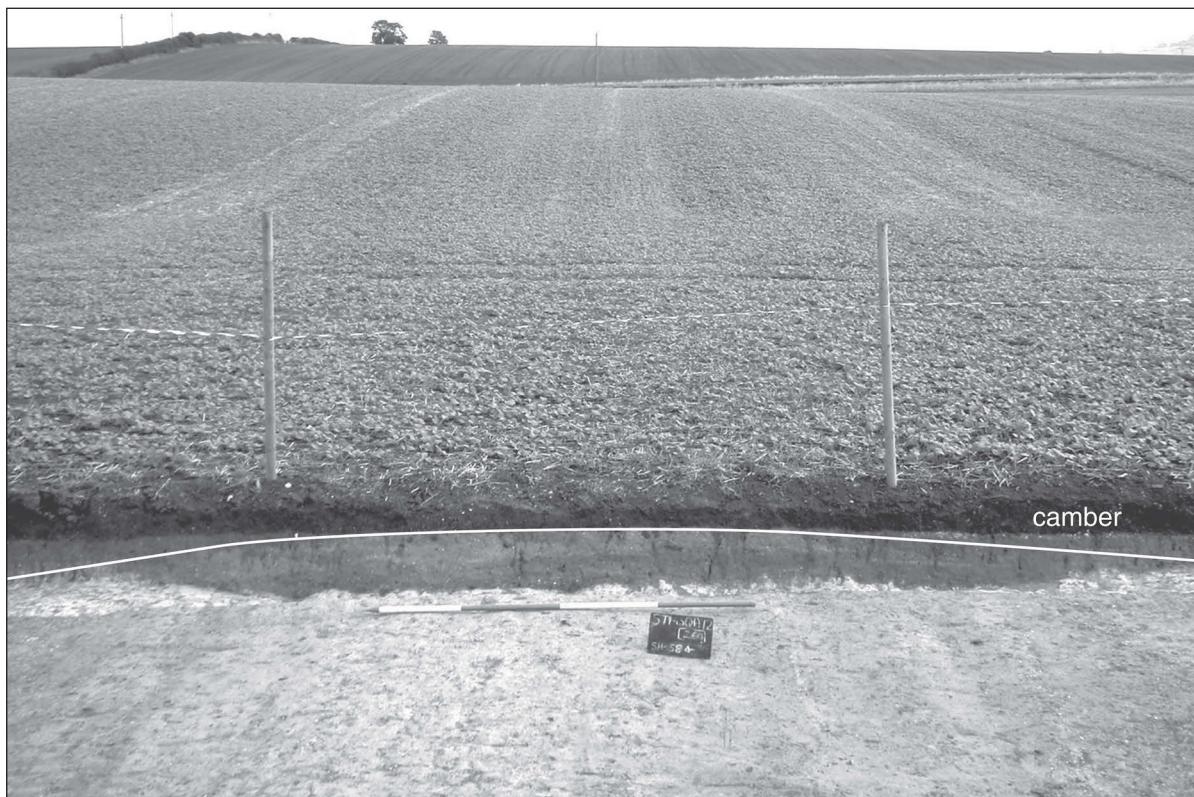
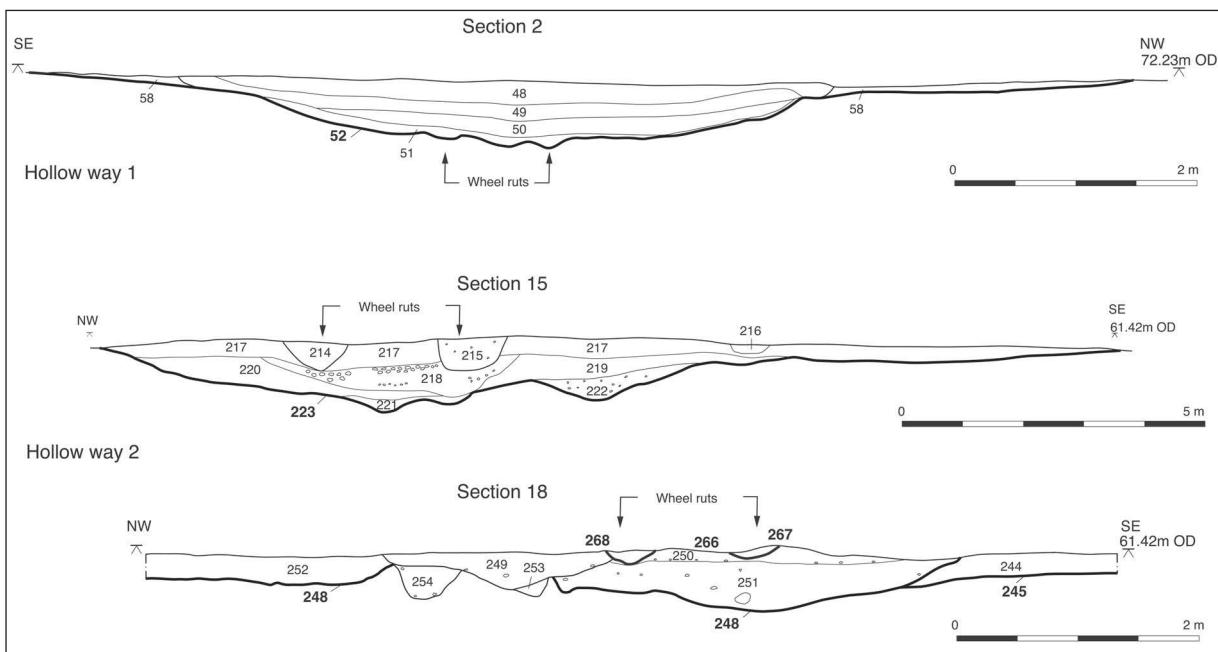


Figure 11. South-west facing baulk showing camber of metalled causeway across palaeochannels.



