A Watching Brief between Wing and Duddington

Elaine Jones

Leicestershire Archaeological Unit

Leicestershire Museums, Arts and Records Service

The Anglian Water Pipeline Transect from Duddington to Wing, in Rutland, East Leicestershire

An Archaeological Watching Brief - May to July 1991

Elaine Jones

Contents

Summary

Aims and Methods

The archaeology along the transect

Conclusions

Acknowledgements

References

Figures

Fig.1 Pipeline route from Wing to Duddington

Fig.2 Fields 1-10

Fig.3 Pipeline route showing Fields 10-16

Fig.4 Pipeline route showing Fields 17-25

Fig.5 Pipeline route showing Fields 26-32

Fig.6 Pipeline route showing Fields 33-43

Summary

In the summer of 1991, Anglian Water installed a pipeline from Duddington in Northamptonshire westwards to Wing in Rutland in eastern Leicestershire. The Leicestershire Archaeological Unit conducted a watching brief along this 30 metre wide transect some 6 miles (10 kilometres) long across south-eastern Rutland. (O.S. Map Sheet 141, 1:50,000 extract).

There was no evidence of settlement on the clay and limestone uplands of South Luffenham Heath and Morcott parish. This contrasted with the south and east-facing hill-slopes overlooking the Welland and Chater valleys where occupation and settlement sites were found.

In Tixover parish, on the eastern slope of the Welland valley were found a flint scatter of Neolithic/Bronze age activity near the excavated ring ditch lying on an ancient gravel terrace: a pit containing some Saxon pottery along with shallow linear gullies; quantities of iron slag and medieval quarry pits. Further west up the hill-slope a Romano-British settlement site was indicated by pottery and some building fragments. An Iron Age rectangular enclosure lay on the hill-top prominence a mile from the Welland river as it bends northwards at Duddington and flows on to Stamford. This site was excavated in advance of the pipeline (Beamish 1991). A second Romano-British settlement site was found at South Luffenham on a south-facing hill-slope overlooking a tributary of the river Chater. (Acc. No. 14, 27, 28, 29, 41 & 42: 1991).

Aims and Methods

The Anglian Water pipeline transect provided the opportunity for a watching brief over a 6 mile (10 kilometre) cut 30 metres wide through 43 fields in the parishes of Duddington (Northants), Tixover, Barrowden, South Luffenham, Morcott and Wing in Rutland, east Leicestershire (Fig.1).

This provided new archaeological information on areas previously unrecorded. It also helped to show the landscape in which the Iron Age enclosure, the barrow, and medieval pits had been situated. Although most of the land is now turned over to arable farming, some pasture land which would not normally have been available for field walking was examined and found productive. It is unfortunate that due to time considerations the watching brief did not commence until after must of the pipeline had already been installed, otherwise information on the Romano-British site at South Luffenham might have been more fruitful.

The method of watching was three-fold. First the mechanical pipe trench cutting was watched. The trench was about 1.5 metres wide and varied from about 1.5 to 5 metres in depth while the pipe itself was 80cm. in diameter. This method of observation did produce information on an organic layer two metres below the alluvium close to the river Welland. It also showed that the excavated ring ditch lay on ancient terrace gravels.

The second method was to examine the transect scraped clear of top-soil for cut archaeological features in plan. The flow of heavy traffic, the import of gravels and the removal of limestone bedrock for back-filling or export for land filling made this difficult. It might have been more fruitful had the field survey been conducted during the initial clearing of the top-soil and their shallowness suggests that much information had already been lost by ploughing. Therefore any further work in this area should bear this point in mind.

The most productive method of retrieving information was from the spoil-heaps of top soil. The greatest concentrations of material have been plotted by pacing out the location from field boundaries.

Mr Gilman of Tixover farms much of the land in this parish westwards to South Luffenham Heath. All his land is Grade 3 except for a small area of Grade 2 & 3 in the field with the ring ditch (Field 5). The fields numbered 9, 11 and 12 in this report were pasture until about 20 years ago when Mr Gilman came here and turned them over to arable. All the other fields were arable when he started farming with the exception of the water meadow by the river Welland which is still pasture (Field 3).

The Leicestershire Museums Field Survey Unit undertook work on the A47 trunk road re-alignment and discovered an iron smelting site by the old A47 - Tixover Grange turn-off. A medieval pottery scatter dating from the 10th century was also recorded then along the old A47 road on the south-facing hill slope above the present village and south of the present survey.

The Archaeology along the Transect

The 6 mile (10km), 30 metre wide pipeline transect is described from Duddington in the east to Wing in the west. The Fields are numbered 1-43.

Fields 1-9 (Fig.2)

Field 1 - SK989004
The pipe trench began in a small area lying on the Lower Lincolnshire limestone east of the A43 road and between the Duddington cemetery and a trackway. Slag and post-medieval pottery was present but not collected. Two fragments of black calcite-gritted pottery, possibly of Iron Age or Roman date were found on the top soil spoil heap but no features were seen.

Field 2 - SK988004
The pipe was tunnelled under the A43 road into a pasture field overlooking the incised bank of the river Welland. The Lower Lincolnshire Limestone gave way to alluvium (?). No features were noticed but the area was disturbed and slag, modern, post-medieval pottery and clay pipe fragments were found.

