

NORFOLK ARCHAEOLOGICAL UNIT

Report No. 918

**An Archaeological Watching Brief at an
Anglian Water Inlet Main, Two Mile Bottom, Thetford**

39843 THD

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Contents

Summary

- 1.0 Introduction
- 2.0 Geology and Topography
- 3.0 Archaeological and Historical Background
- 4.0 Methodology
- 5.0 Report Layout
- 6.0 Results
- 7.0 The Finds
- 8.0 Conclusions

Acknowledgements

Bibliography

- Appendix 1: Context Summary
- Appendix 2: Finds by Context
- Appendix 3: Flint
- Appendix 4: Small Finds
- Appendix 5: Objects of non-archaeological value

Figures

- Fig. 1 Site location
- Fig. 2 Location of pipeline easement

Location: Two Mile Bottom, Thetford
Grid Ref: 8574 8630 (centred)
HER No: 39843 THD
Date of fieldwork: 1st to 15th December 2003

Summary

An archaeological watching brief was undertaken by Norfolk Archaeological Unit at Two Mile Bottom, south Norfolk, during the excavation of a trench for a new Anglian Water Inlet Main. The Inlet Main commenced from an existing pumping station at Broom Covert and continued through Forestry Commission land at Larch Plantation and crossed through arable fields adjacent to the A134 and finished just north of Box Covert. The site was situated in an area of known prehistoric and Roman activity.

The watching brief located a total of 357 pieces of struck flint, 53 fragments of burnt flint, one sherd of Bronze Age Beaker pottery and a metal object dating to the post-medieval period.

1.0 Introduction

(Fig. 1)

This archaeological watching brief was undertaken in accordance with a Brief issued by Norfolk Landscape Archaeology (NLA Ref: 01/12/03/EJR) and a Method Statement for watching briefs prepared by the Norfolk Archaeological Unit.

As part of the programme for the stripping of topsoil and the excavation of the Anglian Water pipeline trench, NLA requested that an archaeologist to be present by constant attendance during the machine-stripping.

The work is designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, following the guidelines set out in *Planning and Policy Guidance 16 – Archaeology and Planning (Department of the Environment 1990)*. The results will enable decisions to be made by Local Planning Authority with regards to the treatment of any archaeological remains found.

The work was commissioned by Anglian Water Services Ltd and May Gurney Ltd were the main contractors.

The site archive is currently held by the Norfolk Museums and Archaeology Service, following the relevant policy on archiving standards.

2.0 Geology and Topography

(Fig. 1)

The site was situated in the Brecklands on a broad chalk outcrop which runs north to south. The overlying geological soils are sand and loamy sands with variable amounts of flint. The sands are very fine and could almost be considered as a type of colluvium deposits.

The colluvium deposits are represented by the topographical location of the site. To the east, the land rises to c.40m OD towards Croxton and slopes west towards the Little Ouse Valley which lies at c.10m OD.

Prior, to the pine plantations of the Forestry Commission (from c.1922) the land-use of arable fields would have been liable to wind erosion, therefore, wind blown soils would have been a common feature of the Breckland landscape.

3.0 Archaeological and Historical Background

The site was located in an area rich in archaeological evidence, particularly from the prehistoric and Roman periods. The Norfolk Historic Environment Record (HER) was consulted and the most relevant sites listed chronologically below:

Prehistoric

- HER 23975: to the north of the fertiliser factory a Bronze Age sickle blade was recovered from the river bank at Two Mile Bottom
- HER 5692: west of the Little Ouse a Palaeolithic flint tool (Haward Collection. No 151) was recovered
- HER 5717: to the south of the fertiliser factory a Mesolithic flint axe fragment was found from the ground surface. In c.1960, south-east of the fertiliser factory, Mesolithic and Neolithic flint implements also prehistoric pottery was recovered

Roman

- HER 5731: in 1966, a buff ware sherd dating to the Romano-British period was recovered while digging a trench for a water main, north to north-west of Hillhouse Farm
- HER 5730: a Romano-British pottery kiln was located west of the fertiliser factory
- HER 5738: in 1995 NAU undertook a major excavation in advance of building a power station. The excavations recovered Mesolithic and Neolithic worked flint. A field system, ditches and a pit dating to the Iron Age. Evidence from the Romano-British period included a building, an enclosure, pottery kilns, pits and ditches (Bates 2003, 57-94) was recovered

Post-medieval

- HER 6531: the location of the present fertiliser factory is situated in the same area as a factory possibly one of the oldest in Britain which was demolished in c.1975

4.0 Methodology

(Fig. 2)

The objective of this watching brief was to preserve by record any archaeological remains affected by the construction of the pipeline.