**Figure 12.** Selected sections across hollow ways.

varying amounts of chalk inclusions. Four of the five buildings produced Roman pottery (collectively 37 sherds), all of which dates from at least the early/mid 2nd century with the latest being two sherds of Hadham ware dating to after AD 170, from Building 2 (Wadeson 2013).

## Discussion

### Origin and date of the track

The date at which Avenell Way first came into use is difficult to determine, but a Late Iron Age origin is considered most likely. Over the length of the track it appears to exhibit certain characteristics:

The track is not straight.

- it appears to bend around the possible settlements at Kneesworth and Foxton;
- wet, boggy areas are avoided, such as in Shepreth and Trumpington;
- easiest slopes are taken where possible.

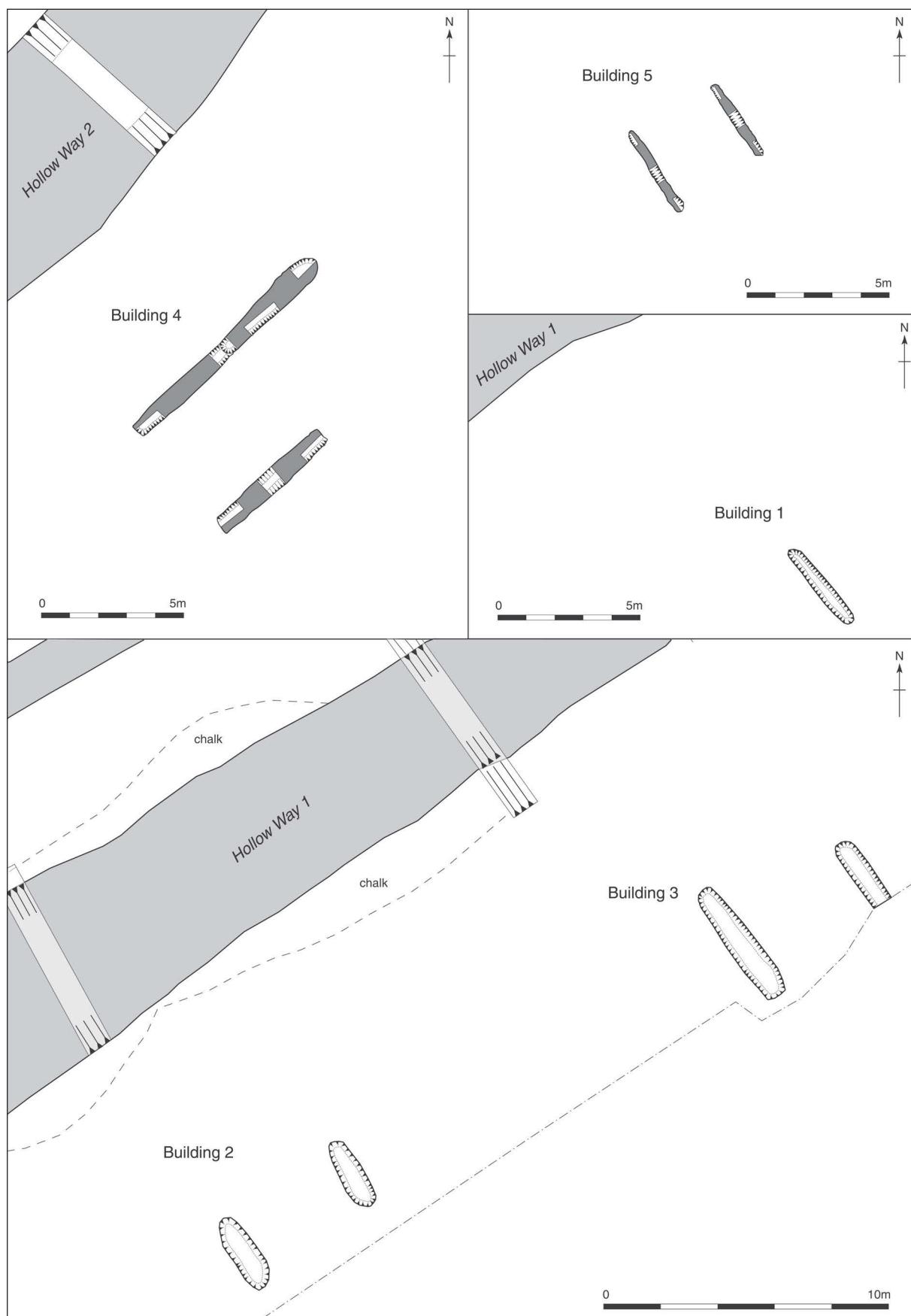
Bronze Age ring ditches/barrows appear to have been used as markers

Such characteristics are unlikely to be exhibited by major Roman roads. However, there are examples locally of non-straight Roman roads. A sinuous track (numbered W3) identified during recent work in north-west Cambridge (Evans *et al.* 2013, 17; fig. 2) was initially believed to be medieval, but excavation demonstrated it to be of probable Roman date, linking two contemporary settlements.

When considering the Addenbrooke's area, south of Cambridge and approximately 1.5km east of Avenell Way, Evans discusses at length the difficulties of assigning a date of origin to the excavated road on the Hutchinson site. He states that 'it is not inconceivable that the site's Roman road represents only the 'regularization' of an Iron Age route ... though the issue remains ambiguous' (Evans *et al.* 2008, 135). Fox (1923, 112) also believed that some straight roads around Trumpington may have been of an earlier date and were then utilised by the Romans. It is possible that Avenell Way was essentially a Roman track, however it appears to pass close to considerably more Iron Age sites than Roman. If Bronze Age burials were used as route markers that is unlikely to have been a Roman characteristic.

