Archaeological Evaluation
on land off
Ridgway Road,
Hanley,
Stoke-on-Trent,
Staffordshire
NGR SJ 8858 4645

Planning Application No.: SOT/48034/RES

Site Code: RRH 08

Museum Accession No.: 2008.LH.59

Produced for

Lovell

by

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Non-technical summary

Stoke-on-Trent Archaeology carried out an archaeological evaluation on land off Ridgway Road, Hanley, Stoke-on-Trent (NGR SJ 8858 4645). The site was occupied by a crate-maker's yard during the late 19th century, which was replaced by an electricity generating station in the early 20th century. The evaluation was undertaken on the 6th and 7th November 2008 and involved the machine excavation of a single trench targeted upon the timber pond of the crate works.

No evidence of the pond was found during the course of the evaluation. Large reinforced concrete fragments, probably representative of a partially sunken water storage tank associated with the electricity works, were encountered during the evaluation, suggesting that this structure had destroyed the earlier crate-maker's pond.

1.0 Introduction

1.1 The proposed development area (PDA) is situated in Hanley, one of the six towns that form the modern conurbation of Stoke-on-Trent. The PDA is located on the eastern side of Ridgway Road on a wedge-shaped plot of vacant brownfield, approximately 1.1km south-east of the town centre, centred on National Grid Reference (NGR) SJ 8858 4645 (Fig. 1). The site was previously occupied by an electricity generating station and lay between, but not within, the Hanley Park and Caldon Canal Conservation Areas.

2.0 Planning background

2.1 A reserved matters planning application by Lovell Homes (Midlands) Ltd to re-develop the site with residential units as part of the City Waterside regeneration scheme, was submitted to the Local Planning Authority (LPA), Stoke-on-Trent City Council on 9th January 2008 (planning application ref. SOT/48034/RES). Permission was approved on 28th March 2008 with an attached condition for an archaeological evaluation, as defined by the Institute for Archaeologists (IfA), be undertaken in advance of development on site.

2.2 The evaluation would assess and record any buried archaeological remains, in accordance with the specifications (Boothroyd 2008) of the Planning Archaeologist for Stoke-on-Trent City Council. This recommendation was in line with the LPA's planning and development process, as defined by the *Stoke-on-Trent City Plan*, including policy *BP9 (Unscheduled Remains)* and national government guidelines established in *PPG15 (Planning and the Historic Environment, 1994)* and *PPG16 (Archaeology and Planning, 1990)*. Stoke-on-Trent Archaeology (SOTARCH) was subsequently commissioned by Lovell to undertake the project.

3.0 Location and character of the PDA

3.1 The PDA extends to approximately 0.96 hectares (2.37 acres), bounded to the west by Ridgway Road, across which is Hanley Park. To the east and south, the site is demarcated by the Caldon Canal and to the north overlooked by the southernmost of two residential tower blocks (Dickson House). The site's western and northern boundaries are defined by iron railings.

3.2 Site topography is generally flat, but with a pronounced slope downwards along the eastern boundary beside the canal. Part of the northern portion of the PDA is partially occupied by a former electricity sub-station, comprising a single-storey brick structure with adjacent transformer.

4.0. Archaeological and historical background

4.1 Until the late 19th century the PDA was in a district known as Stoke Fields, which was mainly waste ground crossed only by Victoria Road (Greenslade 1963, 144). The Ordnance Survey (OS) map of 1880 shows an elongated enclosure within this area, occupied by a crate-maker's yard (Fig. 3). The map indicates two north-east to south-west aligned buildings at the northern end of the area, the largest of which is divided into two, with a sub-rectangular pond positioned some distance to the south. The pond appears to be surrounded on three sides by a raised earthwork or bund.

4.2 The manufacture of crates for the transportation of finished wares was an important ancillary trade of the north Staffordshire pottery industry (Jenkins 1978, 35). Crates traditionally comprised a framework of rigid poles or heads of cleft hardwood (such as oak or chestnut), through which flexible rods of hazel were woven and secured with wedges (Sherlock 1976, 41). An early 20th-century photograph of an anonymous Stoke-on-Trent crate-maker's yard depicts bundles of hazel immersed in a pond and covered with heavy timbers to ensure a thorough soaking (Staffordshire Past Track 2008). Presumably much of the yard area was utilised for the storage of raw materials and finished crates.

