SMR 00/31

LINDSEY ARCHAEOLOGICAL SERVICES

River Rase Improvement Scheme

Site Code: MRF 00

LCNCC Accn No.: 2000.9

Archaeological Evaluation Report for the Environment Agency

by

Mark Williams

LAS Report No. 484

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Jim,

Golf course to be constructed June 2001.
The spoil heap is currently sitting on top of the
area to be evaluated on site 4! —

WITH COMPLIMENTS

Naomi

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EVENTS L12484 L12485 L12492
Site visit Trial Trending LOB

SOURCES L17088 L17089
PRI 54603 L182119

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River Rase Improvement Scheme

Archaeological Investigations

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Summary

Archaeological investigations at three sites affected by the above scheme involved geophysical survey, archaeological evaluation and an extensive watching brief. No archaeological material was identified on any of the sites.

Introduction

Lindsey Archaeological Services was commissioned to carry out archaeological works at the above site by the Environment Agency. The work was carried out in accordance with the requirements of the brief set out in the Contract Document no. NHB30958, the two Corrigenda from the Environment Agency and the general requirements set out in the *Lincolnshire Archaeological Handbook* published by the Archaeology Section, Lincolnshire County Council (1998). This report comprises the results of the evaluation of River Rase Storage Reservoir and the watching brief carried out on the replacement golf holes site.

Site Location and Description

The Environment Agency planned to improve the protection of Market Rasen from flooding by creating water storage areas upstream of Market Rasen on both the River Rase (Site 1) and the South Branch (Site 2). This would affect two other sites. The South Branch site was part of Market Rasen Golf Course and replacement golf holes would be constructed on Site 3 to compensate for loss of part of the golf course. Material for the flood storage area on the South Branch (Site 2) would be won from the excavation of the River Rase flood storage area (Site 1). Site 4 would be used as a temporary stockpile area.

Site 1: River Rase Storage Reservoir TF1150 8930 Middle Rasen

This site was located on arable land (part stubble and part sugar beet crop at the time of the archaeological works) on the northern outskirts of Market Rasen. It comprised a wedge shaped piece of land adjacent to the north bank of the river and extends over an area of c.8ha.

Works comprised diversion of the present watercourse, with associated control structures and embanking, and construction of a flood storage reservoir, requiring deep excavation and embanking.

Site 2: South Branch Site TF 1275 8825 Linwood

This site is located on the south bank of the river on the western part of the Market Rasen & District Golf Club course. The potential flood area (75 year event) is 10.8 ha along the river valley but the area affected by groundworks were 5.5ha. Works will comprise construction of an embanked flood

storage reservoir including minor diversion of the river with a control structure to regulate flows in the river.

This piece of land had previously been landscaped during construction of the golf course and it was unknown what archaeological remains may survive. To date there has been no archaeological investigation of this site.

Site 3: Area for Replacement Holes TF 1360 8790 North Willingham

This site was located east of Site 2 between Willingham Road and the north bank of the river. The site covers an area of c.7ha. Work comprised construction of three new holes to replace those on Site 2, which involved extensive landscaping after clearance of the trees.

Site 4: Temporary stockpile area TF 1475 8715 Sixhills

This site is located on the south side of the river valley c. 1km east of Site 3. Material removed during excavation of the reservoir on Site 1 will be stored on this site until required for construction work on Site 2. The field is 7.3ha in size but the area required for the stockpile is only 2ha. After the stockpile has been removed the field is to be planted as part of the adjacent commercial forestry, to compensate for loss of trees on Site 3.

Initial ground disturbance on this site would be confined to topsoil stripping before stockpiling, over 2ha. However, the proposed tree planting will cause ground disturbance over the whole area.

Archaeological Background

Archaeological discoveries in the Market Rasen area include at least two foci for a Roman pottery industry which flourished in the 2nd and 3rd centuries AD. Kilns have been excavated south of the town on both the west and east sides of Linwood Road. Further kilns were discovered in Linwood parish, in the 1960s, south of Sites 2 and 3. The potential for additional kilns or other features associated with Roman pottery manufacture is high at Sites 2, 3, and 4. There is also a possibility of prehistoric or Roman settlement remains being found on Site 1.

