



CRONTON COLLIERY, KNOWSLEY, Merseyside

Archaeological Desk-Based Assessment & Visual Inspection



Oxford Archaeology North

October 2003

Sinclair Knight Merz

Issue No.: 2003-04/165
OA North Job No: L9302
NGR: SJ 475 895

Document Title: CRONTON COLLIERY, KNOWSLEY, MERSEYSIDE

Document Type: Archaeological Desk-Based Assessment

Client Name: Sinclair Knight Merz

Issue Number: 2003-2004/165

OA North Job Number: L9302

National Grid Reference: SJ 475 895

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Document File Location Emily/Projects/L9302/report

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SUMMARY

An archaeological assessment of the former Cronton Colliery site, Merseyside, was carried out during September 2003 by Oxford Archaeology North (OA North) on behalf of Sinclair Knight Merz. The archaeological work was required as part of an Environmental Impact Assessment for the Planning Application proposals in the redevelopment of the area (centred on SJ 475895). The work comprised a desk-based assessment and a visual inspection survey of the site, as requested by the Merseyside Archaeological Service.

The assessment has identified evidence for considerable archaeological activity within the region dating back to the prehistoric period, although only remains of the medieval and later periods are known from existing documentary sources. The study area lies within the bounds of a former large medieval park estate. Excavations carried out in 1993 to the south of the outlined proposed development area found evidence of Mesolithic activity along Ochre Brook, together with Romano-British and medieval settlement suggesting the area has a long history of human habitation.

Since 1913, however, the study area has been dedicated to coal extraction at Cronton Colliery. The mine, which became one of the largest producers in the area, provided fuel for the numerous industrial activities in the region, as well as employment for many local men from Huyton, Prescot, Tarbock, Whiston and Cronton. Large quantities of Cronton coal was also exported around the world from Liverpool.

The demolition of the Colliery and the subsequent landscaping of the area during the 1990s has effectively removed most of the site's archaeological resource. Those elements which do survive, and merit some archaeological consideration, are the remains of the railway branch line embankment, and the relatively undisturbed areas of woodland on the western side of the site. This area constitutes a surviving remnant of the medieval park and may conceal undisturbed archaeological resource from this period and earlier. Further archaeological mitigation will be necessary if these areas are to be impacted upon during the development.

ACKNOWLEDGEMENTS

Oxford Archaeology North would like to express its thanks to Lorraine Wilde of Sinclair Knight Merz for commissioning the work. Thanks are also due to the staff of the Merseyside County Record Office for their patience and cooperation. Further thanks should be extended to Sarah Jane Farr at Merseyside County Council, and Mark Hart at Merseyside Sites and Monuments Register, for the information provided.

Anthony Lee undertook the desk-based assessment, and the visual inspection with assistance from Chris Riddings. The report was written by Anthony Lee with drawings produced by Mark Tidmarsh. The report was edited by Emily Mercer and Rachel Newman. The overall project was managed by Emily Mercer.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In response to a proposal for the development of the derelict industrial site of Cronton Colliery (centred on SJ 475895), north of Cronton, Merseyside (Fig 1), Sinclair Knight Merz (hereafter the client) requested Oxford Archaeology North (OA North) submit a project design (*Appendix 1*) to undertake an archaeological assessment of the site. This was prepared in accordance with a verbal brief from the Merseyside Archaeological Service. Following acceptance of the proposals OA North was commissioned to carry out the work in September 2003 as part of the Environmental Impact Assessment required for a Planning Application for the site. The work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.
- 1.1.2 The archaeological work comprised a desk-based assessment and a visual inspection or walkover survey. This examined the proposed development area for evidence of sites with archaeological potential. The desk-based assessment consisted of a search of both primary documents, including maps and documentary sources, held in the Merseyside County Record Office and the Merseyside Sites and Monuments Register in Liverpool, as well as any relevant secondary sources. A wider historical context was provided by a brief study of historical and archaeological sites in the surrounding area. A visual inspection of the site was undertaken to relate the existing landscape to research findings.
- 1.1.3 The results of the assessment are presented in the form of a short report outlining the results of findings, followed by a statement of the archaeological potential of the study area, and the impact that the redevelopment will have on this resource.

2. METHODOLOGY

2.1 DESK-BASED ASSESSMENT

- 2.1.1 The study area focused on the site of Cronton Colliery, which was subject to detailed archaeological study, while the surrounding area was also assessed in more general terms. A range of sources was consulted during the course of the desk-based assessment, including records held by the Merseyside Sites and Monuments Record (SMR) and the Merseyside County Record Office. Particular emphasis was placed upon early cartographic evidence, which has the potential to inform medieval and post-medieval occupation and land use of the area. A range of secondary sources was also consulted, and the results have been incorporated into the historical background.
- 2.1.2 ***Merseyside Sites and Monuments Record:*** the Merseyside SMR, held in the Liverpool Maritime Museum, was consulted to establish sites of archaeological interest already known within the study area, and the extent and character of these. For each entry a short note was obtained which was added to the site gazetteer (*Appendix 2*), and marked on a location plan (Fig 2). Unpublished reports held by the SMR, secondary published sources, map extracts and aerial photographs were consulted where relevant.
- 2.1.3 ***Merseyside County Record Office:*** the Merseyside County Record Office in Liverpool Central Library was visited to consult primary records relating to the study area. The tithe maps for the township of Whiston, in which the site is situated, were unfortunately not available. However, an extensive run of Ordnance Survey maps was consulted for the study area. Secondary sources were also investigated.
- 2.1.4 ***Oxford Archaeology North:*** OA North has an extensive library of secondary sources relevant to the study area, as well as numerous unpublished client reports on work carried out under its former guise as Lancaster University Archaeological Unit (LUAU), and as OA North. These were also consulted where appropriate.