The Brief required that archaeological monitoring should take place during the excavation of topsoil and subsoil deposits and to record any archaeological features.

Machine excavation was carried out using a JCB-type excavator using a 2m ditching bucket for the 4m easement and using a 0.60m bucket for the pipe trench. The methodology adopted by the contractors was to excavate the topsoil and subsoil deposits, then place it to one side prior to the excavation of the further subsoil and natural colluvium layers. All material excavated was reinstated.

Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those which were obviously modern.

All archaeological features and deposits were recorded using NAU *pro forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.

Due to the lack of suitable deposits, no environmental samples were taken.

Site conditions were very good with clear access onto and around the site. The weather conditions were variable ranging between frosty, rainy and sunny conditions.

5.0 Report Layout

For the purposes of this report the work has been divided into four areas: the pumping station, the north-west to south-east easement adjacent to the A134, the east to west pipeline trench through Larch Plantation and the north to south easement adjacent to the railway line.

The discovery of struck flint, however, in the north to south easement area meant it was necessary to define clear units of collection to enable the finds to be located. Collection units of c.50m were adopted along this c.500m by c.4m easement. Collection Units [20] and [21] were two smaller areas within the north to south easement that were hand-trowelled. The collection units that contained finds are discussed separately.

6.0 Results (Appendix 1)

(Fig. 2)

Pumping Station

The pumping station was located south-east of the railway level-crossing at Two Mile Bottom. The location of the pumping station was altered (moved by 1m to 2m south) because two oil pipelines were within the vicinity of the area originally proposed. The trench for the new pumping station measured c.4m x 8m and was

excavated to a depth of c.4m. Archaeological recording, however, did not continue below a depth of 1.50m, well into the natural deposits.

Only two deposits were noted, the topsoil and the subsoil. The topsoil ([1]) measured c.0.05m to 0.10m in depth and consisted of light brown sandy loam from which one flint core, or possibly a test piece, was recovered. The subsoil ([2]) measured c.1.10m in depth and consisted of a pale yellow/orange brown loamy sand, from which five flint flakes were retrieved.

North-west to south-east easement adjacent to the A134

The pipeline trench was excavated to a depth of c.1.10m and was c.0.60m and did not reveal any archaeological features. Like the pumping station site, only two deposits were present, the top and subsoils.

The topsoil ([4]) measured 0.30m in depth by 4m in width and consisted of a mid brown sandy loam with moderate rounded and sub-rounded flint. Five pieces of struck flint were recovered from this context. One worked piece is a single platform blade core possible of a Mesolithic date. All worked flint from this context were recovered from the southern side of the easement close to Box Covert.

The subsoil ([5]) was a subsoil/colluvium deposit which consisted of a light-to-mid ginger brown very fine silty sand. Nine pieces of worked flint were recovered from this deposit, all located at the northern end of the easement.

East to west pipeline trench through Larch Plantation

The east-to-west pipeline trench is located within an existing track. The made-up ground ([8]) that was found in the trench section had been deliberately laid to act as a firm ground surface for vehicles using the track-way. It consisted of ginger brown silty sand mixed with compacted building rubble, chalk lumps and rounded flint cobbles.

Below this made-up ground the subsoil ([9]) was recorded. It was a subsoil/colluvium deposit consisting of mid-to-dark ginger brown loamy sand with moderate small to medium rounded and sub-rounded flint and frequent patches of chalky till. The chalky till certainly gives the impression of natural.

No archaeological features, deposits or finds were noted.