Field 3 - SK987006
The pipe trench cut into the Welland river bed and across to the alluvium of the water-meadow in Tixover parish. This low-lying land did not produce any finds. To the north of the pipe transect the outline of a leat was seen across the meadow going to Duddington Mill where it is quite noticeable. Stone wall remains were seen on the western field boundary but only on the southern side of the transect by the river. Stone walls are few in Rutland today. About 20 or 30 m. west of the river bank the pipe cut through about 2.5 metres of alluvium onto underlying gravels. A dark brown organic sediment containing wood and nuts etc. was brought up by the digger from this level - it was not seen in section because it was below the water line. A sample was taken from the spoil heap as it may provide evidence of an earlier landscape before the overlying alluvium was deposited. As the pipe cut inclined gradually uphill, no further deposits were seen. A test pit may be worth digging at some future date.

Field 4 - SK985007
The pipe transect now began to cut up from the valley water meadow into the Lower Lincolnshire Limestone. The land is Grade 3 arable with a large area of terrace in the middle of the field from which pockets of mauve clays and ironstone nodules were noticed. This is a field of archaeological importance with features and finds. Unfortunately no features were noticed in section in the pipe cut, but several shallow linear gullies and an undelineated pit was found in plan. The transect was much disturbed by heavy vehicles and therefore information was probably lost.

Two parallel linear gullies (F1, F2) of unknown length running north-south about 2.5 metres apart and 60cm wide and 4cm deep were located.A segment through F1 produced one Roman colour-coated pottery rim of 3rd-4th century. A rim fragment of black calcite gritted pot was found unstratified by F2.

An undelineated pit (F3) with charcoal and animal bone (not retained) and several large fragments of early Saxon pottery was revealed. A shallow, linear gully (F5) was located running east-west containing a fragment of possible Saxon pot. To the south-west of F5 another pair of shallow linear gullies (F6, F7) running north-south were also revealed. A section of F6 produced one flint, one nail, one calcite-gritted pot fragment and three fragments of slag, whilst a section F7 produced one possible Saxon pot fragment.Another north-south linear gully (F8) was located 0.5m wide and 0.1m deep with a yellow-brown coloured fill, a segment contained one flint core. It should be noted that these shallow gullies lay just below the topsoil of about 0.3m and they have probably been destroyed by ploughing. From the material recovered from these features these gullies appear to be early Saxon in date.

About 55 metres east of the A47 trunk road a dark brown area with two fragments of modern pottery and tree roots indicated recent tree disturbance.

Further evidence of activity was retrieved from the spoil heap of topsoil. Iron slag was found only along the western half of the transect. Sixty seven flints were found from along the whole length of the transect. One u/s Roman grey-ware and one black calcite-gritted fragments were also found. From 0 to 150 metres east of the A47 road at the western end of the field a further black calcite-gritted fragment and three Roman colour-coat fragments were collected. Most of the archaeological features and finds, barring the flint scatter, came from the western end of the field. This field has therefore produced evidence from the Neolithic/Bronze age, Iron Age/Roman and early Saxon periods.

Field 5 - SK980008

West of the A47 trunk road the field is Grade 2 and 3 arable overlying terrace gravels and the Lower Lincolnshire Limestone. About 30 metres from the road a series of medieval pits was encountered during the excavation. The limestone bedrock continued west nearly to the excavated ring ditch (M Beamish 1991 Acc. A27:1991) but was cut by terrace gravels above which was situated the ring ditch.

In April 1991 the pipe transect and the half of the field to the north of the transect, were fieldwalked by traverse and stint. Post-medieval, slag, medieval pottery Roman pottery and flint was recovered. The post-medieval and slag concentrations tend towards the eastern end of the field while the few Roman, medieval and calcite-gritted fragments are found mainly in the west. The flint scatter showed no precise concentrations but any further specialist analysis of this material may indicate possible 'domestic' from 'industrial' activity (Schofield, 1991). A plano-convex knife, probably early Bronze Age, was found at 25A and 2 scrapers at 29C (Acc. Nos. A27, A28, A42.1991).

Field 6 - SK977009

West of the barrow and up to the Tixover Grange lane the pipe cut continued through the Lower Lincolnshire Limestone which was covered with about two metres of red silty hill wash. The spoil heap produced slag, six flints, two colour-coated and two calcite-gritted pottery fragments.

Field 7 - SK973011

There were no finds in the field west of the Tixover Grange lane. The Grade 3 arable land covered Lower Lincolnshire Limestone near the lane but gave way to a red silty hill wash at the bottom of the slope. An attempt was made to find the projected Roman road in the pipe cut section. Twenty four metres east the western hedge boundary and about one metre below ground level a thin band of

olive-yellow clay containing large limestones and lying over natural gravels was noticed.

Field 8 - SK973011
The pipe cut westwards up the hill-slope proper and through the slightly tilting natural bands of the Upper Estuarine clays and silts. Approximately 60m west of the hedge the trench cut through a pit or ditch. Two possible Roman tile fragments were gathered from the spoil along with Roman, medieval and post-medieval pottery fragments. A copper alloy object (probably a medieval belt fitting) was collected and much slag. Field drains were also observed.