4.3 The crate-maker's yard within the PDA was still extant at the time of the 1890 OS map, but by 1900 it was gone and the enclosure vacant, with the exception of the smaller of the two northernmost buildings. This building was accessible from Ridgway Road, the thoroughfare having been built in the 1890s as the outer circular road of the new public recreation park. In 1894 the first municipal electricity generating station in the Potteries was opened in Hanley (Greenslade 1963, 151) about 100.00m north west of the former crate yard. This coal-fired station was originally fitted with steam reciprocating engines but by the early 20th century the advantages of steam turbines were well known and a new central power house with turbine alternators was opened in 1913 (Warrillow 1953, 155).

4.6 By the time of the 1924 OS map the electricity works had been extended south into the area previously occupied by the northern half of the crate yard. The southern half of the former crate works, in which the pond was located, appears to have been used for landfill by 1924. A new boiler house was added at the south end of the turbine hall between *c.*1927-29 and the station was linked to the national grid in 1930 (Warrillow 1960, 155).

4.7 Plans for a low-level water storage tank to the south of the boiler house had been formulated by the mid 1920s (Ellis 1925), with such a structure is first indicated on the 1937 OS map (Fig. 4). The tank was located directly over the site of the former crate work's pond and measured approximately 24.00m x 15.00m, aligned north west to south east. The tank's height and depth below ground level are unknown, but it would have held an immense volume of water which would have been used as the coolant for condensing the steam from the turbines for reuse in the boilers (Buchanan 1977, 346).

4.8 The electricity station was demolished in 1975 and replaced with the present tower blocks; the foundations of which are reputedly the huge turbine beds (SPT 2008). At this stage the area was divided into two plots of land and by 1994 the northern plot was occupied by a small electricity sub-station and power distribution transformer, both of which were still extant in 2008.

5.0 Methodology

5.1 The primary aim of the evaluation was to determine the state of preservation of the crate works' timber pond by excavating a section through the feature in order to ascertain a profile and the method of its construction. The over-arching objectives of the project are described in full in the Planning Archaeologist's project brief (Boothroyd 2008) and are broadly summarised below:

- Confirm the presence or absence of buried remains of archaeological interest in the PDA.
- Determine the date, nature, phasing and the state of preservation and relationships of any archaeological deposits and features.
- Preserve by record the archaeological evidence found.
- Attempt to provide information on the character of the site within a local, regional and national context.

5.2 The project brief required the excavation of an area of 20.00m², comprising one 2.00m x 10.00m trial trench (trench 1), positioned across the location of the timber pond as determined by the cartographic evidence (Fig. 2). This trench was intended to create an east-west aligned section across the north end of the pond and would have revealed approximately 20% of its total area. Due to site constraints and the nature of the archaeology encountered, the eventual trench was somewhat smaller than that requested (see below 6.1).

5.3 Fieldwork was undertaken on the 6th and 7th November 2008 and was conducted in compliance with the Planning Archaeologist's project brief (Boothroyd 2008) and the Written Scheme of Investigation (WSI) produced by SOTARCH (Goodwin 2008).

5.4 The evaluation involved the archaeological supervision of a 180° backhoe excavator equipped with a 1.70m wide ditching bucket to remove modern materials down to the first discernible archaeological horizon. If no archaeological features or deposits were identified, excavation was continued either to a point where undisturbed natural subsoil could be confirmed or to a safe and practical working depth.

5.5 All archaeological horizons were cleaned by hand and the trench documented by means of a written record (site notes and individual *pro-forma* context sheets) and measured drawings (1:10 for sections and 1.20 for plans). A digital colour and 35mm monochrome print photographic record was maintained, showing specific stages of the fieldwork and the layout and relationship of any archaeological features. The trench was backfilled after recording with the permission of the Planning Archaeologist.

5.6 The site archive is stored at The Potteries Museum & Art Gallery, Bethesda Street, Hanley, Stoke-on-Trent, Staffordshire (site code **RRH 08,** Museum Accession Number **2008.LH.59**).