- One used for this purpose appears to have been the large bell barrow in Odsey on the Icknield Way, close to the beginning of the track, at the south-west corner of present day Cambridgeshire
- the two barrows at Ashwell and Morden Station between which the track passes, marking a change in direction from north-east to east-north-east
- a series of ring ditches in Bassingbourn marking the end of the valley across the Litlington / Bassingbourn boundary and the change in direction to the north-east
- the double ring ditch in Kneesworth clipped by the track and marking a change in angle of the route to a more northerly one
- a ring ditch in a prominent position in south Trumpington
- a barrow at the crossing of an ancient route from Red Cross to Grantchester.

The alignment of Avenell Way is quite distinct from other better known tracks of likely earlier prehistoric date, such as the Icknield Way and its seasonal alter-



**Figure 13.** Roman beamslot buildings.

native, Ashwell Street (Fig. 2). Avenell Way diverged from the Icknield Way at Odsey before proceeding north-eastwards, crossing the other tracks on its route, suggesting that it was not part of the same network as the Icknield Way tracks. Instead it was heading for a different, possibly more recently-established destination, such as the extensive high status Iron Age settlement identified at Cambridge (Alexander and Pullinger 1999, 17; Evans and Ten Harkel 2010, 53). Perhaps significantly, Evans and Ten Harkel found in excavations in Cambridge that Akeman Street was of Late Iron Age origin. Avenell Way may have been a new route to allow direct communications between the two markets of Baldock and Cambridge.

A tentative Late Iron Age date for the start of the track could also be argued based on the presence of the ditch at Steeple Morden quarry, which ran parallel with the hollow ways and produced a single sherd of Late Iron Age pottery. Whilst this is scant evidence on its own, it is possible that the lack of finds of this date is simply a reflection of the distribution of nearby settlement during this period.

The discovery of Iron Age urns of the Aylesford type in Ashwell, Odsey, Foxton, Hauxton, Trumpington, Castle Yard Cambridge, Stourbridge Common, Chesterton, Milton (Fox 1923, 90) and amphorae in Trumpington, Stourbridge Common and Chesterton, of a similar type to those found in the Welwyn burials of Catuvellaunian Hertfordshire may also be of significance (Fox 1923, 90–96) given their proximity to the route. The Cambridge area marks the northern limits of the Aylesford-Swarling zone.

At its south-western extent Avenell Way linked with another track at Odsey, into present day Hertfordshire, which suggests that the route was part of an extended network that would have provided communication between the Late Iron Age settlement at Cambridge and similar destinations in Hertfordshire, including Baldock and possibly Welwyn and St Albans.

In addition, it has been suggested (Hill 2000, 10) that from the 2nd century BC this south-western part of what was to become Cambridgeshire appears to have acted in an independent manner, with a noted increase of imported goods; a situation that would have required a good transport network both within and outside the region. Cambridge had an established trade network with Britain and beyond in the Late Iron Age. It was a significant local regional centre, though not a major centre as Baldock was (Evans and Ten Harkel 2010, 48; 53).

When considering a date earlier than the Late Iron Age, it is important to note that at Kneesworth Avenell Way clipped the outer ditch of a Bronze Age double ring ditch. This indicates a later prehistoric origin for the route.

Collectively the evidence points to a Late Iron Age origin for the track. In the eastern region, and much of the rest of Britain, the later Iron Age witnessed increased population levels and establishment of new settlements connected by a network of tracks and droveways (Taylor 1979, 21; Cunliffe 1995, 113; Hill

2000, 10; Abrams and Ingham 2008; Wright *et al.* 2009). The settlements (or probable settlements) identified at Bassingbourn, Kneesworth, Foxton, Trumpington and Cambridge along or close to Avenell Way, while of different sizes and importance, testify to this expansion (Bryant 1997, 28; Brudenell and Dickens 2007; Evans *et al.* 2008).

### *The hollow ways: formation and function*

In addition to the excavated section of Avenell Way at Steeple Morden there are a number of examples of remaining hollow ways along the route of the track, notably in Litlington, Bassingbourn, Meldreth and Shepreth. These are of varying widths and, though all are very difficult to measure due to prolonged use, are approximately 10–20m wide.

Hollow ways were sometimes formed after only a short period of regular use; compaction causes poor drainage (even on normally free draining geology such as chalk), standing water then makes the soil within them soft thereby accelerating the rate of formation (Davies 2006, 22). Once formed, however, they could continue to be used over long periods: some country lanes in current usage are ancient hollow ways that are now stabilised by the introduction of modern road surfacing (S Oosthuizen pers. comm.).

It is worth noting that other perhaps 'more significant' tracks in the area also manifest as hollow ways. For example excavation of a track (possibly the Icknield Way) near Letchworth revealed a hollow way containing wheel-ruts from which a fragment of mid 1st-century AD pottery was recovered (Moss-Eccardt 1964).

The hollow ways excavated at Steeple Morden appear to have formed via a number of processes, largely as a result of erosion, although the effects were variable across the excavated sections. Later truncation, changes in local geology and topography and attempts to stabilise the track during its use may also have contributed to their formation.

Analysis of the changes in depth of the earlier hollow way in relation to the fall in natural ground level from south-west to north-east towards the dry valley, indicates that although there is a general correlation between steepness of slope and greater depth of hollow way this was by no means consistent. Equally, localised changes in geology do not appear to have been a major factor in terms of the depth of the hollows, although areas of softer chalk may have led to the formation of the characteristic lozenge-shaped hollows in segments 6 and 7. Local variations in the natural topography may also have played a part, since slight depressions within the ground level appeared to coincide with the deepest and most heavily rutted sections. It is also worth noting, however, that this deeper section of the hollow way was located adjacent to several small buildings (see below), which may also be relevant. Some attempt seems to have been made to repair/infill the ruts within this section of the track, although this may only have been temporary as it was subsequently by-passed by the second/

later hollow way.