2.2 VISUAL INSPECTION

- 2.2.1 Following the desk-based assessment, a basic visual inspection of the site was undertaken to relate the existing landscape to research findings. The survey was undertaken on 25th September 2003, and was completed in a systematic fashion. The position of archaeological features identified within the landscape was recorded using GPS survey techniques, and was related to features shown on the map provided by the client. A photographic record was also undertaken.

2.3 ARCHIVE

- 2.3.1 A full archive of the desk-based assessment and visual inspection survey has been produced to a professional standard in accordance with current English Heritage guidelines (English Heritage 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of

the project, in accordance with United Kingdom Institute for Conservation guidelines (UKIC 1990). The paper and digital archive will be deposited in the County Record Office, Liverpool, on completion of the project. A copy of the report will be deposited with the Merseyside SMR in Liverpool.

3. BACKGROUND

3.1 LOCATION, GEOLOGY AND TOPOGRAPHY

- 3.1.1 The study area lies in the southern part of Whiston township (SJ 475895), to the south-east of Junction 6 of the M62. It is situated some 7km south-west of St Helens and 5km north-west of Widnes within the modern county of Merseyside (Fig 1). The towns of Prescott and Cronton are situated to the north and south-east respectively.
- 3.1.2 The dominant topographical element in the vicinity of the site is the Ochre Brook, which runs southwards in a broad, flat-bottomed shallow valley. The brook cuts through a low-lying, gently undulating landscape that rises to approximately 30m within the study area.
- 3.1.3 The underlying geology is well known for the extensive coal measures, which are buried beneath a thick layer of glacial drift, in the form of boulder clay with intermittent bands of sand (Geological Survey of Great Britain Sheet 97 (Runcorn), 1:50000 Drift Edition, 1977).

3.2 HISTORY AND ARCHAEOLOGY

- 3.2.1 **Introduction:** this brief summary of the documented history of the site before the existence of the coal mine will incorporate the results of recent archaeological investigations undertaken in the vicinity of the site. This will enable the site to be considered in a slightly wider historical context.
- 3.2.2 During the construction of the A5300 road corridor in 1993, to the south-west of the study area, a number of archaeological evaluations were undertaken. Two sites of note were investigated in the vicinity: one either side of Ochre Brook, near the site of Dagger's Bridge Farm (SJ 466 890 and SJ 464 890). A further site was investigated further south at Brunt Boggart (SJ 468 881). The information provided below was obtained from published results of these investigations (Cowell and Philpott, 2000).
- 3.2.3 **Ochre Brook:** the earliest activity at Ochre Brook could be subdivided into two distinct phases, the Mesolithic and late Neolithic/Bronze Age. In both cases the evidence was restricted to a few fragments of worked flint, and although these indicated some activity in the vicinity, there was no trace of associated features. The small amount of material evidence from the sites on either side of the brook could not provide an appreciation of the nature of Mesolithic activity at this location. However, what was recovered was significant in that it provides the furthest point north for the penetration of hunter-gatherers into the interior of the county from the Mersey, presumably using the Ditton and Ochre Brooks. The retouched blades suggested expedient use, as might be practised by short-stay hunters. The cores, tertiary blades and flakes suggested that tool production and finishing activities were also practised here, and the debitage could belong to either type of activity. The one possible Mesolithic scraper and the truncated piece from the eastern side of the brook suggested that more extended activity, possibly associated with slightly longer stay occupation,

could also have been a feature of this site. No evidence was found for any activity during the Neolithic or Bronze-Age (*ibid*).

- 3.2.4 The second and most substantial period of activity saw the construction, use, and abandonment of a Romano-British enclosure and associated features on the crest of the valley slope on the west bank of Ochre Brook. The earliest Roman phase of occupation of the settlement saw the laying out and construction of the rectilinear enclosure on a slight rise overlooking a stream. The date of construction was determined by the early second century pottery assemblage recovered. A 3.6m wide entrance in the western side confirmed this interpretation as an enclosure, which was calculated to have been 4200 to 4800m². The 1993 excavations and watching brief only examined approximately 2000m². Of the earliest features identified within the enclosure, the most significant was the principal structure within the excavation. The building was a simple post-built structure, an irregular rectangle in plan, with two probable internal sub-divisions, and was tentatively identified as a dwelling. A second, smaller structure was represented by a pair of parallel beam slots, and was assigned to a period after the disuse of the earlier structure, since the two buildings overlapped (*ibid*).
- 3.2.5 After a period of silting up of the enclosure ditches, large quantities of tile and some pottery were dumped in the fill, most of which dated to the second century, but a single sherd of Mancetter-Hartshill mortarium was dated AD 230-320. Amongst the tile was a single example of a consular-dated stamp of the year AD 167, providing a *terminus post quem* for the dumping process. The pottery evidence suggested that the enclosure fell out of use shortly after the early third century after an occupation of approximately a century (*ibid*).
- 3.2.6 The excavations also provided evidence of previously unsuspected medieval occupation at Dagger's Bridge Farm. The earliest documentary evidence for the landholding and messuage dates to 1610 but the excavated evidence pushed back the earliest known occupation of the site by several centuries. Medieval occupation at or very close to the farm itself took the form of both cut features and artefacts. Finds included thirteenth/fourteenth century green glazed jug pottery sherds, and a timber which yielded a felling date of cAD 1235. It was assumed that there was at least one structure on, or very close to, the farm site from the mid-thirteenth century onwards (*ibid*).
- 3.2.7 **Brunt Boggart:** about 1km south of the study area, at Brunt Boggart, Tarbock, another site was investigated in 1993. The earliest activity on the site was attested by one probable and two certain fragments of Mesolithic flint, but no features associated with this period were identified. An isolated, curved linear feature containing three sherds of probable Bronze Age pottery was the earliest visible archaeological feature. The Roman activity at this site was less substantial than at Ochre Brook, but it was likely to mark another, roughly contemporary farmstead site. The major phase of activity at Brunt Boggart was associated with the medieval period and consisted of two adjoining enclosures with a significant ditch, each containing a rectilinear timber post-built structure. A relatively large assemblage of medieval pottery came from these enclosures (*ibid*).