6.0 Results

6.1 ***Trench 1*** (max. 3.00m N-S x 4.60m E-W) (Figs. 5a & 5b; Plates 1-4).

6.1.1 The trench was located at the north end of the PDA, approximately 30.00m north east of the electricity sub-station (Fig. 2). A back-filled ducting trench, previously

excavated along the northern perimeter of the site had clipped the edge of the target area, forcing a minor realignment of the trench to the west. The trench was sited on the eastern edge of a sizeable area of landscaped overburden, the deposition of which appeared to have raised ground levels by up to 2.00m in places.

6.1.2 Excavations commenced with the removal of overburden (100), which comprised a mix of loose red ash, loam, brick rubble, broken concrete and some 20th-century domestic refuse. Deposit (100) was 1.70m thick at the eastern end of the trench, increasing to 1.90m thick to the west and lay above two reinforced concrete slab fragments (101) and (102). The first of these, (101) was positioned at the eastern end of the trench and was 0.26m thick. The full extent of (101) was not revealed during the evaluation, but it was at least 3.00m E-W x 2.20m N-S. Partly underlying (101) in the western half of the evaluation trench was a second slab fragment (102), 0.18m thick.

6.1.3 In the north-western corner of the trench a loam and rubble made ground deposit (103) was exposed, which was similar in consistency to (100), but appeared to continue beneath (102) and (101) to the east. A sondage was machine excavated through (103) on the southern side of (101), revealing another concrete slab (104) located some 1.30m below (101). At this point the sondage began to flood and excavations were halted. Although the required trenching area had not been achieved at this point, it was decided in consultation with the Planning Archaeologist that, given the significant quantities of overburden, the lack of significant finds and the depth of the trench, the evaluation should cease.

7.0 Conclusions

7.1 The evaluation at Ridgway Road failed to identify any trace of the crate-maker's pond that formerly occupied the trench area. The later development of the electricity works, specifically the water storage tank, had destroyed all evidence of this feature. The pieces of reinforced concrete found within the evaluation trench in all likelihood represent fragments of this water tank. The depth at which the fragments were found seems to support the documentary evidence (Ellis 1925) that this was a partly sunken structure, which, when demolished was seemingly broken up and back-filled into the void that it once occupied. Further landscaping appears to have taken place following the tank's demolition.

7.2 With the negative conclusion of the Ridgway Road evaluation, the precise form and construction of crate-maker's ponds in north Staffordshire remains unknown. A great many questions about these features remain unanswered. For example, how deep were such pits? Were they lined with puddled clay or brick? What is the significance of the surrounding earthwork indicated on historical map evidence of the Ridgway Road example? The future archaeological investigation of undisturbed examples will no doubt provide answers to at least some of these questions.

8.0 Acknowledgements

8.1 Fieldwork was undertaken by Richard Cramp, assisted by Heather Anne Cope and Laura Young of SOTARCH. This report was written by Richard Cramp with illustrations by Zoë Sutherland. Thanks are extended to the Planning Archaeologist, Noel Boothroyd, to the client, Lovell Homes and to T.G. Barnett Plant Hire for their assistance and co-operation during the project.