Truncation, notably by ploughing, may have removed those parts of the hollow way where little or no hollow survived. It is feasible, however, that some of the gaps between the hollows may have been to allow access to one of the nearby buildings, or to control animal movement. A possible nearby comparison might be at Hinxton, Cambridgeshire, where excavation identified a series of Late Iron Age animal pens/corras adjacent to a minor trackway (Lyons forthcoming). These, however, were in the form of multiple post hole alignments forming the corrals, no evidence of which was found at Steeple Morden although the two smaller ditches associated with the hollow ways may conceivably have fulfilled a similar function.

Only one section of Avenell Way (where it crosses the dry valley and relict palaeochannels) showed any evidence that metalling had been attempted, and then only after severe erosion and silting had taken place, presumably after many years of use. The change in geology here to sandy silts, coupled with the low-lying situation would have made this area prone to becoming boggy which in turn may have necessitated the consolidation of this stretch of the track. The metalling was made up of crushed chalk, sand, flint and gravel, all heavily compacted, and in one place the surface even showed as a raised camber. Evidence for further wheel-ruts cutting through the surface indicate that it could still be eroded by heavy traffic and attempts had clearly been made to fill in the wheel-ruts in order to keep the track open via this causeway (Fig. 10). This metalling probably occurred at some point during the Early to Mid Roman period; pottery recovered dates to the 2nd century AD or later.

Similar evidence for the metalling of specific lengths of tracks to combat local conditions has been observed along other road locations (Chevallier 1976, 89). Direct comparison to Avenell Way can be seen in two Roman roads (P207 and P308) found in excavations at Areas 2 and 3 along the A505 by-pass just east of Baldock (Phillips *et al.* 2009, 91–101 and fig 8.2). These roads were recorded running roughly parallel c. 140m apart and aligned north-west to south-east heading towards Braughton. For the majority of their lengths the two roads consisted of a simple track defined by two flanking ditches but when they crossed a linear depression created by the same dry valley they both formed a low mound or *agger*, up to 5m and 12m wide respectively, and up to 0.45m thick. As was found at Steeple Morden, the upper sections had a metalled surface comprising compacted chalk and occasional flint pieces up to 0.1m thick.

Avenell Way does not display other characteristics of classic Roman roads such as the *agger* (other than over the causeway) or roadside ditches, perhaps affirming its earlier origin. Recent analysis of over 600 excavation sites where a Roman road was located, however, has demonstrated that often only a single ditch was present, or none at all (Davies 2006, 77). Roads were an innovation introduced to Britain with

the Roman invasion of AD 43, initially to facilitate the military advancement by allowing messages, reinforcements and supplies to be quickly deployed to the zones of conflict. Subsequently the construction and maintenance of roads fell under the auspices of civil authorities; a good transport network was vital to ensure supply of produce to the towns as well as the import and export of goods further afield. It has been estimated that by c. AD 150 at least 10,000 miles of Roman road had been built across England (Smith 2011, 2).

During the late 1st and 2nd centuries AD, and perhaps into the 3rd and 4th centuries, numerous secondary roads linking Romano-British agricultural settlements and industrial sites were also constructed, many of which were unmade trackways that continued to be used after the collapse of Roman rule (Smith 2011, 5). It is possible that Avenell Way, although probably already in existence at the time of the Roman Conquest, was incorporated into this secondary network of trackways and subsequently repaired and maintained.

The type of transport utilising Avenell Way can, to some extent, be surmised from the excavated evidence. At a basic level the two hollow ways would seem to have catered for different types of travel. The earlier track with its deeply eroded sections and wheel-ruts frequently occurring in its base would appear to have been used by wheeled traffic; those on horseback or foot and animals may also have used it. At some point the earlier hollow way appears to have become impassable and lighter traffic began to bypass the worst sections, creating a second hollow way just to the north. No evidence that wheeled transport used the second hollow way was found, apart from the area of the metalled causeway where the two tracks converged to cross the palaeochannel.

Some estimation of the approximate size of cart being used is possible by assessing the measurements of the distance between the wheel-ruts. In seven of the excavated sections through the earlier hollow way, the average distance between the wheel-ruts was 1.40m to 1.50m. Those recorded at Pompeii and Herculaneum were 1.44m apart (Adams 2000), while wheel-ruts revealed during excavation of Stane Street, near Chichester suggested the use of carts with a wheel gauge of 1.47m; about 5 Roman feet (Davies 2006, 79).

Roman rules for road dimensions dictated that a minimum width of a *via*, a single track road suitable for vehicles and pack animals, was 2.37m on straight sections and 3.55m around bends. The notional preferred width for a Roman traffic lane was, however, 2.9m with the absolute minimum for a two-way flow being 4.35m (Davies 2006, 111–112). The width of the earlier hollow way was at least 2.08m with much of it being more than 4m wide, whereas the shorter-lived later hollow way was between 1.94m and 5.7m wide; at its widest over the former palaeochannels. Overall, most of the later hollow way was less than 4m wide, perhaps signifying that the route was largely used as a single track, possibly for more local non-wheeled

traffic.

Avenell Way would have formed an important element of the well-developed network of roads, tracks and droveways that was established in and around Cambridge (*Duroliponte*) during the Late Iron Age and Roman periods. The route appears to have started at Odsey, located c. 4km to the north-east of Baldock, and extended to Cambridge; both significant Iron Age and Roman settlements. It has been estimated (Burnham and Wacher 1990, 44) that for a day's journey a radius of about 10–12km would be feasible for foot transport, 20–24km for pack animals and carts and up to 30km for riding horses. The distance along Avenell Way between Odsey (and on to Baldock) and Cambridge was around 24km, an important consideration as this theoretically meant that both towns were close enough to allow for travel in a day by all except those on foot.

### *Buildings*

Pottery from the buildings indicates their usage in the 2nd to 4th centuries AD, broadly contemporary with the later use of the track. Although most of the pottery was recovered from the beamslots and the sections of hollow way located close to them, the general paucity of finds or environmental remains from the buildings hampers interpretation of their function. Despite the pottery being wholly domestic in character, there is too little to imply permanent settlement and seasonal or occasional visits are more likely.