- 3.2.8 The Roman evidence was the most important to come from the A5300 road corridor project, as Roman activity of any kind in the area has been rare. The link between the Roman farm sites and medieval farms seen at both Brunt Boggart and Ochre Brook are also of great importance.
- 3.2.9 There is no evidence to suggest, however, that the area has been subject to anything other than dispersed agricultural settlement, from prehistoric times until the Industrial Revolution.
- 3.2.10 ***Cronton Colliery in context:*** the coalfield has been a decisive factor in the whole industrial expansion of the region and covers an area of some 550 square miles. It includes the cotton area of east Lancashire, the manufacturing area around Wigan, and the south-western industrial area around St Helens and Prescott, where coal was the basis for the location of such new industries as copper, glass, soap and chemical manufacturing. In the centre of the coalfield there are two barren patches of millstone grit, which cover an area of nearly 100 square miles (National Coal Board, Public Relations Department, 1974b).
- 3.2.11 The development of the Lancashire coal reserves, of which the study area forms part, took place at a later date than in other parts of the British Isles. In the early sixteenth century the inhabitants still burned turf when they could not get timber, in complete oblivion of the coal seams, which ran beneath their land. The first known commencement of coal mining in an organised way was in 1521 when Lord Derby granted a lease of mines in Whiston (*ibid*).
- 3.2.12 In the south-west corner of the county the industry appears to have developed extensively at the end of the reign of Elizabeth I, with the coming of ships to the Mersey to load coal for the Irish market. Shipments from Liverpool increased from about 300 tons a year between 1563 and 1599 to about 1200 tons between 1611 and 1621, and to more than 4000 before the Civil War (1640-46), as the local demand grew (*ibid*).
- 3.2.13 The coalfield expanded rapidly from about 1820 and the northern part of the field was heavily worked prior to 1930 in the areas of profitable seams lying at relatively shallow depths. The seams occur at three levels and the lower measures go down to over 1060m, so that there were some of the deepest mines in Britain at the end of the nineteenth century (Ashmore 1982, 8). At the peak of working in 1907 there were approximately 320 collieries operating in Lancashire producing some 26 million tons of coal per year, employing 94300 men. During this period coal was obtained by hand, and the fortunes of individual small colliery companies fluctuated rapidly as coal was won and lost through hazards such as underground water and geological problems (National Coal Board, Public Relations Department 1974b).
- 3.2.14 After the First World War there was a gradual drift towards machine mining; steel roof supports gradually replaced wooden supports and steel pit tubs replaced wooden ones. Pit ponies were replaced by mechanical haulage and electric safety lamps were gradually introduced (*ibid*).
- 3.2.15 By Nationalisation in 1947 many of the smaller collieries had ceased working and the coalfield had become resolved into larger company concerns working a

relatively small number of large mines. The number of collieries working at this date was 65, having a total annual output of some 11.35 million tons (*ibid*).

- 3.2.16 ***The St Helens Coalfield:*** the coalfield embraces that part of the South Lancashire coalfield lying to the south-west of the Wigan area and occupying some 60 square miles, touching Wigan, Warrington, St. Helens, Widnes and reaching to within eight miles of Liverpool. The coalfield is bound on the north by the outcrop of the productive middle coal measures (*ibid*).
- 3.2.17 The coalfield contains 16 seams totalling 60 feet in thickness and almost all of these have at some time been exploited by various colliery concerns. The proximity of seams to each other has always created a danger of spontaneous heating at the collieries in this locality and constant attention has always been necessary to avoid the more serious consequences of these heatings (*ibid*).
- 3.2.18 Reserves in the shallow working areas to the north became exhausted during the 1960s and output became concentrated in a few of the larger collieries to the south, including Cronton and Parkside (*ibid*).
- 3.2.19 ***Whiston township; a coal mining heritage:*** the township of Whiston is historically linked with coal mining, the first reference to which appeared in 1521, the earliest known coal mining in Lancashire (see 3.2.10). Many shafts were sunk around the area, including those at Carr Colliery in the 1760s; Whiston Colliery of 1802 (closed 1890); Halsnead Colliery of 1802; but the largest, most productive, and familiar pit within the area was at Cronton Colliery (Knowsley Council, 1997).

4. RESULTS

4.1 DESK-BASED ASSESSMENT

4.1.1 In total, six sites of historical or archaeological interest were identified within the study area, with two of these occurring within the proposed development site. These are listed in *Appendix 2*, shown on Figure 2, and summarised in the table below. The Colliery site was recorded by the SMR and observed on cartographic sources, but the surviving features of the mine - the three capped shafts and the railway embankment, were identified during the visual inspection.