North to south easement adjacent to railway line

Stripping of the easement was started at the southern end and headed north towards the proposed pumping station. The topsoil ([6]) was very shallow and measured c.0.05m-to-0.10m in depth and consisted of a light brown sandy loam. The subsoil deposit ([7]) was excavated to a depth of c.1.10m and consisted of pale yellow/orange brown loamy sand with the occasional patches of greyish brown chalky till. The chalky till was generally located towards the base of the trench and contained moderate small-to-medium sized angular and sub-angular flint nodules. Even though the majority of the finds came from the interface between the topsoil and subsoil deposits it was necessary to be able to separate the finds located along the length of the north-to-south easement. Collection units were therefore defined: ten collection units (with an additional two collection units [20] and [21]) produced 385 pieces of worked and burnt flint. All of the worked flint

from these contexts came from the sub-soil deposit and have been given the same context number as collection unit number. The collection units that contained finds are discussed below; their location is shown on Figure 2.

- Collection Unit [10] (0m to 50m) produced eleven pieces of worked flint and one fragment of burnt flint from the subsoil. The flint consisted of two blades, six flakes, a retouched fragment, two scrapers, of which, one is an thin ovate end scraper.
- Collection Unit [12] (100m to 150m) produced five pieces of worked flint from the subsoil. The worked pieces included three flakes, an retouched blade, a sub-circular scraper and a struck fragment.
- Collection Unit [13] (150m to 200m) produced twenty-four pieces of worked flint which were recovered from the topsoil and subsoil. The worked pieces were fourteen flakes, one blade-like flake, a retouched flake, a denticulate, a utilised flake, one core/tool and five spalls. The presence of spalls may indicate that flint working could have been taken place within the vicinity. The core/tool recovered is a bifacially flake rectangular in shape which could be an unfinished irregular axe-type tool possibly a chopper-type tool.
- Collection Unit [14] (200m to 250m) produced eighty-five worked pieces of flint and fifteen burnt flint fragments and were recovered mainly from the subsoil. The worked pieces includes forty-three flakes, a blade-like flake, a utilised flake, two shattered pieces, seven struck pieces, and fifteen spalls.
- Collection Unit [16] (300m to 350m) produced one flint blade and two flakes.
- Collection Unit [17] (350m to 400m) produced three flint flakes.
- Collection Unit [18] (400m to 450m) produced eight worked flint pieces which include three flakes, a blade-like flake, a shattered piece, two retouched pieces and a multi-platform flake core.
- Collection Unit [19] (450m to 500m) produced twenty-three worked flint pieces and twenty-two burnt flint fragments. The worked pieces consisted of twelve flakes, three retouched flakes, two sub-circular flakes with retouch around much of their edges, a backed knife with broken distal end and steep retouch on left ventral face/edge, a core/tool which is a small chunky bifacially flaked piece, ventral face almost completely re-flaked possibly a small chopping-type tool, a multi-platform flake core, two blade-like flakes and one spall.
- Collection Unit [20] (280m to 284m) produced 126 pieces of worked flint and four burnt flint fragments. All of the worked flint were hand collected within an area of 4m. The flint recovered consisted of thirteen blades, 56 flakes, nine blade-like flakes, five retouched flakes, one blade-like scraper with retouched around the distal end, one ovate end scraper with retouch on both ends, one end scraper with rounded thick distal end and pointed proximal end with retouch on right lateral edge, one spurred piece a thin flake with faceted platform and slight retouch around right/distal edge forming a spur, a struck fragment, a single platform flake core and thirty-six spalls.

The amount of worked flint debitage and the presence of a core and spalls indicates that flint working had taken place within this vicinity.

The single sherd of Bronze Age Beaker pottery (possibly from a food vessel) was also recovered from this area within the spread of worked flint. The sherd is decorated with a double line impressions forming a cable effect.

- Collection Unit [21] (200m to 210m) produced 61 pieces of worked flint and nine burnt flint fragments. The flint recovered were twenty-nine flakes mostly quite small with a few irregular thick secondary flakes, five blade-like flakes, a blade, one tested piece which is a thermal piece with some flake scars on one side and twenty-four spalls. Similar to [20], the presence of a core alongside spalls suggests that flint working was taken place within the vicinity.

7.0 The Finds (Appendix 2)

Flint (Appendix 3)

A total of 357 pieces of struck flint were recovered from the site. Fifty-three fragments of burnt flint, weighing 0.480kg, were also found; they have been discarded.

