

AIKTON FLOW TRANSFER STRUCTURE PIPELINE,

Cumbria

Archaeological Watching Brief Report



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SUMMARY

United Utilities (UU) proposed the construction of a flow transfer structure pipeline from south of Little Bampton (NGR NY 2696 5488) to south-west of Aikton at the river Wampool (NGR NY 2646 5195) in Cumbria (Fig 1). Cumbria County Council Historic Environment Officer (CCCHEO) requested a programme of archaeological assessment to evaluate the impact of the development on archaeological remains. This included a rapid desk-based assessment and walkover survey. UU commissioned Oxford Archaeology North (OA North) to undertake this work, the results of which were presented in OA North 2009.

OA North 2009 identified a number of sites within the vicinity of the pipeline route, but none that would be directly impacted upon by the development. The report recommended that a programme of archaeological watching brief be undertaken during any works causing ground disturbance in the greenfield sections of the pipeline route.

The CCCHEO agreed with this recommendation and OA North was commissioned to undertake this watching brief, which was carried out between September and December of 2011. This report presented the results of the archaeological watching brief, with a concluding chapter summarising the findings.

The watching brief identified no new archaeologically significant remains. Evidence of post-medieval or modern ploughing was found in Field 1, and localised deposits of peat of a former moss or mire were found in Fields 7 and 8. Drainage was evidently inserted, most likely in the nineteenth and twentieth centuries, draining this area and improving the land for agriculture (Fig 2). Finds collected form the soil horizon include a small number of nineteenth and twentieth century fragments of pottery, and one fragment of medieval or post-medieval pottery from Field 7.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank United Utilities for commissioning the project. Thanks are also due to Jeremy Parsons, the Cumbria County Council Historic Environment Officer (CCCHEO), for his co-operation during the project.

Becky Wegeil, Nate Jepson, Paul Dunn, Dave Maron and John Onraet undertook the watching brief. The report was compiled by Andrew Bates, and Mark Tidmarsh produced the drawings. Alison Plummer managed the project, and Alan Lupton edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 United Utilities (UU) proposed the construction of a flow transfer structure pipeline from south of Little Bampton (NGR NY 2696 5488) to south-west of Aikton at the river Wampool (NGR NY 2646 5195) in Cumbria (Fig 1). Cumbria County Council Historic Environment Officer (CCCHEO) requested that a programme of archaeological assessment to evaluate the impact of the development on archaeological remains was undertaken prior to the development taking place. This included a rapid desk-based assessment and walkover survey. UU subsequently commissioned Oxford Archaeology North (OA North) to undertake this work, the results of which were reported upon in OA North 2009.
- 1.1.2 The majority of the pipeline route follows the modern road through Aikton, with the remainder in agricultural land. OA North 2009 recommended that an archaeological watching brief be maintained during any works causing ground disturbance in the greenfield sections of the pipeline route. The CCCHEO agreed with this recommendation and OA North was commissioned to undertake the watching brief, which was carried between September and December of 2011. This report presents the results of the watching brief, with a concluding chapter summarising the findings.

1.2 LOCATION, TOPOGRAPHY AND GEOLOGY

- 1.2.1 The proposed pipeline route runs from south of Little Bampton, where it crosses the Bampton Beck, southwards through Aikton and south-westwards between the settlements of Gamelsby and Drumleaning, and terminates at the river Wampool (Fig 1). The south end of the proposed route lies approximately 3km north of Wigton. The area is fairly low lying, with both the south and the north ends of the proposed pipeline route lying at *c* 20m AOD, and gradually rising up to *c* 40m AOD on the west side of Aikton (Ordnance Survey (OS) 1988). The greenfield section of the route subject to the watching brief is located between at NGR NY 2740 5273 and the southern end of the route at the river Wampool (NGR NY 2646 5195).
- 1.2.2 The pipeline route lies west of Carlisle, towards the southern edge of the broad, lowland plain of the Solway Basin, which is fringed by the relatively remote coastline of the Solway Firth. The Solway Basin is underlain mainly by mudstones and sandstones of Permo-Triassic age ('New Red Sandstone') which are overlain by mudstones and limestones of Jurassic age to the west of Carlisle (Countryside Commission 1998, 20). Erosion of the comparatively weak Permo-Triassic and Jurassic rocks had already reduced much of the Solway Basin to an area of low relief prior to the onset of the last glaciation, when thick ice-sheets crossed the area from Scotland and the Lake District, resulting in further erosion and the deposition of boulder clay (op cit, 21).