Table 1: Gazetteer sites and their impact

Site	Period	Name/Type	Impact
1	Post-medieval	Cronton Colliery mine shafts	Directly affected
2	Medieval / post-medieval	Old Halsnead Manor House	Unaffected
3	Post-medieval	Cronton Colliery railway branch line	Directly affected
4	Mesolithic/Romano-British/medieval	Enclosure, Ochre Brook, Dagger's Bridge Farm,	Unaffected
5	Mesolithic/Neolithic	Flint Scatter, Ochre Brook, Dagger's Bridge	Unaffected
6	Post-medieval	Halsnead Hall Manor House	Unaffected

4.1.2 ***Halsnead Hall, Old Halsnead and Estate Park:*** prior to coal extraction, the site of Cronton Colliery lay within with bounds of a large medieval park estate (Fig 3). There were two manor houses within the park; Halsnead Hall (which was named Red Hall until sometime before 1817), and Old Halsnead. There is some confusion within the documentary sources between the two residences.

4.1.3 Halsnead Park came into the possession of the Willis family in 1684 when purchased by Thomas Willis, a Liverpool merchant of ancient lineage (Harris 1955, 156). The earliest mention of Halsnead Hall is in 1585 in a Deed of Covenants. This may have been on the site of Old Halsnead, where the present building has been dated to 1680.

4.1.4 The grand manor house of Red Hall, which became known as Halsnead Hall, was designed in 1789 by the famous architect Sir John Soane (1753-1837) and was a substantial redesign of an existing structure. Halsnead Hall and Park were sold in 1929 by the then head of the Willis family, Major Charles Rodolph D'Anyers Willis of Mildenhall, Suffolk (*ibid*). Harris goes on to mention “*that Halsnead Park, which appears to have been the sole example of Soane's work in either Lancashire or Cheshire, should have fallen a prey to encroaching industrialism is regrettable. The house was demolished in 1932*

and the principal features of the park are now the slagheaps and the pit-head buildings and plant of a large colliery” (ibid).

- 4.1.4 **Cronton Colliery:** in 1913 the Halsnead Collieries closed down, and the Willis family leased land further south, in Halsnead Park, to the Hulton Colliery Company of Wigan for the sinking of a new mine Cronton Colliery (Snow, 1982, 23-27).
- 4.1.5 The coal winding shaft was sunk in 1914 and completed in 1916 to a depth of 520 yards and intersected with the Plodder, Wigan Four Feet, Lower Florida, Pigeon House and Rushy Park seams. Three shafts were sunk in total; Number One shaft was 242 yards deep, closed in 1959 and infilled in 1969. Shafts Two and Three were sunk between 1914-18 to depths of 562 and 532 yards respectively. Electric winding engines, installed in 1920-21, were still in use when the colliery closed in February 1984. The colliery was connected to the main railway line by an extension of the Halsnead Colliery branch line. Two groups of miners’ housing were erected in 1925 by the Hulton Colliery Company, one at Whiston, and the other at Rainhill. An horizontal steam winding engine, by Pearson and Knowles Ltd, Warrington, was removed in 1953 (Chitty et al, 1974, 37).
- 4.1.6 In 1966 a relatively new technique of mining was introduced at the Colliery and this resulted in the site doubling its productivity. Under this system of ‘retreat mining’ roadways were driven in advance to the boundaries of the coal seam and the coal was extracted towards the shaft. It is thought that Cronton was the first colliery in the country to go on full retreat mining (National Coal Board, Public Relations Department, 1974a). In 1974 the Colliery employed 580 men mainly from a seven mile radius of Widnes. The principal markets for Cronton coal at that time were the Central Electricity Generating Board and general industry in the area.
- 4.1.7 A lack of available or existing sources as well as time constraints has necessitated a reliance on cartographic sources to enable a chronological narrative of the Colliery site to be written.
- 4.1.8 The first edition Ordnance Survey (OS) 6’’ and 25’’ maps (published in 1845 and 1893 respectively) show a series of medium-sized rectangular and square fields, with narrow strips of woodland inbetween (Fig 3), one of which is named as Nut Wood on the later map. The fields were most likely created after the Enclosure Act of 1760 and the strips of woodland are doubtless remnants of a once much larger tree cover within the medieval park. Old Halsnead is already represented in italic lettering, indicating a building of considerable antiquity. The second edition OS map (1907) appears identical to the first edition (1893).
- 4.1.9 The third edition OS map (1927) is the first map to identify Cronton Colliery (Fig 4). Three shafts can be clearly observed, as well as what is presumably a conveyer belt or pulley system taking the coal from the shafts to the building constructed over the railway sidings, where the coal could be loaded ready for removal. A reservoir and pumping house had been created to the south, from which could be sourced the water required to wash the coal. The Magazine, for

housing explosives, had been sensibly positioned some distance to the north-east of the other buildings. Various other unmarked buildings can be observed, some of which would have included the headstock, located above and around the shafts.

- 4.1.10 The fourth edition OS map (1936) shows a considerable expansion of the colliery site in the nine years since the previous OS edition (Fig 5). A brickworks had been created on a previously open field to the west. These were a typical feature of collieries and made use of the high grade clay encountered during mining to produce both regular and refractory bricks (Ian Miller, pers comm). A bath house can be observed to the north, close to Old Halshead, which may have been constructed after legislation ordered all collieries to provide baths for its employees (Ian Miller, pers comm). A sewage works can be observed to the south-east of the baths, as well as a pumping house to south of the Magazine.
- 4.1.11 The 1936 map suggests that a significantly increased output occurred at the colliery during this time. This can be attested by the railway sidings having been significantly enlarged; and the existence of a massive, conical spoil heap in the south-east corner of the site, accessed by a conveyer belt/pulley system.
- 4.1.12 The next available map available for study was the 1981 OS map, and, perhaps remarkably, the map shows no significant change or expansion at the Colliery. Indeed the most notable difference is the absence of the brickworks, which is probably explained by a decrease in the commercial viability of the industry due to cheap imports, a situation that was mirrored some years later resulting in the impending doom of the Colliery itself. The Colliery closed in February 1984 and has been completely demolished and the site levelled, as can be seen from the current OS map (Fig 6) .