9.0 References

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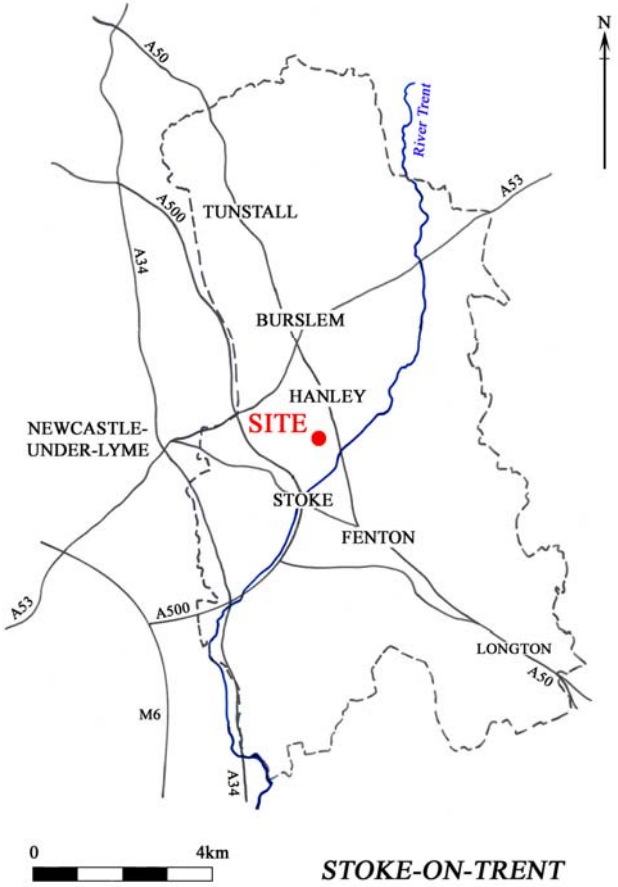