Objectives

In general terms the purpose of the evaluation were to:

- establish the presence or absence, quality and extent of archaeological remains and their location within the development area and to assess their importance in a local, regional and national context
- gather sufficient information to enable an assessment of the potential and significance of the remains to be made and the impact which development will have upon them
- enable an informed decision to be made regarding the future treatment of the remains and any mitigatory measures appropriate either in advance of and/or during development

More specifically the objectives of the evaluation were to:

- establish whether waterlogged deposits exist on the site
- establish whether there is any evidence of the Roman pottery industry on the three sites to the east of Market Rasen

Archaeological Work

A four-stage programme of archaeological work was provided for in the scheme. This report describes the results from Stage 1, part of Stage 3 and part of Stage 4.

Stage 1: Walkover Survey

This took place only on Site 1 due to the unsuitability of ground conditions of the other three sites. A single flint was recovered from this site.

Stage 2: Geophysical Survey

This was carried out on Sites 1 and 4 by Oxford Archaeotechnics and the report submitted in January 2000 (Oxford Archaeotechnics 2000).

Stage 3: Site 1 Evaluation Trenches

Evaluation excavations were carried out on Site 1 only, where topsoil magnetic survey and targeted gradiometer survey revealed numerous magnetic anomalies. While it was thought most likely that the variations in magnetic readings were due to natural variations in the subsoil two trial trenches were excavated to test the results, as requested by the Senior Built Environment Officer (Archaeology) of Lincolnshire County Council.

Method

Archaeological recording was carried out by two experienced archaeologists, including a Site Director. The trenches were hand-cleaned to reveal features in plan. LAS operates a standard context recording system, developed by its staff over the past 20 years based on MOLAS and CAS models. A full written (single context) and photographic record was made of the site, to include site plans at a scale of 1:50 or 1:20, as appropriate, and section drawings at 1:10.

A plan of each trench was made together with sample profile drawings of the sections. A full photographic record, in colour print was made during the progress of the excavation to cover principal features together with general site views.

Results

The area was part stubble and part sugar beat crop (Pl. 1). The trenches were machined with a JCB and a 1.8m wide dyking bucket and then cleaned using hand tools.

Trench 1

This trench was approximately 36m long and orientated north – south (Pl. 2-3). It was excavated through 0.20m of brown / grey silty sand topsoil directly onto a mixed natural sand ranging from orange through yellow to white. There were no archaeological features or artefacts found. Although it was impossible to directly correlate geophysical anomalies with natural variations in the natural soils there seems little doubt that this was the cause.

Trench 2

This trench was approximately 36m long and orientated east – west. It was excavated through a sequence of 0.20m of topsoil onto mixed natural from orange through yellow and white sand, similar to that found in Trench 1. No archaeological features were recovered from this trench. Again it was impossible to relate geophysical anomalies to natural variations.

Both trenches quickly became flooded, Trench 2 being almost wholly submerged, soon after excavation making cleaning impossible although the nature of the natural meant that any archaeological features would have been visible on initial inspection if present.

Within both trenches the ploughsoil lay directly over the natural sand and plough scores were visible running approximately north-east/south-west. Although it is possible that archaeological remains have been removed by ploughing the was no evidence of archaeologically significant material from the ploughsoil.

Stage 4 Site 3 Mitigation

Depending on the results of the earlier phases provision was made in the original Project Design for undertaking watching briefs on Areas 2, 3 and 4. The watching brief has been carried out on Site 3 only; results from the remaining areas will be presented in a future report.

Method

All earth moving was monitored by an experienced archaeologist. LAS operates a standard context recording system, developed by its staff over the past 20 years based on MOLAS and CAS models. A full written (single context) and photographic record was made of the site.

Results

Area of replacement holes

The land was formerly Forestry Commission land with a crop of five year old Corsican Pine intermixed with Birch scrub. The site was completely overgrown, with weeds to a height of c.1m. Also present were sawn off trunks from the previous stand of trees (Pl. 4). Ground conditions precluded any prior evaluation of the area using geophysical survey techniques or evaluation trenching. It was thought that evidence for Roman pottery production might be present.

Monitoring of the site clearance was carried out. Clearance comprised grubbing out of the old tree roots and removal of the saplings by machine. The ground was then levelled by machine (Pl. 5). Removal of the trees caused considerable disturbance to the subsoil but no pottery or any other archaeological remains were seen during this stage of the works. It was therefore decided to proceed with a watching brief during the next stage of ground preparation without any archaeological evaluation trenching being carried out.

Topsoil was then stripped and stored in temporary stockpiles in order to landscape the area for the new golf course (Pl. 6). The topsoil was approximately 0.40m thick and overlay a natural deposit yellow and orange sand. There was no evidence of archaeological remains from the site.