Their most probable use was agricultural and one interpretation is that they may have been shepherds' huts providing shelter for travelling herdsmen. Evidence for Roman sheep farming has been found nearby at Litlington (Wessex Archaeology 2010, 21) and to the north at Wimpole, where ribbon settlement adjacent to Ermine Street was investigated. Analysis of the sheep/goat assemblage from Wimpole indicated that most animals were butchered when adult, possibly indicating that they were kept for both their wool and their meat (Horton *et al.* 1994, 45). Four of the buildings at Steeple Morden, however, were adjacent to deeply eroded and rutted sections of the earlier hollow way, perhaps indicating that wheeled carts stopped here to load or unload goods. It is even possible that sections had been deliberately deepened to facilitate loading onto high carts. Thus an alternative function could be that the buildings were used as barns for the temporary storage of locally harvested crops before they were taken for processing. A very similar building (structure 3) was uncovered near to Chignal Roman villa and adjacent to a possible Roman threshing barn which measured 15.02m by 7.6m in size (Clarke 1998, 24 and 135, fig. 17). This structure was represented by two parallel trenches 3.3m and 3.15m long with almost vertical sides and flat bases, up to 0.37m deep. Its overall external dimensions were 3.35m by 2.94m. Given its location, the structure was thought to be agricultural in nature but no direct parallels could be found for it (*ibid*, 135).

An alternative explanation for these buildings is

that they were temporary storage/shelters for tools and associated material related to the maintenance and repair of the track. However, the only place where any significant effort appears to have been made to maintain the track was the causeway/metalled section across the dry valley several hundred metres to the north-east of the buildings.

### *End of use of Avenell Way*

Avenell Way presumably continued in use, along the entire route, for as long as the Iron Age and Roman settlements that it served (*i.e.* Baldock (via Odsey) and Cambridge) were in active operation. In both cases the towns are thought to have endured to at least the end of the 4th or early 5th century (Stead and Rigby 1986, 410; Alexander and Pullinger 1999, 83). The years following the Roman withdrawal would have dramatically reduced traffic along the track with excess grain, for example, no longer needed to feed the military or the urban centres.

The location of two possible Saxon cemeteries and/or burials identified at Steeple Morden and at Foxton close to Avenell Way tends to indicate that the route was still in use. Early and Middle Saxon cemeteries were often sited adjacent to Roman roads, for example outside Great Chesterford in Essex (Medlycott 2011) and near Botolph Bridge, where five examples of Saxon burials/cemeteries clustered along the probable Roman road from Peterborough to Oundle were identified (Spoerry and Atkins in press).

Along the south-western part of the route, Avenell Way seems to have continued to have been used for local traffic during the post-Roman period. Pollen records from Litlington and Bassingbourn combined with Williamson's work (1987) on field boundary survival in East Anglia, indicates that fields continued to be farmed in this period (Hooke and Burnell 1995, 14; Phillips 2009). The establishment of a minster at Meldreth before AD 870, possibly in the 7th century, may also have influenced a continuance of traffic utilising adjacent parts of the route.

Later landscape features have clearly employed elements of and/or respected the route, for instance, the named headland in Litlington and the boundaries of the ridge and furrow and present fields in Kneesworth and Meldreth. This phenomenon has also been noted further north in Cambridgeshire's Bourn Valley, where fragments of an earlier system are fossilised within the medieval common fields (Oosthuizen 2006, 68 and 134; Knight 2009).

The reason for the final demise of the route, particularly in the west, was probably the shift from predominantly pastoral agriculture to predominantly arable farming during the 11th to 13th centuries AD, as shown by Oosthuizen (2006) only slightly further north in the Bourn valley. Avenell Way's somewhat oblique alignment would have been at odds with the later agricultural use of the land, as it now appears to cut diagonally across the medieval fields. Perhaps also the track declined as other routes, in better condition, connected settlements which rose in impor-

tance, in much the same way as Ermine Street and the Great North Road altered in importance over time, as the main route to the north from London.

It seems that the actual end date was different for each section. From Odsey on the Icknield Way to just west of the excavated area of the quarry, the OS Surveyor's map (BL OSD147) shows a footpath still remained in use until at least 1804, although it was gone by 1845 when the railway plans were drawn up (CRO Q/Rum/16). The Litlington headland entitled 'Avenell Way' was used until Enclosure in 1828. Bassingbourn's Field Book of 1563 shows several large *Pieces of Old Bury Lands* in the appropriate furlongs, but no other indication of a route crossing them, even though the large linear depressions at the parish boundary and near Moules Farm remain today. It seems likely the track here went out of use well before 1563.

The section between Kneesworth and Shepreth must at least have been a landscape feature when it was used to delineate later field boundaries (CHERs 09539 and 8556a), but as Hooke and Burnell (1995, 102) indicate, this could have been any time from the Mid-Saxon period to the 13th century AD. A section in Meldreth, before the river, was marked as a footpath on the 1885 OS map, although after the crossing it then joined the footpath along Chiswick End. The adjacent section is still a field boundary today; but closer to Meldreth the track was incorporated into the field, presumably when more land for arable was required, after the 12th century. The Meldreth-Shepreth boundary was probably established in the Late Saxon/early medieval period and takes a sharp turn at the point where it crosses the track.

In Shepreth, short changes in both the field boundary and the river's course combined with the place name (meaning the 'brook where sheep were washed' (Reaney 1943, 81)), probably indicates that this part of the route was in use until the medieval period, or perhaps later.

From Foxton onwards, Avenell Way appears to have been covered by the medieval road from Royston, meeting the route near Foxton Crossing. Royston Priory was established by 1189 and soon became an important local settlement, and presumably the development of the new route was designed to provide a good connection between the town and Cambridge.