4.2 VISUAL INSPECTION WALKOVER SURVEY

- 4.2.1 A visual inspection survey of the study area was undertaken to relate the existing landscape to research findings, and was carried out on 25th September 2003. Where it was possible to identify physical remains, points were taken with the hand-held GPS, and a photographic record was maintained.
- 4.2.2 All structures pertaining to Cronton Colliery were found to have been demolished. The only evidence as to the Colliery's existence were three concrete capped mine shafts (Plate 2), in the centre of the site (Fig 2), each of which incorporated a substantial gas vent and the remains of the railway embankment (Plate 1) at the western end of the site (Fig 2). The rest of the area, save for pockets of woodland around the fringes, had been levelled and partially landscaped. A recent base survey provided by the client, provides the most effective record of the site.
- 4.2.3 The landscape within the extent of the study area accords with one that has been severely impacted by the establishment of a major coal extraction industry, and which has subsequently been subject to the demolition of the buildings and the landscaping of the site. No physical remains of any sites predating the establishment of Cronton Colliery were identified, nor would

such sites be expected, given the extensive landscaping of the site that has been undertaken since its abandonment.

5. DISCUSSION

5.1 DISCUSSION

- 5.1.1 The desk-based assessment has identified evidence for archaeological activity within the region since the prehistoric period. Excavations revealed significant Mesolithic activity providing evidence for the furthest point north for the penetration of hunter-gatherers into the interior of the County from the Mersey. A Romano-British enclosure and medieval occupation remains were also revealed immediately to the south of the study area. No evidence of these sites were known before, and, although the evidence does not suggest anything other than an agricultural, dispersed settlement pattern, it suggests that the archaeological potential of the area was high.
- 5.1.2 Documented evidence revealed that the study area lay from medieval times within a large estate park belonging to the Willis family, who resided at Halsnead Hall. The family leased the southern part of their park to the Hulton Colliery Company in 1913, and the area was given over to coal extraction for the next 71 years.
- 5.1.3 It appears that the two pockets of trees present within the western fringes of the site are the remnants of larger areas of woodland which existed within Halsnead Park. The current OS map names the trees in the north-western corner of the study area 'Old Wood', a name unchanged since the first edition map of 1845. Further scrutiny of this map shows that the surviving tree cover in the south-western corner of the study area was once part of a belt of woodland following the line of Chapel Brook. This suggests that these areas have remained undisturbed since at least the creation of Halsnead Park in the medieval period, and possibly earlier.
- 5.1.4 The study area, in the central and eastern parts of the site, is occupied by the site of the Colliery. As a consequence it seems unlikely that substantial archaeological remains of an earlier date will have survived this phase of industrial activity. All of the above ground fabric of the Colliery has been demolished, and the site levelled and landscaped. The areas of the site apparently undisturbed by the Colliery, includes the northern end occupied by Old Halsnead, the north-western and south-western extreme, which remains wooded, and a large arable field between these two areas.
- 5.1.5 The only extant remains of the Colliery site are the three capped shafts in the centre of the site, and railway embankment in the north-western corner (Fig 2).

6. IMPACT AND RECOMMENDATIONS

6.1 IMPACT

- 6.1.1 In all probability, the twentieth century use of the study area as a colliery will have obliterated any surviving archaeological evidence pertaining to an earlier period. It appears that the surviving woodland on the western fringe of the site has been largely undisturbed, however, and is archaeologically significant as it is the only surviving remains of Halsnead Park south of the M62. Also, it may conceal earlier, undisturbed archaeological deposits. Evidence for medieval and Romano-British settlement, as well as Mesolithic transient activity, has all been found a short distance from this area, on a hitherto unknown site. There is a strong possibility therefore, that further archaeological evidence for any or all of the periods mentioned, may be preserved under the areas of the park left undisturbed by coal extraction and associated activities.
- 6.1.2 The demolition of the Colliery's surface structures, and the subsequent landscaping of the area during the 1990s, has removed any above ground archaeological resource relating to this industrial period of use. The only exception to this is the dismantled railway, which survives as an embankment in the north-west corner of the site. Any future redevelopment of the site may have a negative impact on these elements of the site.
- 6.1.3 The underground workings associated with the colliery constitute a significant sub-surface archaeological resource. These workings would be affected should poor quality coal be extracted from the site prior to, or during, its redevelopment.

6.2 RECOMMENDATIONS

- 6.2.1 Those areas of the site physically impacted upon during the lifetime of the Colliery are deemed to have been disturbed to the extent that it is highly unlikely that earlier archaeological remains survive. It is therefore recommended that no further archaeological mitigation is required in these areas. The pockets of undisturbed woodland in the north-west and south-west corners of the site, however, may well conceal an intact sub-surface resource. This is made more likely when the results of recent archaeological excavations conducted a short distance to the south of this area are considered (Cowell and Philpott, 2000). It is therefore recommended that an archaeological evaluation be undertaken in these areas, if they are to be disturbed by the development in terms of actual groundworks or any ancillary or landscaping works. Details of the development proposals would be required in order to consider the extent of this evaluation.