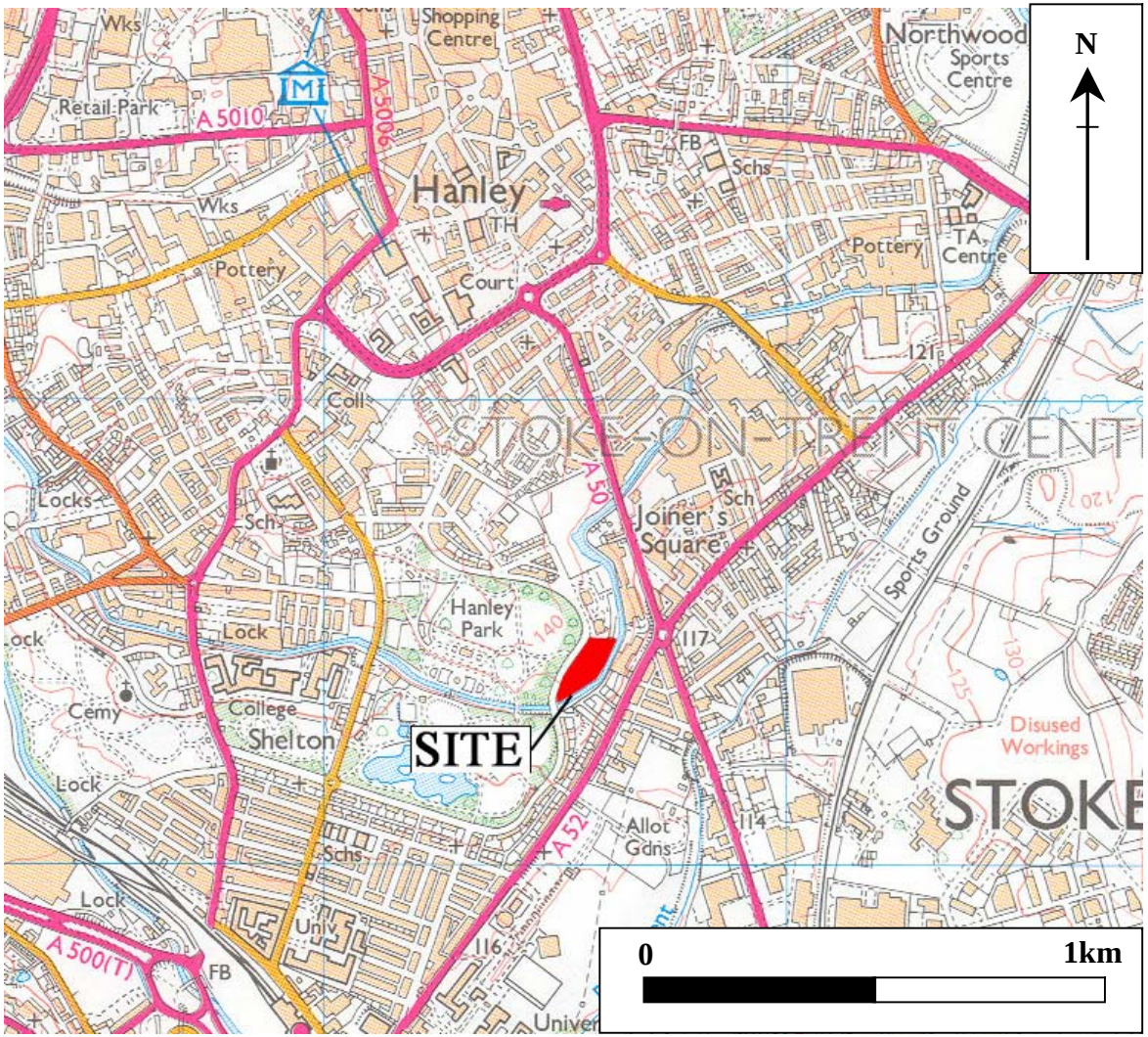


FIG.1

Site location

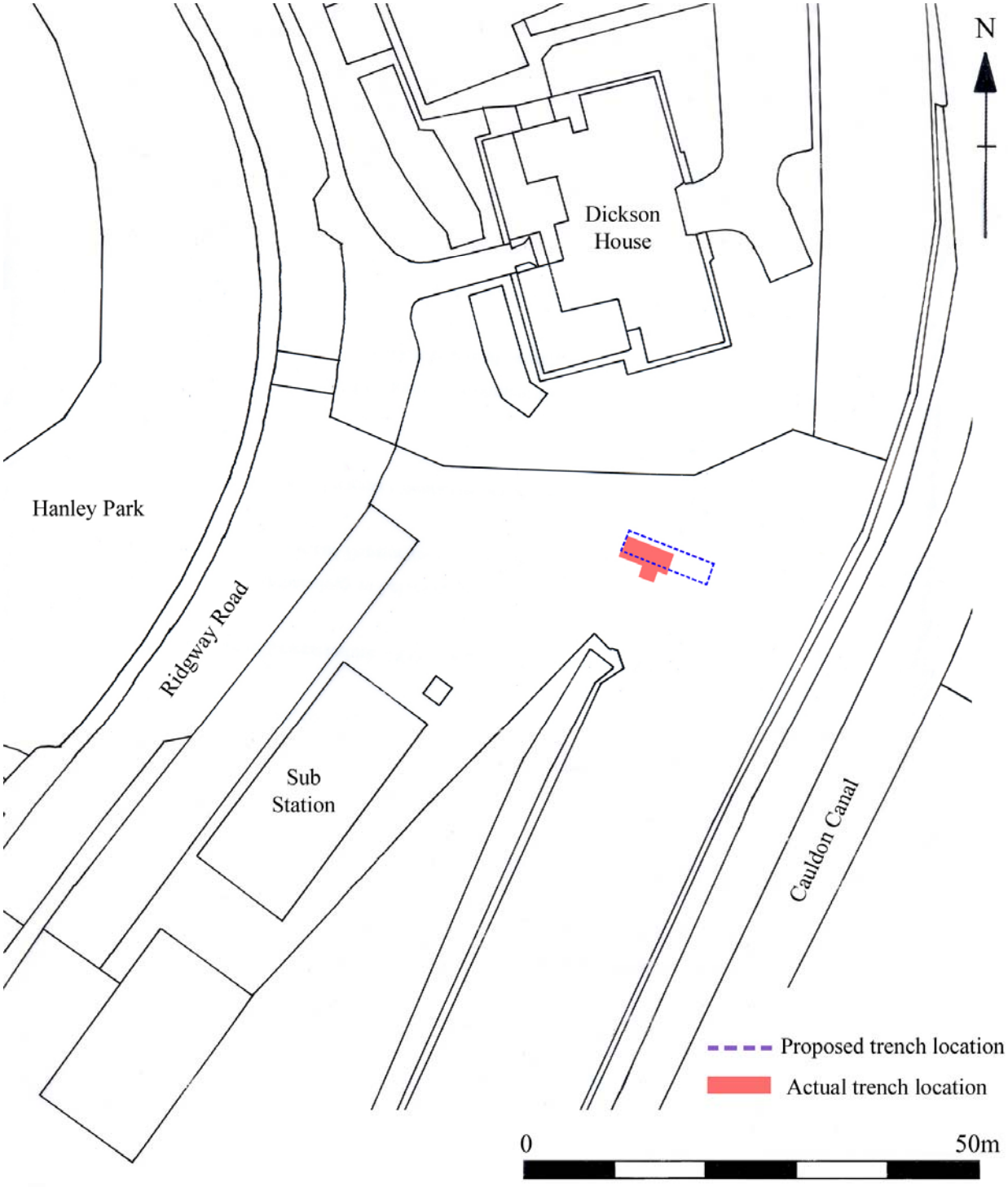


FIG. 2

Trench location plan

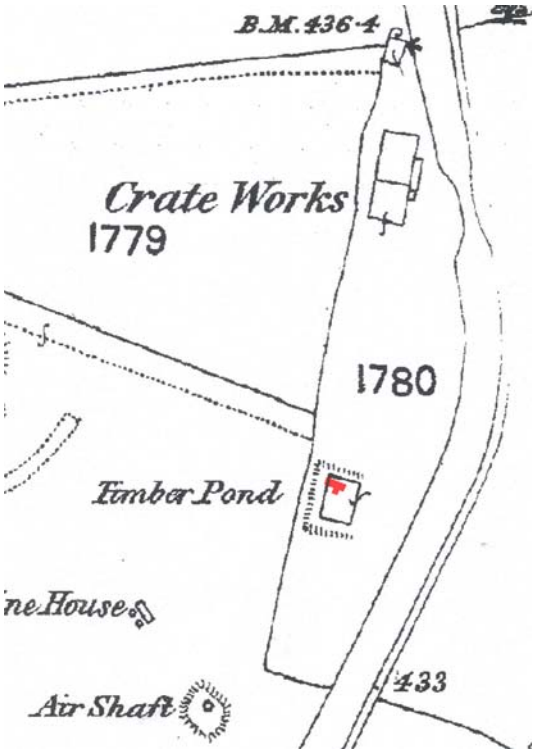