2. METHODOLOGY

2.1 Introduction

2.1.1 The archaeological watching brief was carried out in accordance with the relevant IFA and English Heritage guidelines (Institute of Field Archaeologists 2008; English Heritage 2006).

2.2 WATCHING BRIEF

2.2.1 A watching brief was carried out on the removal of topsoil from the greenfield section of the pipeline easement. The client removed the topsoil from utilising a 21 ton 360° mechanical excavator fitted with a toothless bucket. The programme of field observation comprised the systematic examination, characterisation and recording of any structures or horizons exposed during the course of the watching brief on OA North's *pro-forma* sheets. Structures or features were planned either with hand drawn plans or differential Global Positioning System (dGPS). An indexed photographic record in digital and monochrome formats was maintained.

2.3 ARCHIVE

- 2.4.1 The results of the archaeological watching brief will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (2006) and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990). The archive will be deposited in the County Record Office in Carlisle, and copies of this report will be deposited with the HER in Kendal. In addition, a copy of the archive can be made available for deposition in the National Archaeological Record. The Arts and Humanities Data Service (AHDS) online database project Online Access to index of Archaeological Investigations (OASIS) will be completed as part of the archiving phase of the project. The project archive represents the collation and indexing of all the data and material gathered during the course of the project.
- 2.4.2 The material and paper archive generated from the watching brief will be transferred in accordance with the guidelines provided by Procedures for the Transfer of Archaeological Archives (2003).

3. HISTORICAL BACKGROUND

3.1 Introduction

- 3.1.1 A detailed archaeological and historical background was compiled for the desk-based assessment, and presented in OA North 2009. It is from this document that the following summary has been drawn. For a fuller background including a map regression see OA North 2009.
- 3.1.2 Much of the following information was sourced from the Historic Environment Record (HER) of Cumbria County Council. Where appropriate the HER record number has been provided.

3.2 THE PREHISTORIC PERIOD

- **Prehistoric:** Cumbria has only a few remains of the Late Upper Palaeolithic period, which are largely in the south-west of the county (Hodgkinson et al 2000, 32-33), although these are sparsely represented. During the Mesolithic period the inhabitants of the British Isles employed a subsistence strategy traditionally viewed as the exploitation of natural resources by activities based on hunting, gathering, and fishing. The Mesolithic period is represented in Cumbria by numerous sites along the west coast (summarised in Rollinson 1988), as well as the limestone uplands of east Cumbria (Cherry and Cherry 1987). The location of monuments from the succeeding Neolithic period appears to suggest a shift in the emphasis of Neolithic activity from the coastal plain to the edge of the Lake District hills and the Eden valley (Hodgkinson et al 2000, 37). The Historic Environment Record of Cumbria County Council records finds in the Wigton area including three Neolithic stone axes (HER 673, HER 674 and HER 16935, all recorded from NGR NY 25 48). Field work carried out at Tiffenthwaite Farm, Syke Lane, Wigton by the former Carlisle Archaeology Unit (CAU) also recovered a serrated blade and a prismatic core (HER 19091 at NGR NY 26059 47382) (CAU 2000). A Bronze Age food vessel has been found c 1.5km to the east of Aikton (HER 19743 at NGR NY 29 53) and two Bronze Age stone axes have been found in Wigton (HER 675 and HER 667, both at NGR NY 25 48).
- 3.2.2 A comparative lack of material culture in the North West relating to the Iron Age has historically made sites of this period difficult to identify in the archaeological record, particularly with reference to small-scale rural sites. Both the uplands and lowlands of Cumbria have produced evidence of enclosures that may date to the Iron Age, although there is generally a lack of dating evidence to confirm this (Hodgson and Brennand 2006, 52).
- 3.2.3 There are a number of cropmark sites in the vicinity of the pipeline route of undated, but probable prehistoric, date. Approximately 3km to the north-west of the pipeline, west of Fingland, is a scheduled cropmark site (SM 27665 at NGR NY 2511 5725) comprising an oval enclosure, measuring *c* 60m by *c* 45m, and a trackway with side ditches.