Field 9 - SK972011
The slag concentration and the scatter of Roman pottery and tile continued on uphill but petered out half-way after c 110 metres. About here the Great Oolite Clay began to overlie the Upper Estuarine silts and clays. From c 100 to 150 metres east modern slate, bricks and pot were noticed.

Fields 10-16 (Fig.2)

Field 10 - SK970011
The hill-top prominence overlooking the bend in the river Welland a mile away was observed in the area of excavation of the Iron Age enclosure. Here the 0.5 metre band of Cornbrash overlay the Great Oolite Clay into which the Iron Age enclosure ditches had been dug. There was a distinct area of about 150 metres along the transect separating the Iron Age enclosure from the RB scatter downslope (Fields 8, 9).

The next 2.5 miles (4km) of the transect to the river Chater tributary at South Luffenham produced no archaeological material to indicate settlement. The pipe cut across a stream valley through the Great Oolite Clay and then up into the Oxford Clay on South Luffenham Heath and then down to the Chater valley, first through the Upper Estuarine Series and Lower Lincolnshire Limestone to the Lower Estuarine series in the valley bottom. A very few flints and pot fragments were recovered.

Field 11 - SK967012
Half way down the west-facing hill-slope just below the Iron Age enclosure, modern brick and pot were found which may relate to a rectangular structure visible on some aerial photosgraphs.

Field 13 - SK695014
Aerial photographs also suggested a possible pond or duck decoy just inside Barrowden parish which could not be seen during the topsoil clearance in April. The geological map published in 1958 shows the woodland extending northwards from the adjacent quarry in this area which may account for this anomaly. Eight flints, slag and two Roman grey-ware fragments were found in this vicinity.

Fields 17-25
Field s 18-22 - SK945015 to SK938016
On the hill-slope east of South Luffenham a few fragments of calcite-gritted, Roman, medieval and post-medieval pottery were found - more an indicator of field manuring than settlement. Slag was collected from the eastern side of the Chater valley near Northampton Sand deposits.

Field 23 - SK936015
The pipe then cut down through a disturbed area of pasture where the stream side lay along the old railway embankment.

Fields 24-25 - SK935017 and SK933016
A distinct scatter of Romano-British building fragments, pottery and slag was found extending into a pasture field with irregular shallow earthworks. This scatter stopped abruptly mid-slope at the Morcott - South Luffenham public footpath.

Fields 26-32 (Fig.4)

Field 29
The pipe cut on up hill through the Lower Lincolnshire Limestone to Elms Farm and across the plateau above Morcott towards Wing. Over a distance of about 2 miles (3km) the transect was void of archaeological settlement. Some medieval pot and one Samian fragment, three flints and a little slag were found west of Elms Farm.

With the exception of Field 31 (SK918018), the pipe transect cut just to the south of the old 19th century ironstone quarry and the sections shown in the pipeline transect indicated natural horizons of limestone and the underlying Lower Estuarine Series.

Field 31 - SK918018
The Morcott to Pilton road appeared to be earlier than the quarry as the east facing road section showed natural horizontal bedding disturbed on the northern side by apparent quarry back fill.
Fields 33-43 (Fig.5)

As the pipe cut reached the Wing Water Treatment Plant there is a slight increase in the density of archaeological material but nothing of great significance. A scatter of medieval and post-medieval pottery and one Roman grey-ware fragment was located close to the village. The twenty flints recovered indicate that further field reconnaissance may be of value in this area because a small lake or basin which was filled in during the Last (Ipswichian) Interglacial and the early stages of the succeeding Devensian glaciation may possibly have provided a local environment in contrast with the surrounding Northampton Sand Ironstone. This basin, some 100m in diameter was discovered during the preparation for the construction of the Water Treatment Plant in 1974 and the area will now have been destroyed (Hall A R, 1980).

Conclusions

Although only 30 metres wide, this 6 mile transect suggests that between Wing and the river Welland the clays and limestones of the uplands over 300 feet O.D. (80 metres) were not settled in the past. This contrasts with the settlement and occupation sites on the south and east-facing hill slopes near the river Welland and the Chater tributary over 100 feet O.D. (30 metres). The Iron Age rectangular enclosure on the cornbrash prominence is 200 feet up overlooking the bend in the river Welland as it turns to flow northwards from Duddington to Stamford.

These sites range from:

a) the Neolithic/Bronze Age flint scatter east of the river Welland in Tixover parish (Fields 4 & 5)

b) the ring ditch (Bronze Age?) on an ancient gravel terrace just to the west of the flint scatter (Field 5)

c) the Iron Age enclosure in Tixover parish (Field 10)

d) the two Romano-British settlement sites at Tixover (Fields 8 & 9) and South Luffenham (Fields 24 & 25)

e) Saxon activity in Field 4

f) the early medieval village site at Tixover on the hillside south of the pipe transect which has been recorded previously (SMR)

g) Iron slag was found in the Welland valley and at South Luffenham and dating it is difficult. No known iron working in the area was noted in 1712 by John Morton (Beaver, S H 1982, Mountfield, P R & Turnock, D 1989) and no evidence of 19th century workings in this area has come to the writer's knowledge. The slag at Tixover could therefore be Iron Age, Roman, Saxon or medieval in date The concentrations of slag found in South Luffenham were definitely associated with the Romano-British scatter but medieval pottery was also found there.