Conclusion

The archaeological work carried out on the two above sites have revealed no evidence that the groundworks disturbed any significant archaeological remains. Excavation of Roman kilns by Lindsey Archaeological Services in Market Rasen has shown that where kilns are present then large amounts of kiln material is spread over substantial areas and is visible in the topsoil (Field and Williams 1999 and Williams forthcoming). The anomalies identified in the geophysical survey seem, as suggested in the report, to represent changes in the underlying drift geology as opposed to archaeological remains.

Acknowledgements

Fieldwork was carried out on this site by Wendy Booth and the author. The watching brief was undertaken by Naomi Field and Geoff Tann. Naomi Field managed the project and edited this report.

Mark Williams
Lindsey Archaeological Services
November 30th 2000

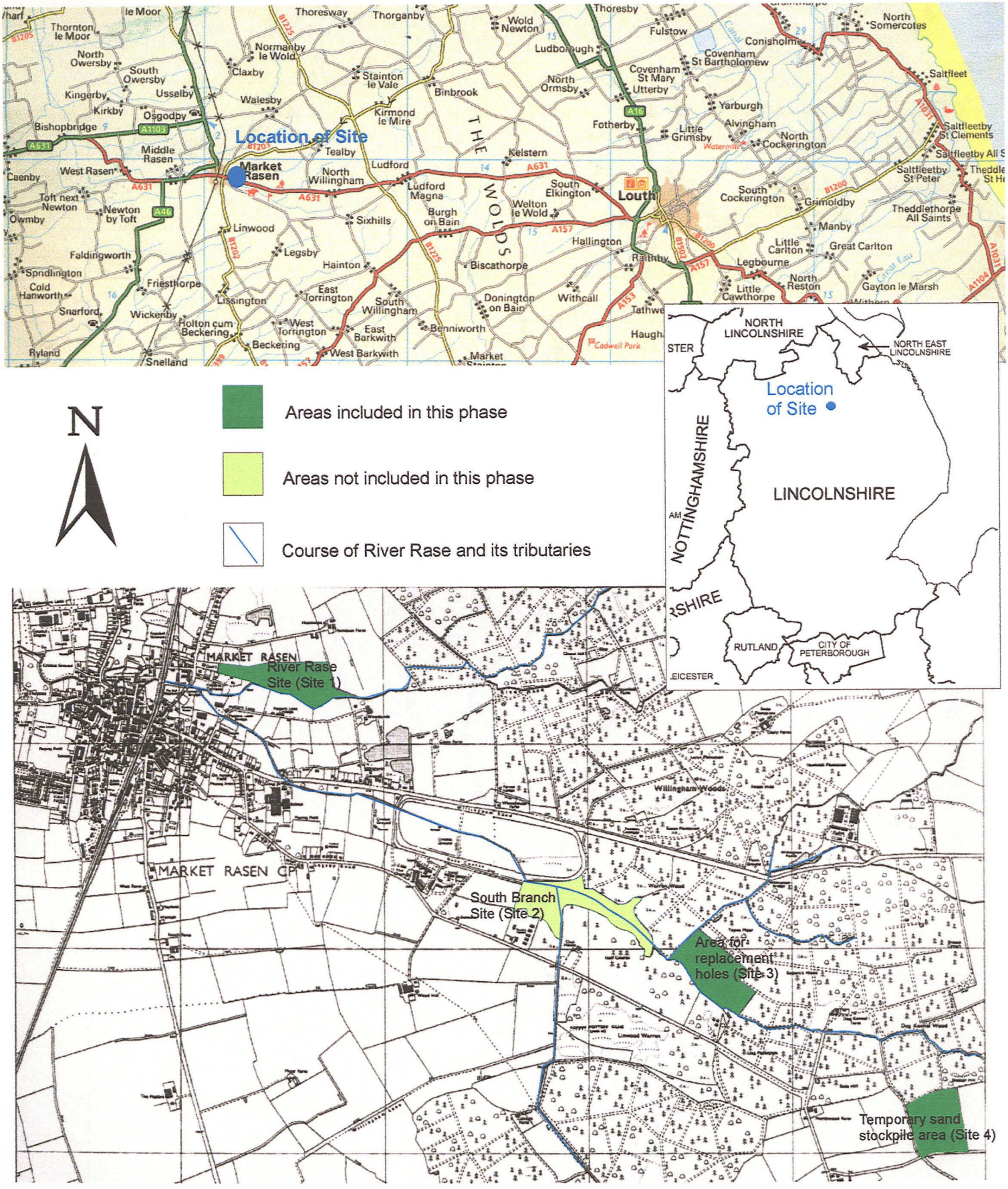

Fig. 1: Location of Market Rasen. Inset C. Location of improvement scheme based upon a plan provided by the Environment Agency (Drg. No NHB30958 /200)