- 3.2.4 Within the immediate vicinity of the pipeline are a number of sites shown or thought to be prehistoric in date. Undated cropmarks include a ditched enclosure to the south-west of Little Bampton (HER 16553) and two further enclosures south of Aikton (HER 16706 and HER 3323). Within the vicinity of Drumleaning, towards the southern end of the pipeline, are a further enclosure (HER 3318), two settlement sites (HER 3324 and HER 3320), a field system (HER 3222), a lynchet and unclassified cropmarks (HER 16707).
- 3.2.5 The find of a carved stone head found in a wall at Greenhill Farmhouse in Wigton is thought to be in the style of the local late Iron Age tradition, and therefore provides further evidence for Iron Age activity in the area (HER 5085 at NGR NY 25 48) (Bewley 1994).

3.3 THE HISTORIC PERIOD

- 3.3.1 *The Romano-British Period:* the development area lies within the territory suggested to have been controlled by the *Carvetti* at the time of the Roman Conquest (Shotter 2004, 4), and the numerous cropmark sites in the area (*Sections 3.2.3 and 3.2.4*) include sites that are likely to be of Iron Age/Romano-British date, such as the farmstead west of Fingland (SM 27665).
- 3.3.2 A fort at Kirkbride (SM 27833), c 4.5km to the north-west of the pipeline, dates to the late first/early second century and is located on a low but commanding position at the head of the sea inlet at Moricambe, overlooking the river Wampool. Strategically, Kirkbride Roman fort formed part of the Stanegate frontier system, which, once completed, ran from Kirkbride to the fort at Washing Well on the south bank of the River Tyne. This frontier was superseded by Hadrian's Wall, which runs c 4.5km to the north of Aikton, the building of which commenced in 122 AD, and Kirkbride is considered to have been abandoned once Hadrian's Wall became operational (*ibid*).
- 3.3.3 The Roman fort at Old Carlisle is located *c* 5.5km to the south of the Aikton, on the south side of Wigton, and there is considerable evidence for Roman activity between Wigton and Old Carlisle. The construction of the fort suggests that it was one of the series of Hadrianic cavalry forts (Birley 1951, 33) and it compares closely with the Benwell and Chesters forts. Epigraphic evidence has confirmed that the fort was indeed occupied by a cavalry unit (the *ala Augusta Gallorum Proculeiana*), which was the only cavalry unit on the western flank of Hadrian's Wall (*op cit*, 30).
- Ferguson (1890) and, later, Haverfield to propose that the fort was a strategic centre for the region (1920, 146). The associated settlement can be seen to extend along both sides of the main Roman road to the south of the fort and along the approach road to the east gate. A road running northwards from Old Carlisle has also been postulated. Bellhouse traced a north-bound road for approximately one mile, which appeared to be heading towards Drumburgh on the Solway Firth (1956, 42). Some evidence for a north-bound road was furnished by a limited programme of archaeological investigation in 1998/9 by CAU, which focused on the area *c*1.5km to the north of Old Carlisle fort. This