The iron ores could have come from deposits of Northampton Sand ironstone which are to be found in the Welland valley at Duddington and the surrounding area, and at South Luffenham in the Chater valley (Appendix 2). Ironstone beds can also occur at the base of the Upper Estuarine Series. (I.G.S. Sheet 157, 1:50,000).

h) The medieval quarry pits in Field 5 could have been for building stone as they do not appear to have been deep enough to have reached the iron-bearing strata (Judd, J W, 1875).

Acknowledgements

Funding of this archaeological watching brief and the preceding excavation was made possible by the generosity of Anglian Water. I would like to thank Mr Andy Freeman of Anglian Water and all the men employed by the contractors, Gallifords for their co-operation and interest in the field. Matt Beamish, Patrick Clay, Richard Clark, Sian Davies and Deborah Sawday from the Leicestershire Archaeological Unit gave encouragement and help with the finds identification.

References

Beamish, M 1991 Archaeological excavations along the Anglian Water Pipeline at Tixover March-June 1991 (A14, A27 & A28.1991)

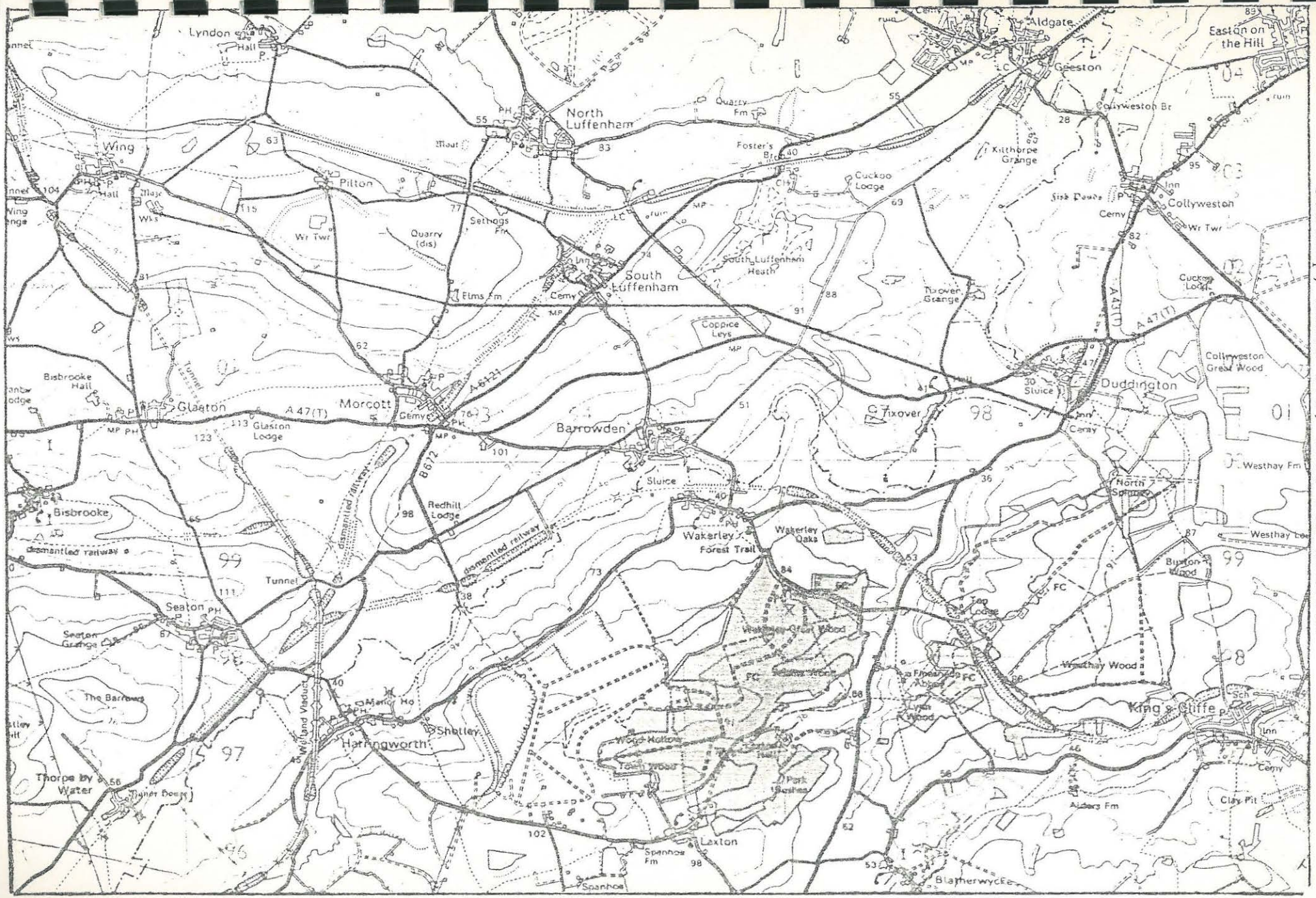
Beaver, S H 'Ironstone in Rutland, 1882-1982' Rutland Record 3 1982/3 pp110