In Harston, the predecessor of the A10 was diverted at some point, presumably after the closes to the west of the High Street were laid out and that area increased in importance. On both sides of Church Street, The Bakehouse, which was built in the mid-16th century, the cottage opposite and the boundary of Harston Hall, were aligned with Avenell Way, so it may have still been a track at that time, again indicating its endurance.

Perhaps a combination of emparkment of Trumpington Hall and the growing importance of the London route through Great Shelford resulted in that section of the route moving to its present position by 1793. The presumed final section of Avenell

Way, between Bentley Road and Brooklands Avenue, is still in use as Trumpington Road.

#### *Settlement and farming adjacent to Avenell Way*

Evidence for possible Iron Age or Roman enclosures and settlements pepper the route of Avenell Way, some of which (notably in Bassingbourn; NMRs 1395394, 1395346 and 1430364 and Kneesworth (Fig. 2)) are clearly aligned with the track. A Roman farmhouse (Malim 1990, 24) is located c. 800m away to the north of the route, with associated fields (Hurst 2011), while a possible Iron Age or Roman field system extends across the Well Head Field (MCB19213) 300m north-west of the farmhouse.

#### Conclusions

Was Avenell Way an ancient single track across south Cambridgeshire?

Detailed landscape, documentary and excavation work has provided a considerable body of evidence to enable the identification of a probable ancient track and an understanding of its origins, purpose and demise. As such it has significantly contributed to current knowledge of the local Late Iron Age and Roman communications network in this area and to a certain extent the formation of hollow ways. Unmetalled roads and trackways are notoriously difficult to date (Smith 2011, 5), making the recovery of pottery from the later phases of use of the hollow ways of some importance. The presence of associated and broadly contemporary buildings, albeit of uncertain function, that do not appear to have been part of any nearby settlement, is also a relatively rare occurrence.

Avenell Way may have developed at a time when the population increased dramatically and new settlements needed more accessible routes to newly-established markets at Baldock and Cambridge. Previously these two burgeoning settlements appeared to have no direct route connecting them, as the established trackways such as the Icknield Way and Ashwell Street ran roughly east to west rather than north-eastwards.

This southern part of what became Cambridgeshire seems to have evolved separately from much of the surrounding area, reflecting a period when the kings of the *Catuvelauni* and *Trinovantes* sought to strengthen and expand their influence here in the 1st century BC (Hill 2000, 10). It is tempting to think that Avenell Way may have been a significant element within wider developments that included the laying out of a new communication network to link the main administrative and commercial centres.

Utilising a number of methods, this study has identified around 79% of the c. 24km-long route and has indicated that it may have originated as a single track in the Late Iron Age and may have been subsequently adopted and maintained during the Roman period. The demise of the route as a presumably continuous track probably occurred in the 5th century

(or earlier) when the Baldock and Cambridge markets diminished after the end of Roman rule. Small local farming settlements presumably became largely self-sufficient and such routes became less important. The south-western section of Avenell Way in particular was largely abandoned, becoming integrated into local fields as paths or occasionally fossilised as boundaries. Elsewhere, parts of Avenell Way remained as a track.

By the time Baldock re-emerged as a main market, it was linked to other newly established settlements, such as Royston, along different road routes. Conversely the emerging importance of Royston and its new road links attaching it to Cambridge meant that parts of the eastern section of Avenell Way were maintained from Foxton to Cambridge, a route now fossilised as the A10.

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### Appendix: Aerial Photographs

CCC: Cambridgeshire County Council; CUCAP: Cambridge University Collection of Aerial Photography; GE: Google Earth, NMR: National Monument Record. RAF: Royal Air Force.

**Odsey, Guilden Morden: TL 5295 2379 – TL 5296 2380**

**Steeple Morden: TL 5296 2380 – TL 5314 2402**

GE1/1/2003

CB15315 and CB15317, CgMs2002, C Cox

GE 1/1/2000

GE 2/21/2003

GE 1/1/2005

GE 17/10/2008

GE 17/10/2007

GE 17/10/2008

GE17/10/2006

Linear cropmark associated with CHER 09448, supplied by HER 18/09/2003

**Litlington: TL 5314 2402 – TL 5330 2418**

GE 21/02/2003

GE 10/16/2003

GE 7/30/2008

GE 17/10/2008

NMR21593/04 TL3241/45-27-MAR-2002

**Bassingbourn: TL 5330 2418 – TL5348 2433**

NMR 21593/04 TL 3341/45 27-MAR-2002

NMR 23067/18 TL 3342/35 17-APR-2003

ZEISS 406302 6 OCT 1972

GE 2/21/2003

GE 10/16/2003

GE 10/17/2008

NMR21593/07 TL 3342/7 27-MAR-2002

CUCAP BLQ 79

CUCAP BLQ 80

CNZ41

CNZ43

RAF 58/1983 30

NMR 21548-19 TL3342-16 27 Mar 2002

NMR 21548-23 TL3342-14 27 Mar 2002

NMR 21593-22 TL3442-13 27 Mar 2002

GE 1/1/2000

**Kneesworth: TL 5348 2433 – TL 5360 2447**

NMR Aerial TL 3442-14 27 Mar 2002 21593-23.jpg

NMR 21549-04 TL 3543-23 27 Mar 2002.jpg

NMR 21598/01 TL 3543/11 27-MAR-2002.