- work revealed a series of boundary ditches of Roman date, and included the retrieval of a fourth century cremation and ceramics (HER 19091; CAU 2002). Whilst being far from conclusive, this work provided tentative evidence of extramural settlement at a distance in excess of 1km beyond the north gate of the fort, which would suggest some communication line in this direction. It seems likely that the area of the development would have been part of the hinterland of Hadrian's Wall, providing agricultural produce and supplies for the construction and garrisoning of the wall (Bewley 1994).
- 3.3.5 In 1995 a circular cropmark was excavated to the north of Drumleaning. The features uncovered were interpreted as comprising a four-posted Roman tower, measuring *c* 3.6m square. The tower was surrounded by a ditch, which enclosed an area *c* 19m across. A small rectangular building was identified four metres to the west of the western ditch, which measured 4m x 2.6m. This building has been interpreted as having been for storage or accommodation. There was a cobbled approach to the north-west of the tower, with a break in the ditch adjacent to it. This whole area was enclosed by a circular palisade approximately 24m in diameter. No precise dating material was available for either structure (HER 6889).
- 3.3.6 *Early Medieval (AD 410 1066):* as is the case throughout Cumbria, evidence for early medieval activity is extremely limited. Once the administration of the Roman occupation was finally rescinded in *c* AD 410 the region is thought to have become part of the kingdom of Rheged, which was under the control of the British king Urien by the end of the sixth century AD (Higham 1986, 266). From the seventh century onwards the area came under the sway of the expanding kingdom of Northumbria (Kirkby 1962).
- Some tentative evidence for continued occupation of the region through the 3.3.7 early medieval period comes from documentary sources, such as the Notitia Dignitatum. An official document containing a list of army units, the Notitia Dignitatum has been dated to c AD 410 and mentions Old Carlisle, which suggests that a Roman garrison was maintained there during the closing years of the fourth century. Significantly, there is some evidence, albeit slight, for continued occupation during the post-Roman period (Higham and Jones 1985, 127). The early ninth century work attributed to Nennius refers to the 'castle' which Vortigern built for himself at Guasmoric near Carlisle, 'a city which in English is called Palmcastre'. An inquest of 1305 includes Palmcastre among a group of enclosures in the King's forest (Inglewood Forest), all of which are identified as places in the western part of the parish of Westward, whilst a survey of the same area, dated 1578, mentions 'Old Carliell at Palmcastle' (op cit, 17). Using this evidence, Collingwood (1928, 111) raised the possibility that the settlement at Old Carlisle may thus have been the capital of a British chief or king in the time of Vortigern, or else the same settlement was still inhabited and became the local centre of British survival when the Northumbrians arrived in the seventh century. Birley concluded that the settlement at Old Carlisle 'is by far the most promising one in the whole of our territory for the investigation of the transition from Roman Britain through sub-Roman Cumbria to Anglo-Norman times' (1951, 34).