Hall, A R 1980 'Late Pleistocene deposits at Wing, Rutland' Philosophical Transactions Royal Society B. Biological Sciences Vol.289, pp135-164, No.1035

Judd, J W 1875 The Geology of Rutland, Longmans & Co., London

Mountfield, P R & Turnock D 1989 'Rutland's Ironstone Quarries in 1930: the notebooks of the late Professor S H Beaver Rutland Record 9 1989

Schofield A J 1991 'Artefact distributions as activity areas: examples from south-east Hampshire' in Schofield A J (ed) Interpreting Artefact Scatters - contributions to Ploughzone Archaeology, Oxbow Monograph 4, Oxford



O.S.Map, sheet 141, 1:50 000 extract

Fig 1 Pipeline route from Wing to Duddington

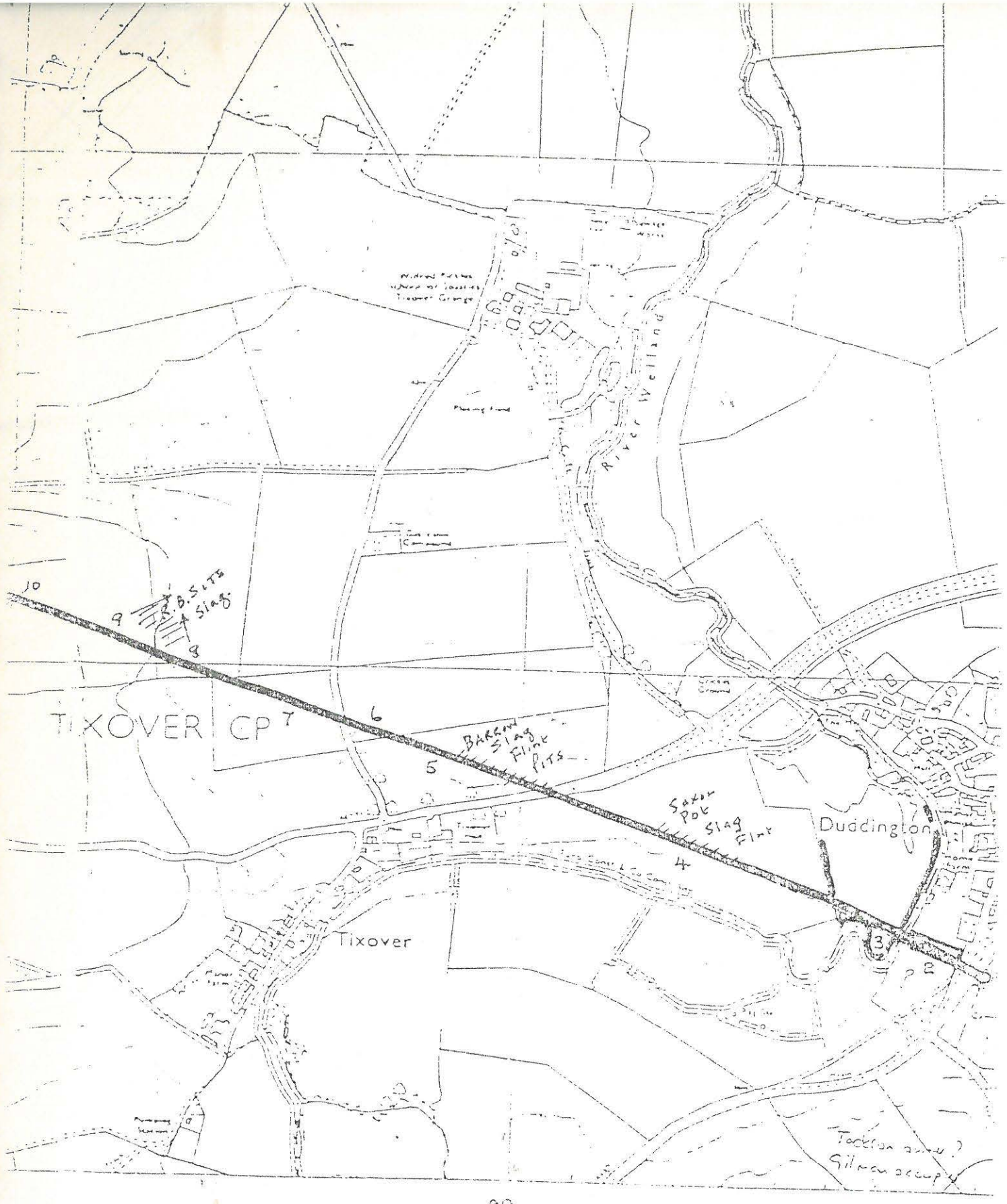


Fig.2 Fields 1-10

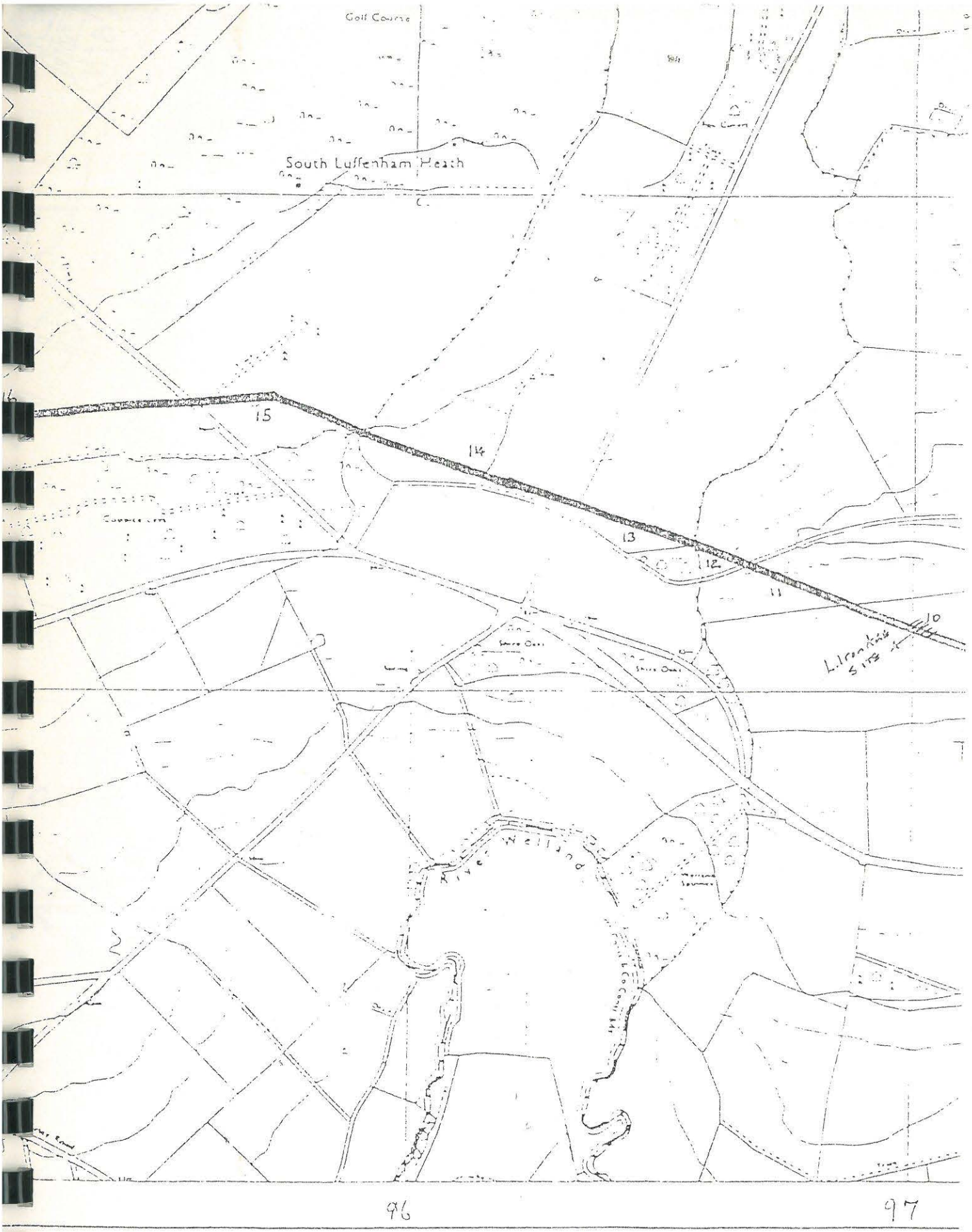


Fig.3 Pipeline route showing Fields 10-16