Type	Number
Multi platform flake core	2
Single platform blade core	1
Single platform flake core	1
Tested piece	2
Struck fragment	10
Shatter	4
Flake	183
Blade	17
Blade-like flake	24
Spall	82
Core/tool	2
End scraper	4
Scraper	1
Subcircular scraper	3
Denticulate	1
Piercer	1
Spurred piece	1
Backed knife	1
Retouched flake	13
Retouched blade	1
Retouched fragment	1
Utilised flake	2
Total	357
Burnt fragment	53

Table 1: Summary of flint types

Six pieces are broadly classified as cores. They include one small neat blade core [4], two small multi platform flake cores [18] and [19], one single platform flake core [20] and two tested pieces. A few miscellaneous struck fragments and shatter pieces are also present.

Two other piece may have been used as cores or tools – or both. These are a small bifacially flaked chunky piece ([19]), possibly a chopping type tool and a bifacially flaked long sub-rectangular piece ([13]) which may be an irregular or unfinished axe type implement.

Much of the assemblage consists of unmodified flakes and spalls. Many of the flakes are quite small and some are thick or are broad or squat in shape. Although small numbers of blades, some of them neat in nature, and blade like pieces are also present and there are a number of pieces with abraded platforms, the debitage appears predominantly to be quite irregular hard hammer struck material.

Eight scrapers are present. These include two small subcircular scrapers ([19]), a thin ovate end scraper and a quite large triangular-shaped piece with steep retouch along one edge ([10]), a quite chunky small sub-circular scraper ([12]) and three pieces classified as end scrapers ([20]).

The broken distal end of a probable backed knife is present ([19]). It has steep retouch along one edge and more slight retouch on the other.

A few other retouched pieces include pieces classified as a piercer ([5]), a denticulate ([13]), a spurred piece ([20]), fifteen miscellaneous retouched pieces and two utilised flakes.

The flint from the site was all recovered from topsoil or subsoil contexts and represents activity in the vicinity during the prehistoric period. Concentrations of material may indicate areas where subsoil features survive or have been truncated. There are few pieces which can be closely dated but the neatly retouched scrapers, especially the small sub-circular pieces are probably likely to be of later Neolithic or early Bronze Age date and the backed knife is probably of a similar date. The general nature of the debitage with irregular or small thick flakes being predominant also suggests a relatively late prehistoric date for much of the activity represented by the worked flint.

Worked flint has previously been found in large amounts from the Two Mile Bottom area and particularly of note has been the predominance of material of Mesolithic date from the area (Robins 1998). Although there are a few neat blades and a single blade core in the present assemblage which may be of Mesolithic date none of the typically diagnostic Mesolithic types such as core preparation pieces and microliths found previously in the area were found during the present work.

Pottery

A single broken prehistoric sherd weighing 0.006kg was recovered ([20]). The sherd is decorated with a double line impressions forming a cable effect. The impressions were made using a tool, possibly a bird-bone. The sherd also has a single deep fingernail-impression. The fabric and style of decoration suggest that the pottery is Bronze Age possibly a Beaker or Food Vessel

Small Finds (Appendix 4)

The two Small Found artefacts consist of a small copper alloy decorative ring (SF1), thought to be a link of some kind from a decorative chain (rather than a suspension chain) and a copper alloy George II halfpenny coin (SF2). The coin has been folded into the shape of a tricorne hat, possibly for use as a toy.

Finds of Non-archaeological Value (Appendix 5)

The site produced seven post-medieval, and unstratified, metal-detected artefacts. These consist of a copper alloy watch-winder and six lead musket balls/shot.

8.0 Conclusions

This watching brief has provided further evidence (in the form of a significant prehistoric worked flint assemblage) to aid with understanding the development of prehistoric activity, east of the Little Ouse Valley, in Breckland, south Norfolk.

Although, no positive prehistoric settlement activity was located, the presence of flint working debitage gives an indication that temporary settlement was taking place within the vicinity.

This watching brief, moreover, has demonstrated that only limited truncation has taken place of the subsoil deposits from which the majority of flint finds were recovered. This suggests that the prehistoric ground surface is largely intact in this area.