NMR 21598/03 TL 3443/3 27-MAR-2002

GE 1/1/2003

GE 10/17/2008

GE 10/16/2003

CUCAP BHZ 20

CUCAP BHV 94

RC8 CO131

GE 1/1/ 2007

**Meldreth: TL 5360 2447 – 5387 2468**

GE 1/1/2007

GE 05/03/2007

GE 10/17/2008

GE 1/1/2003

GE 10/16/2003

CUCAP CO55

CUCAP CO54

RAF 58 1119 3

TL 3846 36 TL 386469 31-MAY-2002 NMR 25613/04

TL 3846 37 TL 386469 31-MAY-2002 NMR 25613/05

CCC 1962 Run 15 565843  
OS 74186 154

**Shepreth: TL5387 2468 – TL5400 2480**

RAF/CPE/UK/1993 4101

OS/74186 154

OS/72415 773

OS/52R31 168

RAF/106G/UK/1635 2427

GE1/1/2007

**Foxton: TL5400 2480 – TL5415 2499**

Foxton boundary to Foxton Rail crossing

GE1/1/2007

GE 10/16/2003

GE 1/1/2003

Foxton Rail crossing to Harston boundary

GE 1/1/2005

Aerial analysis for CHER 08636

**Harston: TL5415 2499 - TL5428 2522**

CCC 1962 survey Run 17 565882

Fairey June – August 201 592

GE 01/01/2003

GE 01/01/2005

GE 01/01/2007

GE 10/17/2008

**Hauxton: TL5428 2522 – TL5431 2528**

CCC 1962 survey Run 15 565990

GE 01/01/2007

GE 10/17/2008

GE 01/01/2003

GE 10/16/2003

**Trumpington: TL5431 2528 – TL5452 2569**

CCC 1962 survey Run 15 565990

GE1/1/2003

GE 1/1/2000

GE 10/16/2003

GE 01/01/2002

GE 9/10/2006

GE 1/1/2007

GE 4/29/2002

lished.

Bryant, S 1997. 'The Iron Age'. In J Glazebrook (ed.), *Research and Archaeology: a Framework for the Eastern Counties, 1. Resource Assessment*. East Anglian Archaeology Occasional Paper 3. Norwich: Scole Archaeological Committee, 23–34.

Bryant, S and Burleigh GR 1995. 'Later prehistoric dykes of the eastern Chilterns'. In R Holgate (ed.), *Chiltern Archaeology: recent work*. Dunstable: Book Castle, 92–5.

Burleigh, GR and Fitzpatrick-Matthews KJ 2010. *Excavations at Baldock, Hertfordshire, 1978–1994. Volume 1: An Iron Age and Romano-British cemetery at Wallington Road*. North Hertfordshire Museums Archaeology Monograph 1. Welwyn Garden City: North Hertfordshire District Council Museums Service and North Hertfordshire Archaeological Society.

Burnham, B and Wacher J 1990. *The Small Towns of Roman Britain*. London: Batsford.

CgMs 2002. *Land at Station Quarry, Steeple Morden, Cambridgeshire: aerial photographic assessment*. CgMs report, unpublished.

Chevallier, R 1976. *Roman Roads*. London: Batsford.

Clark, JGD 1939. A report on trial excavations at Limlow Hill, Litlington. *PCAS* 38: 170–6.

Clarke, CP 1998. *Excavations to the south of Chignall Roman villa, Essex 1977–81*. East Anglian Archaeology 83. Chelmsford: Essex County Council.

Cox, C 2002. *Aerial photographic assessment, land at Station Quarry, Steeple Morden, Cambridgeshire*. Air Photos Services Ltd report, unpublished.

Crawford, OGS 1937. *The Strip Map of Litlington*. Ordnance Survey Professional Papers, New Series No. 17.

Cunliffe, B 1995 *Roman Britain*. Batsford: London.

Davies, HEH 2006. *From tracks to motorways: 5000 years of highway history*. Tempus: Stroud.

Evans, C with D Mackay and L Webley 2008. *Borderlands: The archaeology of the Addenbrooke's environs, South Cambridgeshire*. Cambridge Archaeological Unit (CAU) Landscape Archives: New Archaeologies of the Cambridge Region Series, Oxford: CAU/Oxbow.

Evans, C and Ten Harkel L 2010. Roman Cambridge's Early Settlement and Via Devana: Excavations at Castle Street. *PCAS* 99: 35–60.

Evans, C, Cessford C and Roberts H 2013. North West Cambridge Archaeology: An interim Statement, Cambridge Archaeological Unit, unpublished.

Fox, C 1923. *The Archaeology of the Cambridge Region*. Cambridge: Cambridge University Press.

Haigh, D 1975. *A correlation between archaeological sites and field names: a survey of parishes along the line of the northern and western by passes of Cambridge*, unpublished. Call No. C41/ELS Reference resource. Cambridgeshire Collection.

Haselgrove, C, Armit I, Champion T, Creighton J, Gwilt A, Hill JD, Hunter F, Woodward A, (ed.) 2001. *Understanding the British Iron Age: An Agenda for Action*. Salisbury: Trust for Wessex Archaeology Ltd.

Hill, JG 2000. 'The Iron Age'. In T Kirby and S Oosthuizen (ed.), *An atlas of Cambridgeshire and Huntingdonshire history*. Cambridge: Anglia Polytechnic University, 10.

Hooke, D and Burnell S (ed.) 1995. *Landscape and Settlement in Britain AD400–1066*. Exeter: University of Exeter Press.

Horton, W, Lucas G and Wait GA 1994. Excavation of a Roman Site near Wimpole, Cambs, 1989. *PCAS* 83: 31–74.

Hurst, V 2009. *Avenell Way. Alignments of early tracks across south-west Cambridgeshire*, unpublished.