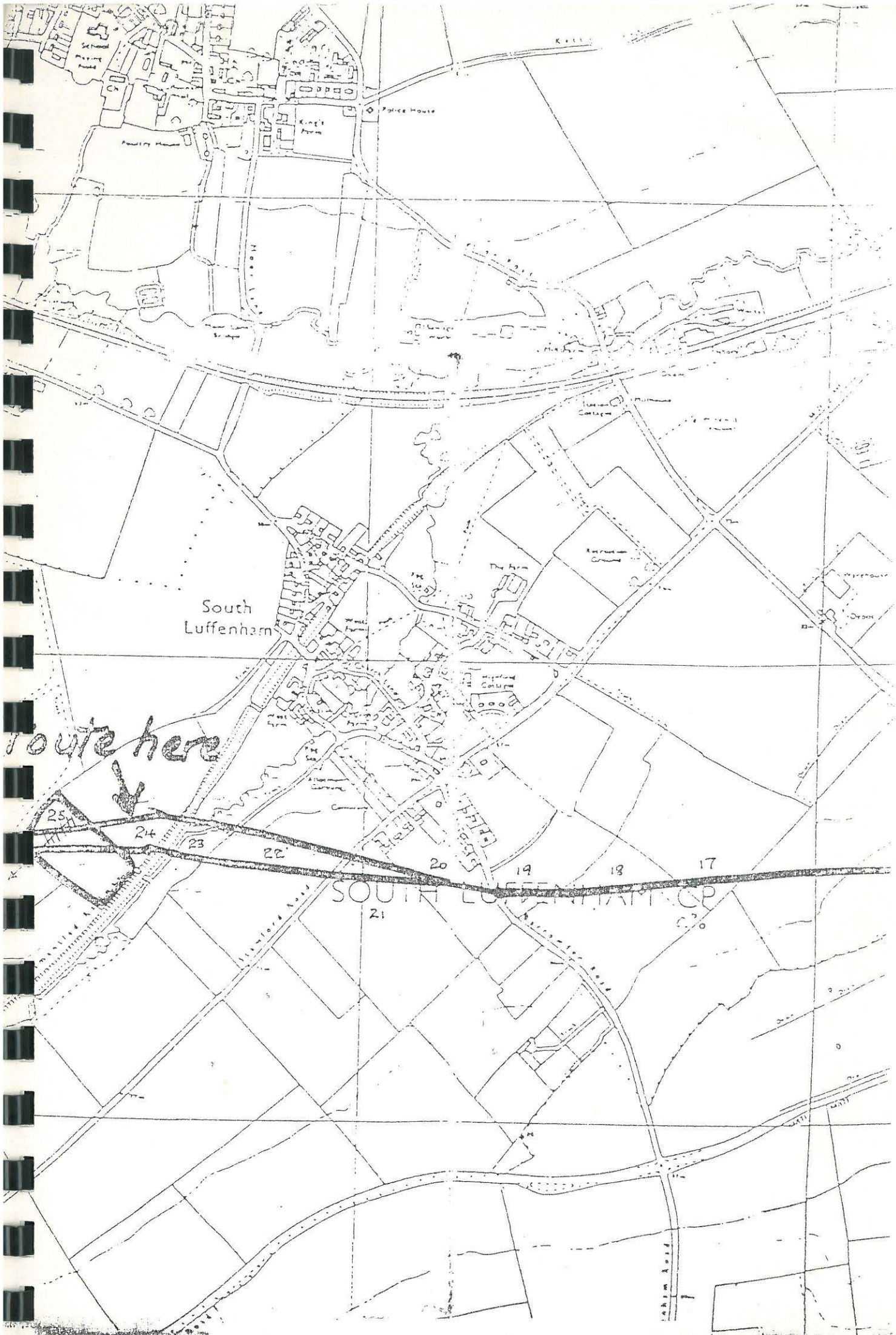


Fig.4 Pipeline route showing Fields 17-25

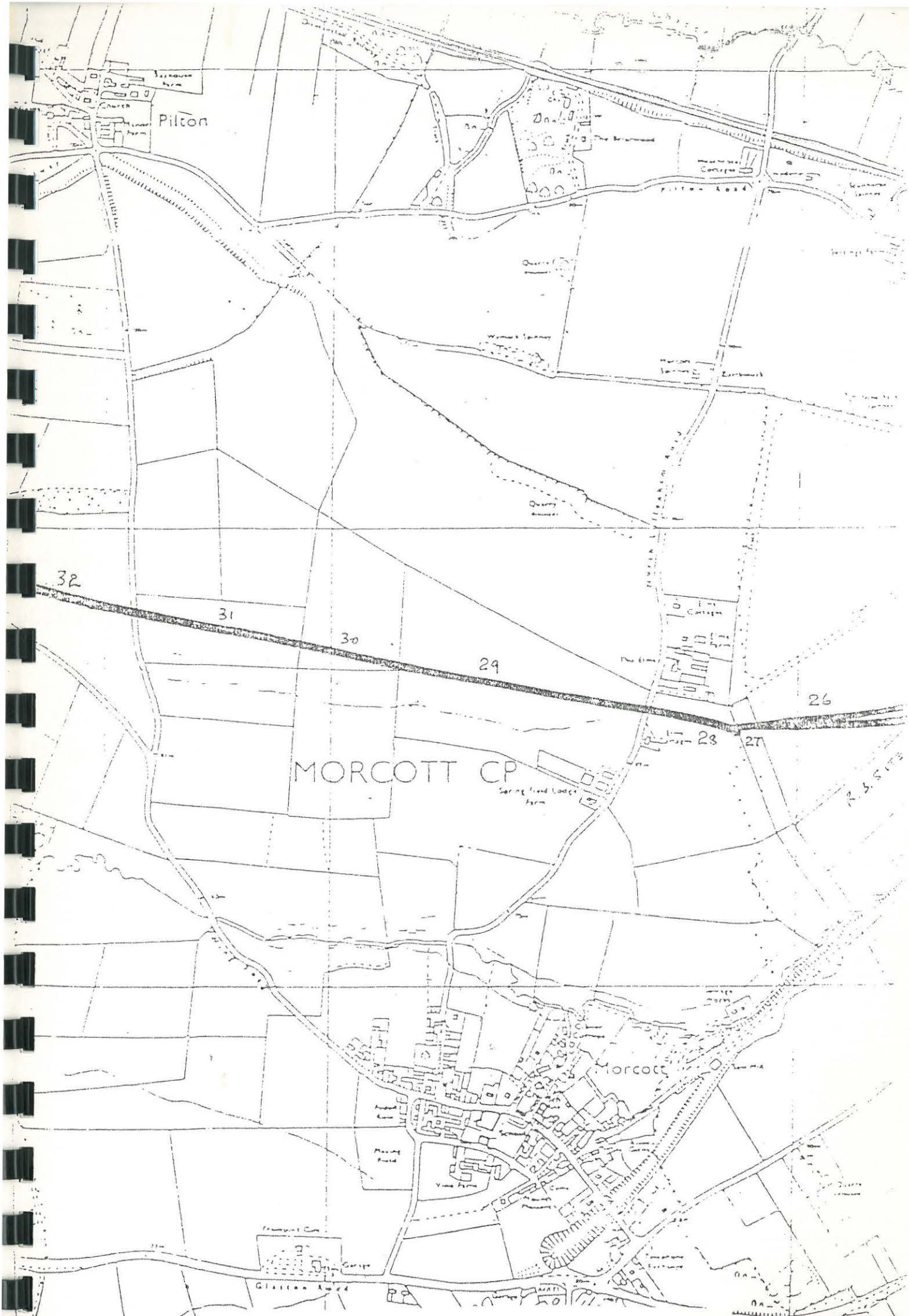


Fig.5 Pipeline route showing Fields 26-32

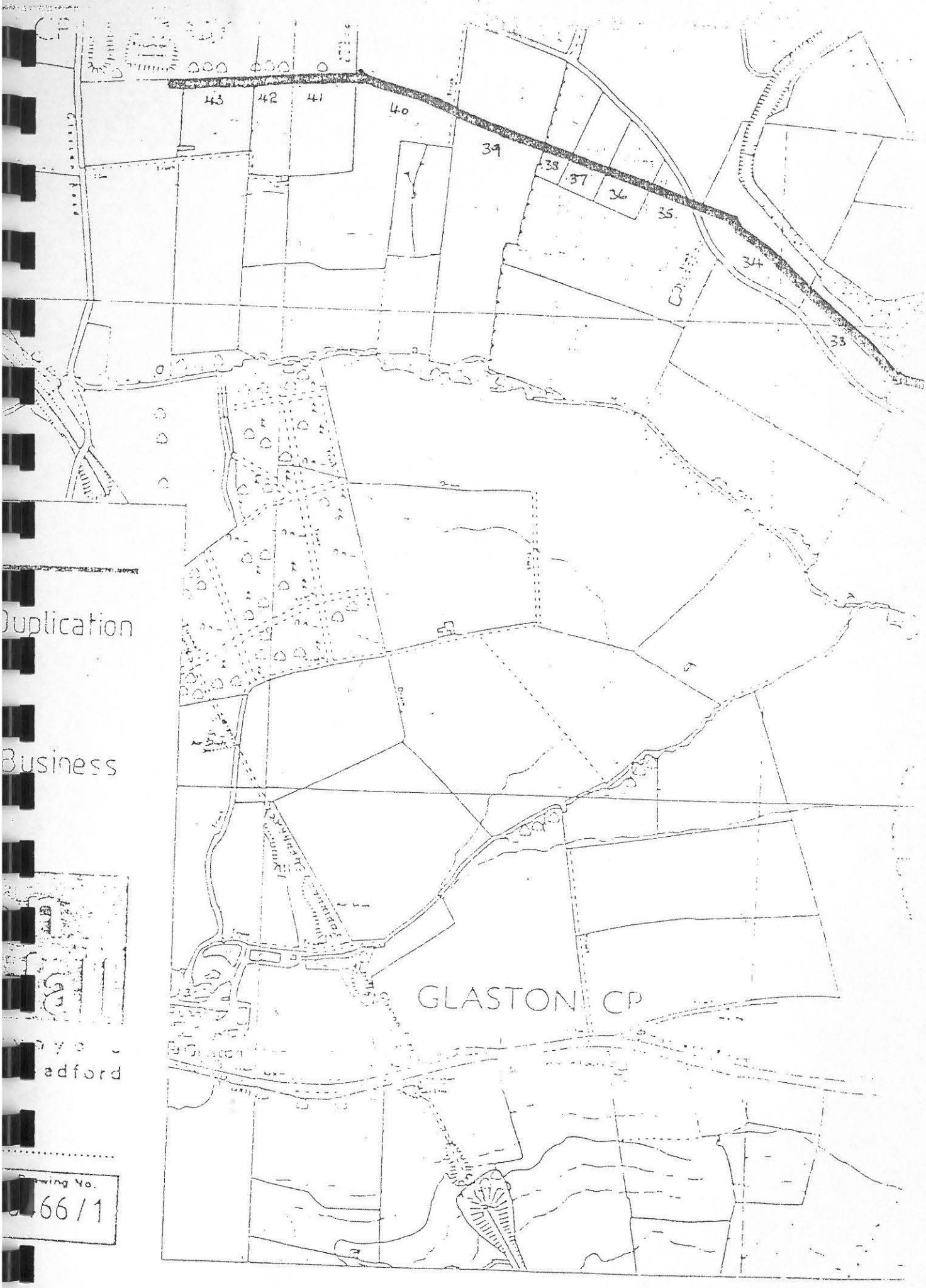


Fig.6 Pipeline route showing Fields 33-43