Acknowledgements

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Appendix 1: Context Summary

Context	Category	Description
1	Deposit	Topsoil, pumping station
2	Deposit	Subsoil, pumping station
3	Find spot	Flint
4	Deposit	Topsoil, north-south linear easement (arable field)
5	Deposit	Subsoil, north-south linear easement (arable field)
6	Deposit	Light brown loamy sand same as [1]
7	Deposit	Pale yellow/orange brown loamy sand, same as [2]
8	Deposit	Made-up ground, east-west pipeline trench
9	Deposit	Subsoil, east-west pipeline trench
10	Collection Unit	0m to 50m, north-south easement (machined)
11	Collection Unit	50m to 100m, north-south easement (machined)
12	Collection Unit	100m to 150m, north-south easement (machined)
13	Collection Unit	150m to 200m, north-south easement (machined)
14	Collection Unit	200m to 250m, north-south easement (machined)
15	Collection Unit	250m to 300m, north-south easement (machined)
16	Collection Unit	300m to 350m, north-south easement (machined)
17	Collection Unit	350m to 400m, north-south easement (machined)
18	Collection Unit	400m to 450m, north-south easement (machined)
19	Collection Unit	450m to 500m, north-south easement (machined)
20	Collection Unit	280m to 284m, north-south easement (hand trowelled)
21	Collection Unit	200m to 210m, north-south easement (hand trowelled)

Appendix 2: Finds by Context

Context	Material	Quantity	Weight (kg)	Period
01	Flint	1	-	Prehistoric
02	Flint	5	-	Prehistoric
03	Flint	2	-	Prehistoric
04	Copper alloy (SF 1 and 2)	2	--	Post-medieval
04	Copper alloy	1	--	Post-medieval
04	Lead	6	--	Post-medieval
04	Flint	5	-	Prehistoric
05	Flint	9	-	Prehistoric
10	Flint	13	0.015	Prehistoric
12	Flint	6	-	Prehistoric
13	Flint	25	0.027	Prehistoric
14	Flint	87	0.254	Prehistoric
16	Flint	3	-	Prehistoric
17	Flint	3	0.048	Prehistoric
18	Flint	9	-	Prehistoric
19	Flint	26	0.023	Prehistoric
20	Pottery	2	0.006	Prehistoric
20	Flint	127	0.058	Prehistoric
21	Flint	71	0.131	Prehistoric

Appendix 3: Flint

Context	Type	Number
1	Tested piece	1
2	Flake	5
3	Blade-like flake	1
3	Struck fragment	1
4	Single platform blade core	1
4	Blade-like flake	2
4	Flake	2
5	Blade-like flake	2
5	Flake	5
5	Piercer	1
5	Retouched flake	1
10	Blade	2
10	Burnt fragment	1
10	Flake	6
10	Retouched fragment	1
10	End scraper	1
10	Scraper	1
10	Non struck fragment	0
12	Flake	3
12	Retouched blade	1
12	Subcircular scraper	1
12	Struck fragment	1
13	Burnt fragment	2
13	Core/tool	1
13	Denticulate	1
13	Blade-like flake	1
13	Flake	14
13	Spall	5
13	Retouched flake	1
13	Utilised flake	1
14	Burnt fragment	15
14	Blade-like flake	1
14	Flake	43
14	Shatter	2
14	Spall	16
14	Struck fragment	7
14	Non struck fragment	0
14	Utilised flake	1
16	Blade	1
16	Flake	2
17	Flake	3
18	Multi platform flake core	1
18	Blade-like flake	1
18	Flake	3
18	Shatter	1
18	Retouched flake	2
18	Non struck fragment	0

Context	Type	Number
19	Burnt fragment	22
19	Core/tool	1
19	Multi platform flake core	1
19	Blade-like flake	2
19	Flake	12
19	Spall	1
19	Backed knife	1
19	Retouched flake	3
19	Subcircular scraper	2
19	Non struck fragment	0
20	Blade	13
20	Burnt fragment	4
20	Single platform flake core	1
20	Blade-like flake	9
20	Flake	56
20	Shatter	1
20	Spall	36
20	Spurred piece	1
20	Retouched flake	5
20	End scraper	3
20	Struck fragment	1
21	Blade	1
21	Burnt fragment	9
21	Tested piece	1
21	Blade-like flake	5
21	Flake	29
21	Spall	24
21	Retouched flake	1