- 3.3.8 By the tenth century Hiberno-Norse cultural and political influences began to affect the area. The placename evidence indicates the presence of people of Hiberno-Norse extraction in the landscape throughout Cumbria (Fellows-Jensen 1985). More tangible evidence comes from the few known sites and finds, including stone sculpture and grave slabs from nearby Dalston and Great Orton (Ryder 2000).
- 3.3.9 *Medieval* (*AD* 1066 1540): Little Bampton was originally part of the manor of Kirkbampton, but in 1227 Eudo de Carlisle gave four carucates of land in Little Bampton and Oughterby to Walter de Bampton by fine, and it was held by the Barony of Burgh. At an unknown date the estate appears to have passed to the Musgraves of Crookdale, the co-heiresses of which enfranchised the lands (Whellan 1860, 174). In the sixteenth century the 'manor of Little Bampton' was conveyed by a Thomas Bisley to Southaick and Tolson, who later conveyed it to John Dalston, who subsequently sold it off to his tenants.
- 3.3.10 Aikton was also part of the Barony of Burgh, and was the principal seat of Johan de Morville, the second daughter of one of the co-heirs of Sir Hugh de Morville, Lord of Burgh, who was one of the four assassins of Thomas à Beckett in Canterbury Cathedral in 1170. Johan and her husband, Sir Richard Gernon, lived at Down Hall in Aikton (*op cit*, 198). The manorial seat appears to have descended through the Morville family for some time, and in the fifteenth century it was purchased by the Dacre family (*op cit*, 199).
- 3.3.11 Aikton Down Hall is a Scheduled Monument (CU 527) to the east of the pipline comprising earthworks with a moat. The site appears to have been surrounded by an outer wall on three sides, which enclosed a bailey on the east side. To the east of this was the moat, which was intact until *c* 1900. The remains of a drawbridge are reported to have been found in 1826, and an excavation in 1981 recovered medieval pottery from the site (Perriam and Robinson 1998, 58). Aikton Hall is located *c* 350m to the north of Aikton Down Hall (to the east of this development) and is also a possible fortified site, including the earthworks of a former moat. Its function is unclear, as Aikton Down Hall is thought to have been the manor house, so the reason for the close proximity of a second fortified site is unknown, unless Aikton Hall preceded Aikton Down Hall (*ibid*). St Andrews Church, located to the east of the village, and to the south of Aikton Hall, has some Norman architecture in the chancel (Whellan 1860, 199).
- 3.3.12 The Aikton holy well, located on the east side of the village, is labelled as 'Fairy Well' on the OS first edition map and modern OS mapping.
- 3.3.13 *Post-medieval (AD 1540 present):* Wigton had received its market charter in 1262 from Henry III, and continued to operate as a market town for the wider area in the post-medieval period (Whellan 1860, 198). However, it would seem that any significant expansion of the town took place after the seventeenth century, as Wigton does not appear on the late sixteenth or early seventeenth century maps (Allen 1999; Higham 1993).
- 3.3.14 The industrial development of Wigton was centred on the textile industry. In the forty years from 1791-1831 the population rose from approximately 1700

- to 4885 (Gate 1894) mainly due to the influx of workers from the surrounding rural areas to the expanding textile mills and tanneries. This was facilitated by the coming of the railway from Carlisle to Maryport, which opened in 1843 (Carrick 1949).
- 3.3.15 Examination of historical maps of the area identified a number of additional sites (OA North 2009). The 1843 Aikton tithe map (DRC 8/2) labels a field to the south of Aikton, on the west side of the main road, Kiln Green. The name suggests that a kiln was located in this area. The same map also denotes a smithy in Aikton itself. The 1901 OS map of the area marks a gravel pit to the south of Aikton at NGR NY 26987 52329

4. WATCHING BRIEF

4.1 Introduction

4.1.1 In total, 11 field were investigated by the watching brief on removal of topsoil from the pipeline easement, between the compound sited at NGR NY 2740 5273 and the river Wampool at NGR NY 2646 5195 (Fig 2). The fields have been numbered 1 to 11 on Figure 2 for ease of reference.

4.2 RESULTS

4.2.1 The pipeline easement measured *c* 10.0m wide. The mechanical excavator removed *c* of 0.40m of the soil horizon from the easement. The soil horizon typically comprised two parts: an upper very dark grey sandy silty topsoil up to 0.40 thick; and a lower light brown grey sandy silty subsoil up to 0.20m thick. The underlying natural glacial till was only visible in a small number of areas, the ground works typically leaving much of the lower part of the soil horizon *in-situ* (Plate 1). When visible, the composition of the underlying till varied from a mid-orangey grey sandy gravel or clayey silt to a mid-orangey brown silty sand. On the flood plain adjacent to the river Wampool the till comprised light orangey brown clay.



Plate 1: Field at the southern end of the route of the pipeline, looking north

4.2.2 At the northern end of the watching brief in Field 1 (Fig 2), two north/south aligned furrows were visible cutting the lower part of the soil horizon. They measured c 2.0m wide and were spaced 2.0 - 3.0m apart, filled with topsoil

(Plate 2). No finds were recovered from them, but given their dimensions and distance apart they are thought likely to be the results of either post-medieval or modern ploughing.



Plate 2: Area of furrows at the northern end of the watching brief, looking south

4.2.3 In Fields 7 and 8 localised deposits of peat were observed between the topsoil and glacial till (Fig 2; Plate 3). These fields are depicted as containing roughly east-west aligned drains on modern Ordnance Survey mapping of the area (Fig 2). In addition, a number of nineteenth tile drains were located. This area of land has evidently been drained to improve the pasture, most likely during the post-medieval and modern periods.