FIG. 3

Extract from 1880 OS map showing crate works (evaluation trench location is marked in red).

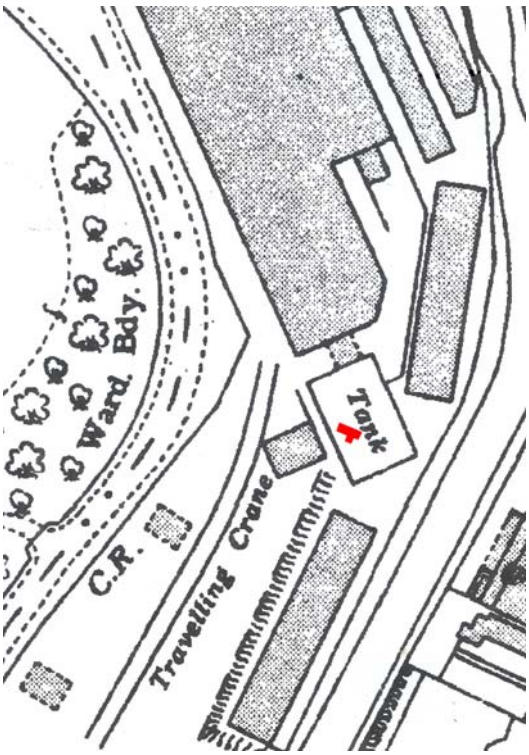
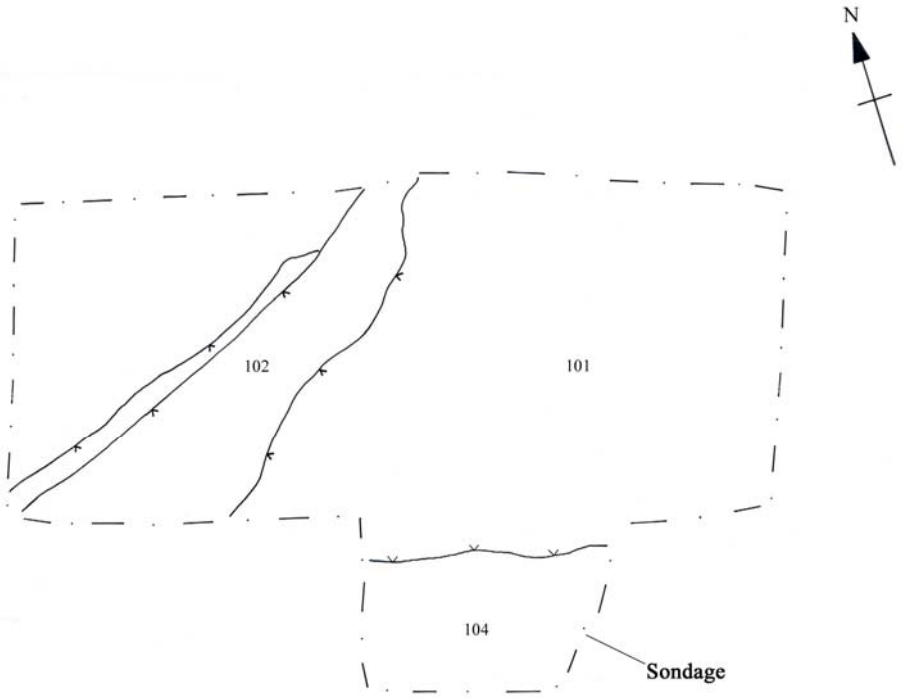