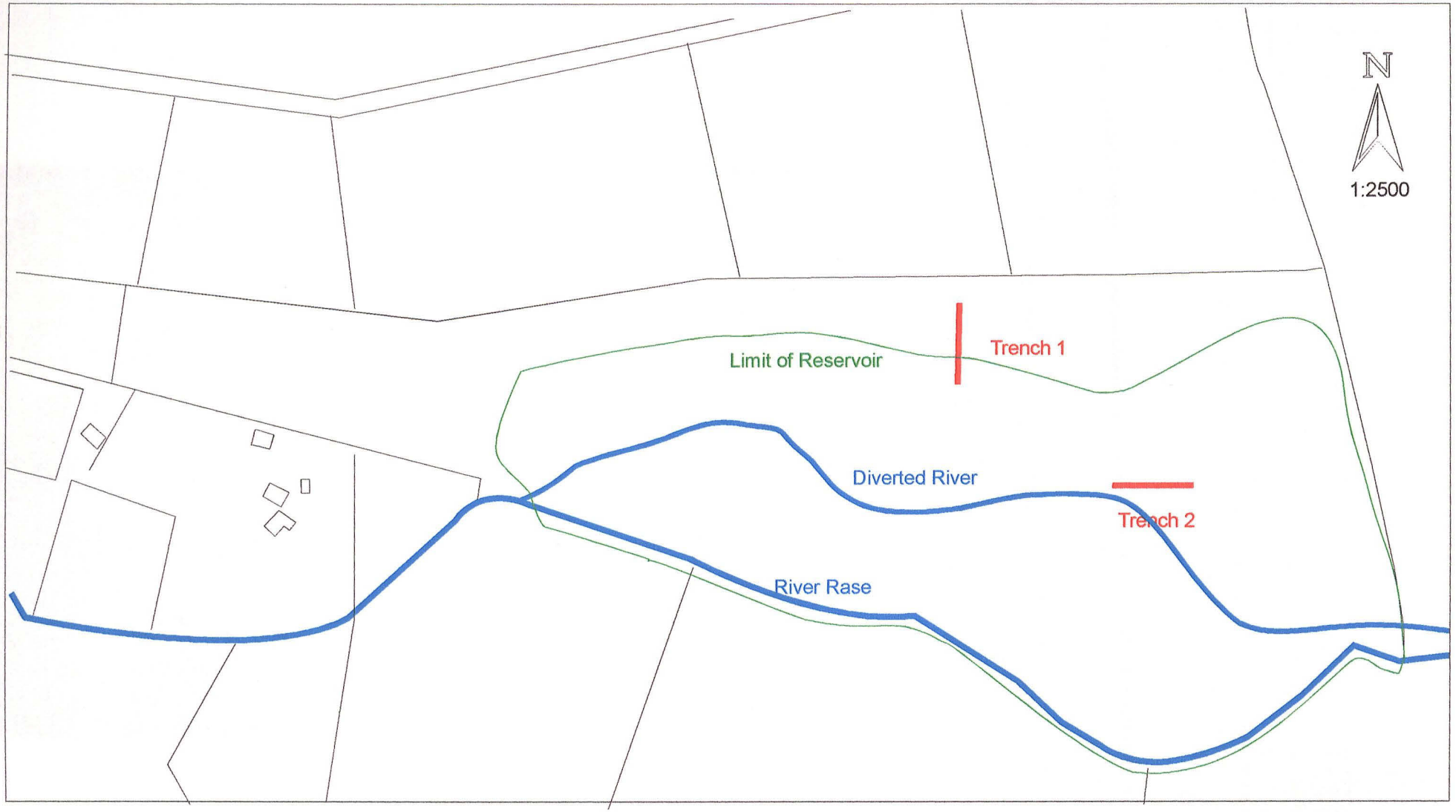

Fig. 2: Site 1, Trench Locations

Pl.1 Site 1, General view looking south-east

Pl. 2 Site 1, Trench 1, looking north

Pl. 3 Site 1, Trench 1, looking south

Pl. 4 Site 4 prior to clearance showing extent of vegetational cover. Note piles of tree roots.

Pl. 5 Site 4 after removal of undergrowth levelling of the ground

Pl. 6 Site 4 following topsoil removal and partial landscaping for the new golf course.