Plate 3: Intervention into localised deposit of peat in Field 7, looking north



Plate 4: Drainage ditch of the northern eastern field boundary of Field 8, looking south-west

4.3 FINDS

4.3.1 In all, twelve fragments of pottery were recovered, all from topsoil, and thus technically unstratified. All but one of the fragments, probably representing a minimum of eight vessels, can be dated to the mid/late nineteenth or earlier twentieth century, and reflect the disposal of domestic pottery, including both table and kitchenwares. There is, in addition, a single fragment of a fully-reduced green-glazed vessel (probably a jug or a cistern) of medieval date. Fully-reduced wares were common from the fourteenth to the sixteenth centuries, and their production continued, on a regional basis, well into the seventeenth century.

Context	OR no	Qty	Description	Date
Topsoil	1000	1	Rim fragment relatively fine redware narrow-necked jar with lustrous black glaze and rouletted decoration	Late nineteenth century
		2	Joining body fragments late stoneware jar.	Late nineteenth-early twentieth century
		4	Body fragments refined white earthenwares (two joining)	Late nineteenth-twentieth century
		1	Small body fragment transfer-printed white earthenware.	Nineteenth-early twentieth century
		1	One body fragment bowl in blue and white industrial slipware	Late nineteenth-early twentieth century
		1	One body fragment bowl in slip-decorated red-bodied industrial slipware	Late nineteenth-early twentieth century
		1	One body fragment fully-reduced green-glazed ware. Relatively soft, slightly sandy fabric.	Fourteenth- sixteenth-century or possibly later.

Table 1: Summary of all finds recorded from the topsoil

5. CONCLUSIONS

5.1 DISCUSSION

- 5.1.1 The removal of the topsoil from the pipeline easement failed to excavate to the glacial till in most areas. It can not be said, therefore, whether any features below the lower part of the soil horizon were present cutting into the glacial till.
- 5.1.2 No further sites of archaeological significance were located by the watching brief. Evidence of post-medieval or modern ploughing was found in Field 1, and localised deposits of peat were found in Field 7 and 8 (Fig 2). This peat would have been formed in a former moss or mire, which has been drained to improve the land, most likely in the post-medieval and modern periods.
- 5.1.3 A small number of finds were recovered from the soil horizon, most of which are fragments of nineteenth or twentieth century pottery. One fragment of fourteenth to sixteenth century or later pottery was recovered from the soil horizon in Field 7.

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8. ILLUSTRATIONS

8.1 LIST OF FIGURES

Figure 1: Site Location

Figure 2: Watching Brief Location and Field Numbers

8.2 LIST OF PLATES

Plate 1: Field at the southern end of the route of the pipeline, looking north

Plate 2: Area of furrows at the northern end of the watching brief, looking south

Plate 3: Intervention into localised deposit of peat in Field 7, looking north

Plate 4: Drainage ditch at northern eastern field boundary of Field 8, looking southwest