7. BIBLIOGRAPHY

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APPENDIX 1: PROJECT DESIGN

**Oxford
Archaeology
North**

September 2003

CRANTON COLLIERY, KNOWSLEY, MERSEYSIDE

ARCHAEOLOGICAL DESK-BASED ASSESSMENT PROJECT DESIGN

Proposals

The following project design is offered in response to a request by Sinclair Knight Merz Ltd for an archaeological desk-based assessment prior to proposed development of the Cranton Colliery site, Knowsley.

1. INTRODUCTION

- 1.1 Sinclair Knight Merz Ltd (hereafter the 'client') has requested that Oxford Archaeology North (OA North) submit proposals for a rapid desk-based assessment and walk-over survey of the Cronton Colliery Site, Knowsley (centred on SJ 475895) prior to proposed redevelopment. The desk-based assessment will form part of the first phase investigations to be put forward for an Environmental Impact Assessment. The site is positioned immediately to the south-east of junction 6 of the M62 motorway into Liverpool.
- 1.2 Cronton Colliery was one of a number of pits in the township of Whiston. Originally known as the Hulton Colliery Company it first began in 1913, with the first coal being raised in April 1915, and closed in the 1980s.
- 1.3 The site lies within an area of archaeological potential and prior to coal extraction it lay within the bounds of a large medieval park estate. Excavations carried out in 1993 to the south found evidence of Mesolithic activity alongside the watercourse, together with an Iron Age site and Romano-British tile fragments suggesting the area was settled for some time. No known intrusive archaeological investigations have taken place on the site itself.
- 1.4 OA North has extensive experience of desk-based assessments, as well as the evaluation and excavation of sites of all periods in this area, having undertaken a great number of small and large-scale projects during the past 23 years. These have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables.
- 1.6 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an **Institute of Field Archaeologists (IFA) registered organisation, registration number 17**, and all its members of staff operate subject to the IFA Code of Conduct.

2. OBJECTIVES

- 2.1 The following programme has been designed to provide an accurate archaeological assessment of the designated area within its broader context. The required stages to achieve these ends are as follows:
- 2.2 **Desk-based assessment:** to provide a rapid desk-based assessment of the site.
- 2.3 **Rapid Identification Survey:** to carry out a Level I RCHM(E) rapid identification survey over the site.
- 2.4 **Report and Archive:** a report will be produced for the client within eight weeks of completion. A site archive will be produced to English Heritage guidelines (MAP 2) and in accordance with the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990).

3. METHOD STATEMENT

3.1 DESK-BASED ASSESSMENT

- 3.1.1 The following will be undertaken as appropriate, depending on the availability of source material. The level of such work will be dictated by the time scale of the project.
- 3.1.2 **Documentary and Cartographic Material:** this work will comprise a rapid desk-based survey of the existing resource. It will include an appraisal of the Merseyside Sites and Monuments Record, as well as appropriate sections of County histories, early maps, and such primary documentation (tithe and estate plans etc.) as may be reasonably available. Particular emphasis will be upon the early cartographic evidence which has the potential to inform the post-medieval occupation and land-use of the area. Any photographic material

loded in the County Sites and Monuments Record or County Record Office will also be studied. Published documentary sources will also be examined and assessed. The study will examine place and field name evidence for the site and its environs. This work will involve visits and or correspondence searches of the following repositories: Merseyside Sites and Monuments Record at the Liverpool Museum, County Records Office, Lancaster University Library and the OA North research archive.

3.1.3 **Aerial Photography:** a brief survey of the extant air photographic cover will be undertaken. Merseyside Sites and Monuments Record will be consulted for aerial photography and the study will entail liaison with the Royal Commission on the Historical Monuments (England) (NMR), although, within the timescale available, it is unlikely that prints will be forthcoming from this body for inclusion in this report.

3.1.4 **Physical Environment:** a rapid desk-based compilation of geological (both solid and drift), pedological, topographical and palaeoenvironmental information will be undertaken. It will be based on published geological mapping and any local geological surveys in the possession of the county council or the client. This will not only set the archaeological features in context but also serves to provide predictive data, that will increase the efficiency of the field inspection.

3.2 RAPID IDENTIFICATION SURVEY

3.2.1 **Visual Inspection:** following the desk-based assessment a Level I RCHM(E) rapid identification survey (*Appendix 1*) will be undertaken over the site to relate the existing landscape to research findings. Archaeological features identified within the landscape will be recorded using the relevant OA North pro forma, and the features accurately positioned with the use of either a GPS, which can achieve accuracies of $\pm 0.1\text{m}$ with respect to the OS national grid, or by manual survey techniques which will tie in new features to features already shown on the relevant OS map.

3.3 ARCHIVE/REPORT

3.3.1 **Archive:** the results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. This archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the SMR (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects (paper, magnetic and plastic media) with the County Record Office.

3.3.2 **Report:** one bound and one unbound copy of a written synthetic report will be submitted to the client, and a further two copies submitted to the Merseyside SMR within eight weeks of completion of the study. The report will include a copy of this project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above. The report will also include a complete bibliography of sources from which data has been derived.

3.3.3 This report will identify areas of defined archaeology. An assessment and statement of the actual and potential archaeological significance of the identified archaeology within the broader context of regional and national archaeological priorities will be made. Illustrative material will include a location map, section drawings, and plans.

3.3.4 Provision will be made for a summary report to be submitted to a suitable regional or national archaeological journal within one year of completion of fieldwork, if relevant results are obtained.