## References

- Abrams, J and Ingham D (ed.) 2008. *Farming on the Edge: archaeological evidence from the clay uplands to the west of Cambridge*. East Anglian Archaeology 123: Bedford; Albion Archaeology.
- Adams, C 2000. *Was the standard railway gauge of (4' 8 1/2") determined by Roman chariot ruts?* Available <http://www.straightdope.com/columns/read/2538/was-standard-railway-gauge-48-determined-by-roman-chariot-ruts.html> Accessed 25th October 2012.
- Alexander, J and Pullinger, J 1999. Roman Cambridge, excavations on Castle Hill 1956–1988. *Proceedings of the Cambridge Antiquarian Society (PCAS)* 88: 131–40.
- Atkins, R and Graham, S 2013. *Excavation of "Avenell" Way: A Roman track at Station Quarry, Steeple Morden, Cambridgeshire*. Oxford Archaeology East (OA East) report 1415, unpublished.
- British Geological Survey (BGS) 2001. *Biggleswade, England and Wales Sheet 204. Solid & Drift Geology*. 1:50 000, Keyworth, Nottingham: British Geological Survey.
- Brudenell, M and Dickens A 2007. *Trumpington Meadows, Cambridge. An Archaeological Evaluation of a Bronze Age, Iron Age and Romano-British Riverside Landscape*. Cambridge Archaeological Unit, report 753, unpub-

- Hurst, V 2011. *The morphology of the Well Head area*, unpublished.
- Hurst, V 2012. *Odsey on the map*, unpublished presentation on Odsey Grange.
- Knight, J 2009. *Morphology of settlement*. University of Cambridge Diploma thesis, unpublished.
- Ladd, S 2013. *Middle and Late Saxon Settlement Features at Anstey Hall Farm, Trumpington*, OA East report No. 1555, unpublished.
- Lyons, A forthcoming. *Hinxton Cambridgeshire: Part 1. Excavations at the Genome Campus 1993–2011: Ritual and Farming in the Cam Valley*. East Anglian Archaeology.
- Malim, T 1990. *Archaeology on the County Council Farm Estate, Clear Farm*. Cambridge: Cambridgeshire County Council and English Heritage.
- Medlycott, M 2011. *The Roman town of Great Chesterford*. East Anglian Archaeology 137. Chelmsford: Essex County Council.
- Moss-Eccardt, J 1964. Excavations at Wilbury Hill, an Iron Age hill-fort near Letchworth, Hertfordshire 1959. *Bedfordshire Archaeological Journal* 2: 34–46.
- Oxford Archaeology 2002. *Station Quarry, Steeple Morden, Cambridgeshire. Archaeological evaluation*. OA report, unpublished.
- Oxford Archaeology 2006. *Steeple Morden Quarry, Steeple Morden, Cambridgeshire Archaeological evaluation report*. STMQU 05 Oxford Archaeology South (OAS) report, unpublished.
- Oosthuizen, S 2006. *Landscapes Decoded The origins and development of Cambridgeshire's medieval fields*. Hatfield: University of Hertfordshire Press.
- Phillips, M, Duncan H and Mallows C 2009. *Four millennia of human activity along the A505 Baldock Bypass, Hertfordshire*. East Anglian Archaeology 128. Bedford: Albion Archaeology.
- Phillips, T 2009. *Iron Age and Saxon Activity at Bassingbourn Village College, Bassingbourn, Cambridgeshire*. OA East report 945, unpublished.
- Phillips, T forthcoming. *The Archaeology of Clay Farm, Trumpington*. East Anglian Archaeology.
- Piper, L 2008. *Station Quarry, Steeple Morden, Cambridgeshire*. OAS report, unpublished.
- Piper, L and Norton A 2009. An excavation at Station Quarry, Steeple Morden, Cambridgeshire. *PCAS* 98: 73–76.
- Reaney, PH 1943. *The Place-names of Cambridgeshire and the Isle of Ely*. English Place-Name Society. Cambridge: Cambridge University Press.
- Robinson, MJ, Going CJ and Gdaniec K 1995. *Manor Farm Barns, Litlington, Cambridgeshire: an archaeological evaluation*. Cambridge Archaeological Unit (CAU) report 146, unpublished.
- Smith, N 2011. *Pre-industrial Roads, Trackways and Canals. Introduction to Heritage Assets*. Swindon: English Heritage.
- Smith, RF 1987. *Roadside settlements in Lowland Britain*. Oxford: British Archaeological Report British Series 157.
- Spoerry, P and R Atkins in press. *A Late Saxon village and medieval manor: excavations at Botolph Bridge, Orton Longueville, Peterborough, 1987 and 1999–2000*. East Anglian Archaeology and OA East.
- Stead, I and Rigby V 1986. *Baldock: the excavation of a Roman and pre-Roman settlement, 1968–72*. Britannia Monograph. Series 7. London: Society for the promotion of Roman studies.
- Stokes, HP 1908. Cambridge outside the Trumpington Gates. *PCAS* 44: 66.
- Taylor, A 1997. *The archaeology of Cambridgeshire. Volume 1: South-West Cambridgeshire*. Cambridge: Cambridgeshire County Council.
- Taylor, C 1979. *Road and Tracks of Britain*. London: Dent.
- Wadeson, S 2013. 'Pottery'. In R Atkins and S Graham, *Excavation of "Avenell" Way: A Roman track at Station Quarry, Steeple Morden, Cambridgeshire*. OA East report 1415, unpublished.
- Wessex Archaeology 2010. *Litlington, Cambridgeshire: Archaeological Evaluation and Assessment of Results*. Wessex Archaeology report 71511, unpublished.
- Williamson, T 1987. Early co-axial field systems on the East Anglian boulder clays. *Proceedings of the Prehistoric Society* 53: 419–431.
- Wright, J, Leivers M, Seager Smith R and Stevens CJ 2009. *Cambourne New Settlement. Iron Age and Romano-British settlement on the clay uplands of west Cambridgeshire*. Wessex Archaeology Report No. 23. Dorset Press: Dorchester.

### Other Documents

- British Library OS Surveyor's map 1804 OSD147
- CRO (Cambridgeshire Record Office) P11/28/1 *Drag or Field book made of the Queen's Manor in Bassingbourn*, 1563
- CRO P85/26/1 *Harston Inclosure Map*, 1799
- CRO Q/RDC11 *Bassingbourn Inclosure Award and map*, 1806
- CRO Q/Rum/16 *Cambridge and Oxford Railway proposed plan*, 1845
- CUL (Cambridge University Library) Maps.bb.53(1).95.9-  
*Bedwells and Courses estate map, Steeple Morden*, 1782
- Public Record Office Calendar of Inquisitions  
Miscellaneous File 290 (1)