FIG. 4

Extract from 1937 OS map showing electricity works and water storage tank (evaluation trench location is indicated in red).

a)



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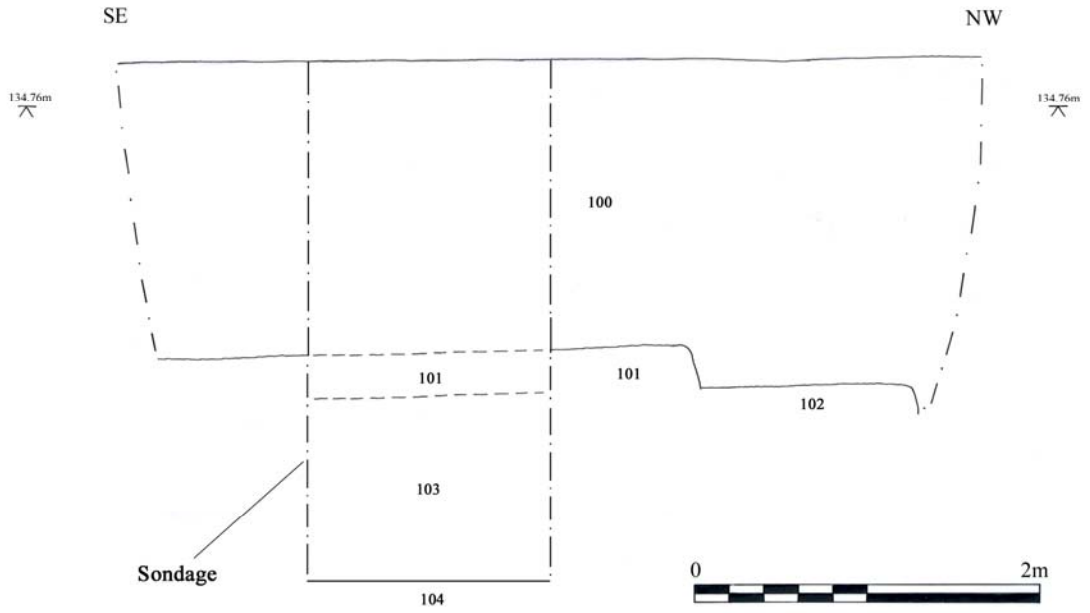

FIG. 5

a) post-excavation plan of trench *b)* north-facing section of trench.

PLATE 1

General view of trench being excavated, facing south.

PLATE 2

View of trench facing south, showing depth of overburden (100) and concrete (101) (scales: 1.0m & 2.0m).

PLATE 3

View of concrete fragments (101) and (102), looking north west (scales: 1.0m).

PLATE 4

Concrete fragment (104) at base of sondage on the south side of the trench, looking south west (scale: 1.0m).