3.3.5 **Confidentiality:** all internal reports to the client are designed as documents for the specific use of the Client, for the particular purpose as defined in the project brief and project design,

and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

4 PROJECT MONITORING

- 4.1 OA North will consult with the client regarding access to the site. Whilst the work is undertaken for the client, the County Archaeologist will be kept fully informed of the work. Any proposed changes to the project design will be agreed with the client.

5 WORK TIMETABLE

- 5.1 OA North could commence the archaeological programme of works within two weeks of receipt of written notification from the client.
- 5.2 The desk based assessment is expected to take approximately five days to complete.
- 5.3 The walk-over survey will take approximately one day to complete.
- 5.4 The client report will be completed within approximately eight weeks following completion of the desk-based assessment.

6 STAFFING

- 6.1 The project will be under the direct management of **Emily Mercer BA (Hons) MSc AIFA** (OA North Senior Project Manager) to whom all correspondence should be addressed.
- 6.2 Present timetabling constraints preclude detailing exactly who will be carrying out the rapid desk-based assessment and walk-over survey, but it is likely to be supervised by an OA North project supervisor experienced in this type of project. All OA North supervisors are experienced field archaeologists capable of carrying out projects of all sizes.

7 INSURANCE

- 7.1 OA North has a professional indemnity cover to a value of £2,000,000; proof of which can be supplied as required.

LEVEL 1 SURVEY

The survey outlined is based on survey levels defined by the Royal Commission on the Historical Monuments of England (RCHM(E)) and are in accordance with stages of evaluation defined by the Association of County Archaeological Curators (ACAO 1993).

Level 1 Survey (Assessment)

This is a rapid level of survey (Site Inspection in project design) typically undertaken alongside a desk top study as part of the site assessment (ACAO 1993, 14). It is an initial site inspection, which helps the local planning authority to consider fully the archaeological implications of a planning proposal and also serves as the basis for undertaking and planning further archaeological work on the site.

The Level 1 survey represents the minimum standard of record and is appropriate to exploratory survey aimed at the discovery of previously unrecorded sites. Its aim is to record the existence, location and extent of an archaeological site. The emphasis for the recording is on the written description, which should record type and period and would not normally exceed c. 50 words.

The location and extent of the sites is typically shown on 1:2,500 or 1:10,000 OS maps as requested by the client. The extent of a site is only defined for sites greater than 50m in size and smaller sites are shown with a cross.

There are two alternative techniques (Levels 1a and 1b), which provide different accuracy levels and have different applications:

Level 1a

The sites are located by manual distance measurement techniques (eg pacing) with respect to field boundaries and provide an accuracy of $\pm 10\text{m}$ (8 figure grid ref.). The loss of accuracy is offset by the slightly reduced costs; however, it is only appropriate for enclosed land, because of the paucity of usable topographic detail.

Level 1b

The sites are located using Global Positioning System (GPS) techniques, which uses electronic distance measurements along radio frequencies to satellites to enable a fix in Latitude and Longitude, which can be converted mathematically to Ordnance Survey National Grid. As long as differential GPS techniques are employed then it is possible to achieve accuracies of better than $\pm 1\text{m}$. There is a slightly increased cost implication by comparison with Level 1a survey, but it can be undertaken in most terrains, even some woodland.

APPENDIX 2: SITE GAZETTEER

Site number 1
Site Name Cronton Colliery
NGR SJ 475895
SMR no 478906
Site Type Coal Mine
Period Post-medieval
Source SMR

Description

A colliery was established in 1913 by the Hulton Colliery Company. The coal winding shaft was sunk in 1914 and completed in 1916 to a depth of 520 yards and intersected with the Plodder, Wigan Four Feet, Lower Florida, Pigeon House and Rushy Park seams. Three shafts were sunk in total; Number One shaft was 242 yards deep and closed in 1959, and infilled in 1969. Shafts Two and Three were sunk between 1914-18 to depths of 562 and 532 yards respectively. Electric winding engines, installed in 1920-21 were still in use when the Colliery closed in February 1984. The site was demolished and levelled sometime later.

Assessment

The site lies within the proposed development area and will be affected.

Site number 2
Site Name Old Halsnead
NGR SJ 47498955
SMR no 47891
Site Type Manor House
Period Post-Medieval
Source SMR

Description

The present building has been dated to 1680. Constructed of stuccoed stone, the building has stone roof with centre chimney, and is of two storeys. A two storeyed gabled porch has a round arched entrance with keystone and imposts; and a three-light window above; and an armorial crest on the gable. A five-light window is situated on each floor, to the right of the porch, and there are five-light windows on each to the left of the porch, all with chamfered stone mullions and beaded panes (mostly non-opening).

Assessment

The site lies to the north of the proposed development area and is unlikely to be affected.

Site number 3
Site Name Cronton Colliery railway branch line
NGR
SMR no -
Site Type Dismantled Railway
Period Post-medieval
Source Visual Inspection

Description

An overgrown embankment was noted during the walkover survey which marked the position of the Cronton Colliery railway branch line.

Assessment

The site lies within the proposed development area and will probably be affected.

Site number 4
Site Name Ochre Brook, Daggers Bridge Farm
NGR SJ 464890
SMR no 468916
Site Type Possible temporary camp, and enclosure
Period Mesolithic / Romano-British / medieval
Source SMR

Description

Archaeological investigations conducted in 1993 resulted in the discovery of prehistoric flint artefacts, as well as the remains of a Romano-British enclosure and associated features. A long period of continuous settlement of the site was suggested with the presence of medieval building remains.

Assessment

The site lies to the south-west of the proposed development area and will be unlikely to be affected.