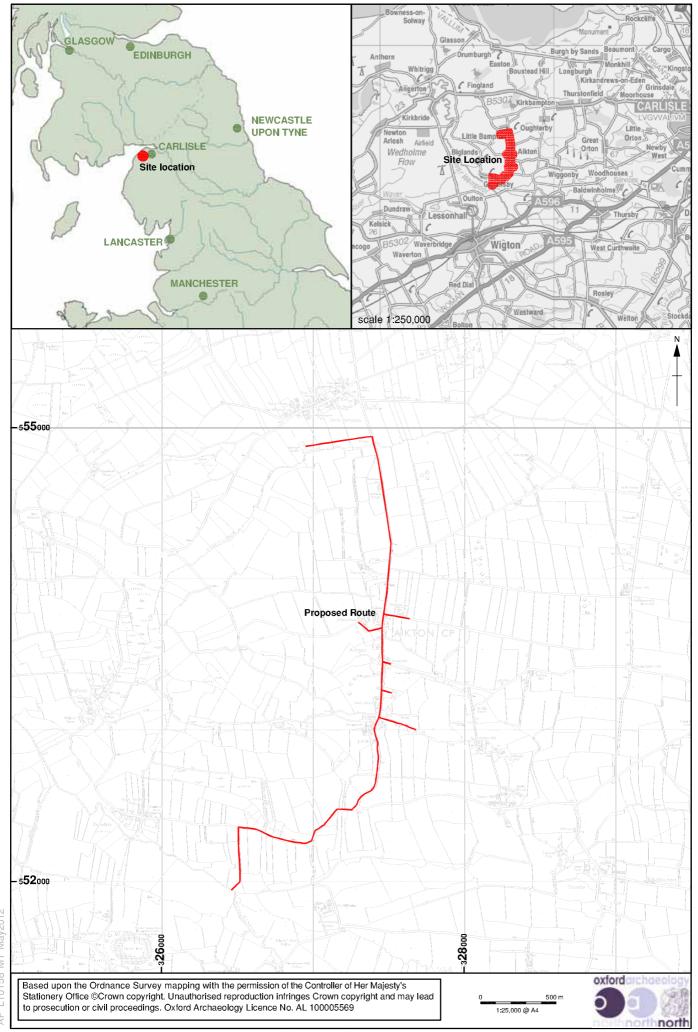


Figure 1: Site location

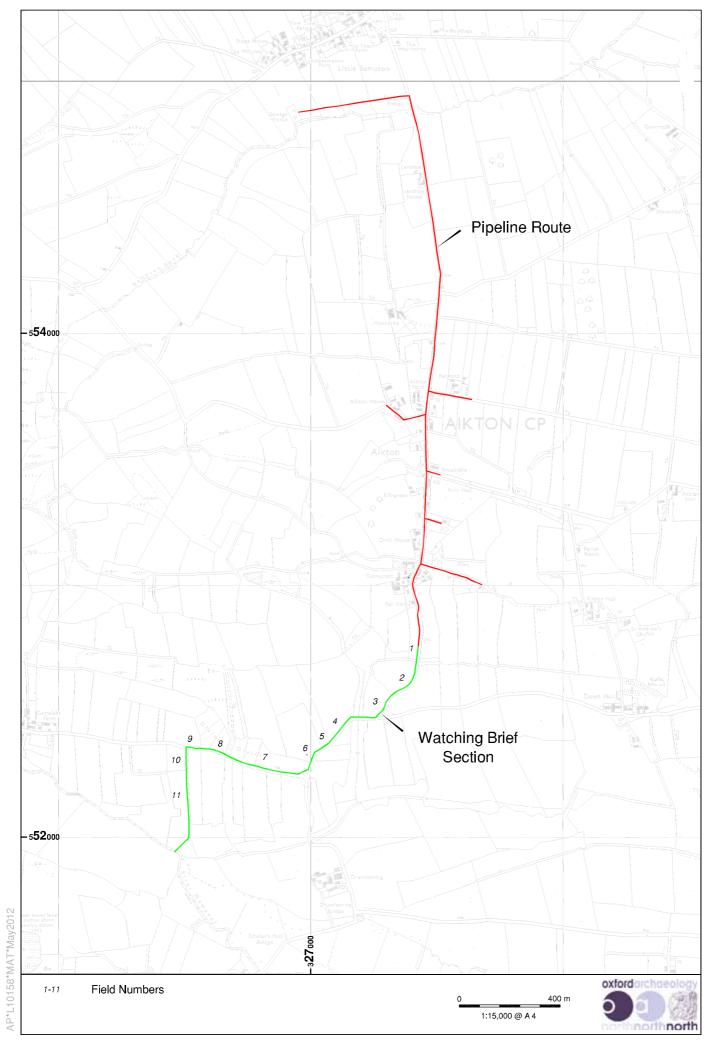


Figure 2: Watching Brief Location and Field Numbers