Appendix 4: Small Finds

Small Find	Context	Qty	Material	Object Name	Description	Date
1	04	1	Copper alloy	Ring	Decorative link	Post-medieval
2	04	1	Copper alloy	Coin/toy	Tricorne hat, George II half penny	1753

Appendix 5: Objects of non-archaeological value

Context	Quantity	Material	Object Name	Date
04	1	Copper alloy	Watch-winder	Post-medieval
04	6	Lead	Musket balls/shot	Post-medieval

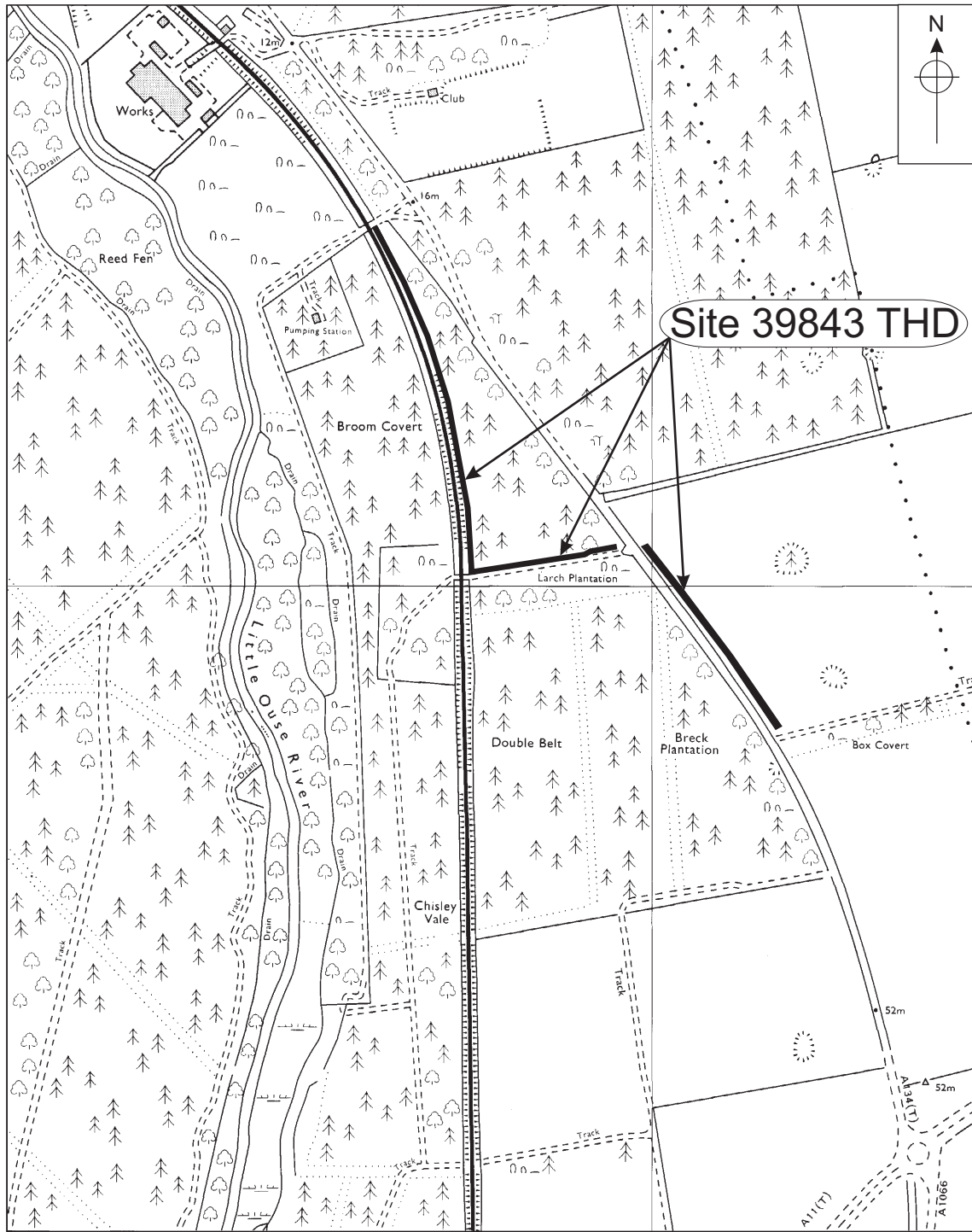


Figure 1. Site location. Scale 1:10,000

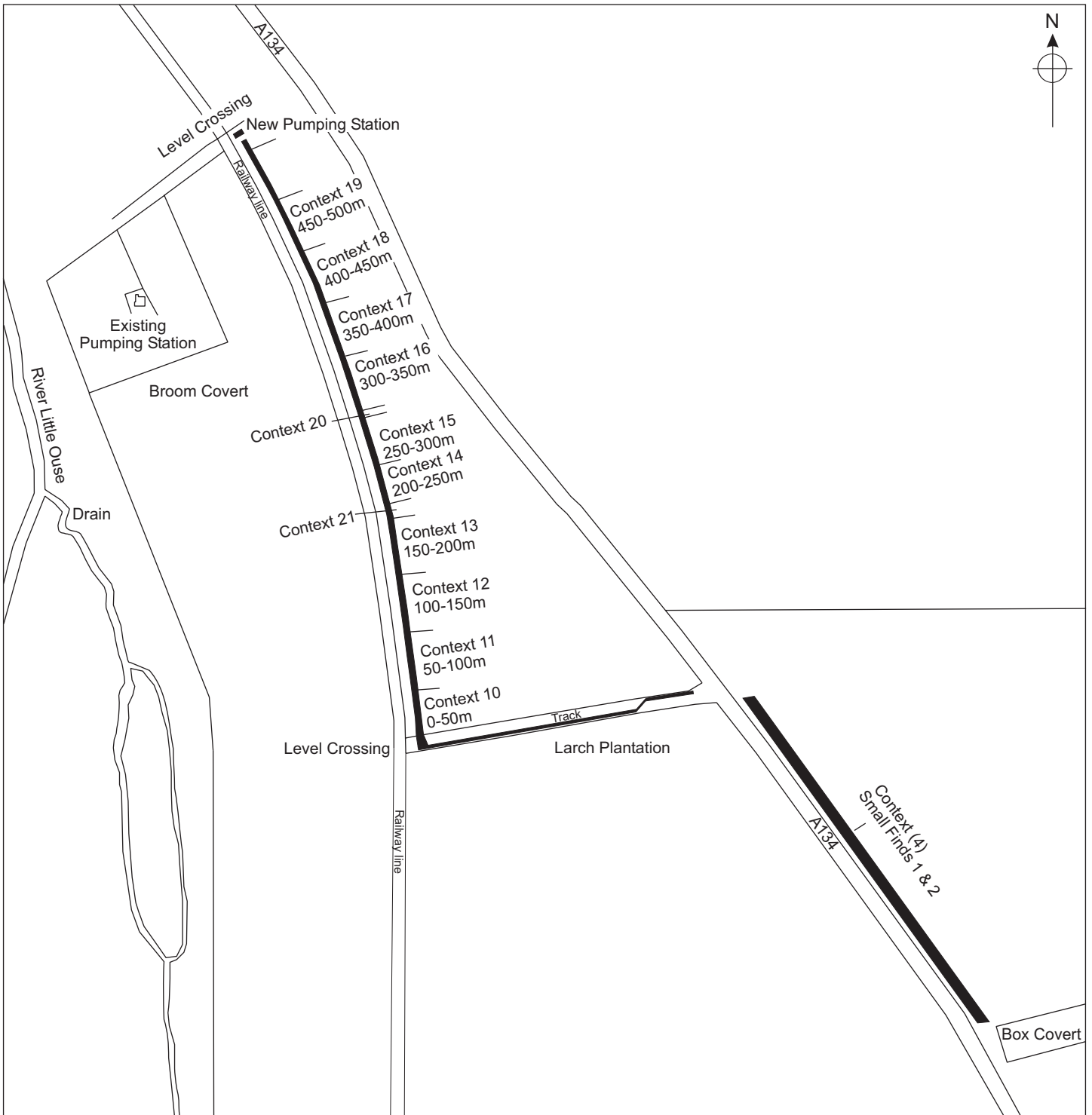


Figure 2. Location of pipeline easement. Scale 1:5000