Site number 5
Site Name Ochre Brook, Daggers Bridge
NGR SJ 466890
SMR no 468917
Site Type Flint scatter
Period Mesolithic
Source SMR

Description

A small number of flint artefacts were discovered in 1993 during archaeological evaluations for the A5300 development.

Assessment

The site lies to the southeast of the proposed development area and will not be affected by it.

Site number 6
Site Name Halsnead Hall
NGR SJ 47278999
SMR no 478905
Site Type Manor House
Period Post-medieval
Source SMR

Description

The grand manor house of Red Hall, which became known as Halsnead Hall, was designed in 1789 by the famous architect Sir John Soane (1753-1837) and was a substantial redesign of an existing structure. Halsnead Hall and Park was sold in 1929 by the then head of the Willis family, Major Charles Rodolph D'Anyers Willis of Mildenhall, Suffolk. The building was demolished in 1932

Assessment

The site lies to the north of the proposed development area and is unlikely to be affected by it.

ILLUSTRATIONS

Figure 1: Location Map

Figure 2: Gazetteer Sites, OS 1:10000

Figure 3: Extract from 1st edition OS 6" to 1 mile map (1845)

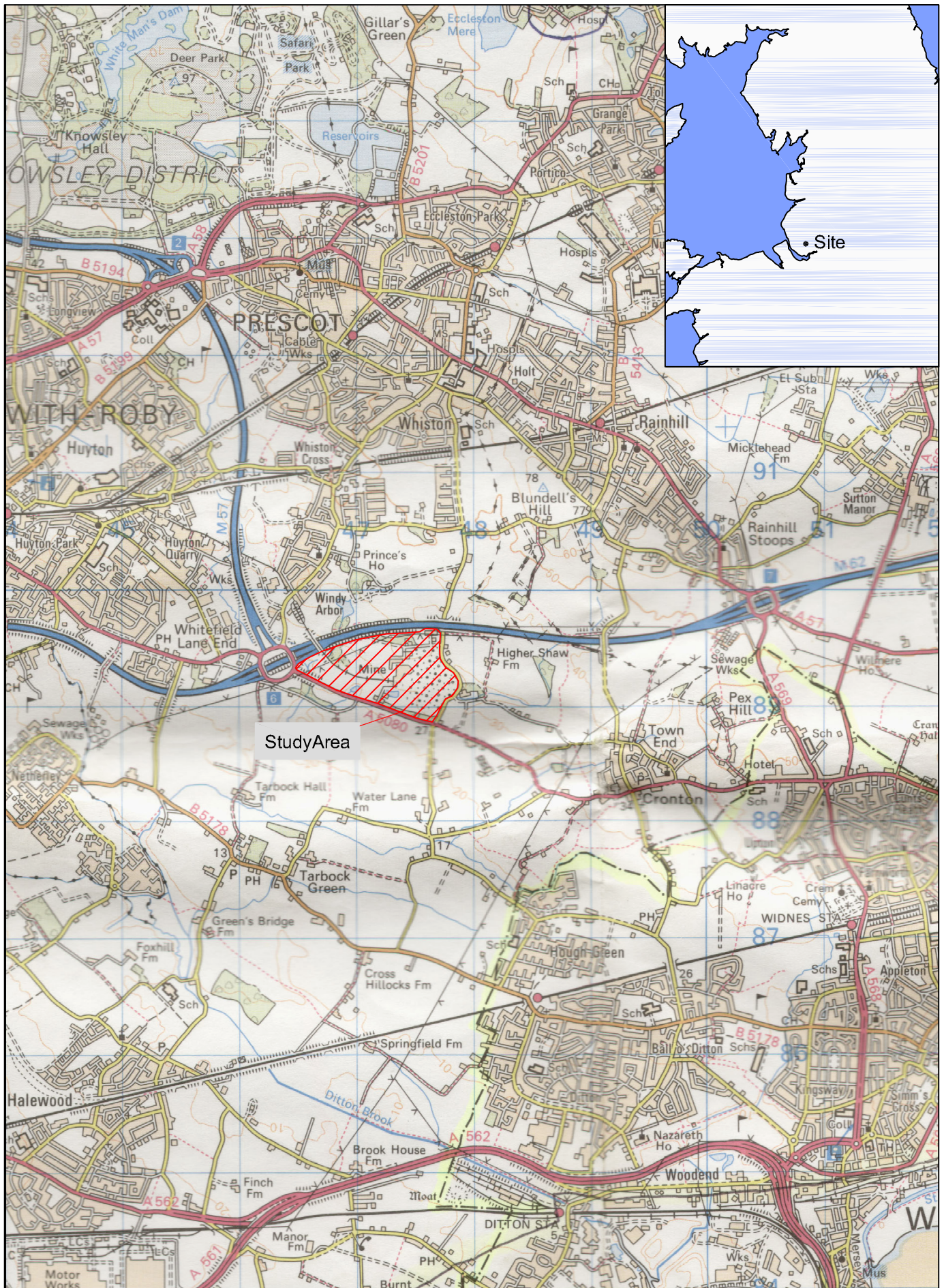
Figure 4: Extract from 1st edition OS 25" to 1 mile map (1893)

Figure 5: Extract from 2nd edition OS 25" to 1 mile map (1927)

Figure 6: Extract from 3rd edition OS 25" to 1 mile map (1936)

PLATES

- Plate 1 Railway embankment, looking north-west
- Plate 2 The capped mine shafts, looking south
- Plate 3 The Colliery site, looking south-west
- Plate 4 The now levelled spoil heap area, looking south-east
- Plate 5 Old Halsnead, south facing front elevation
- Plate 6 A 1960s image of Cronton Colliery, looking north-west

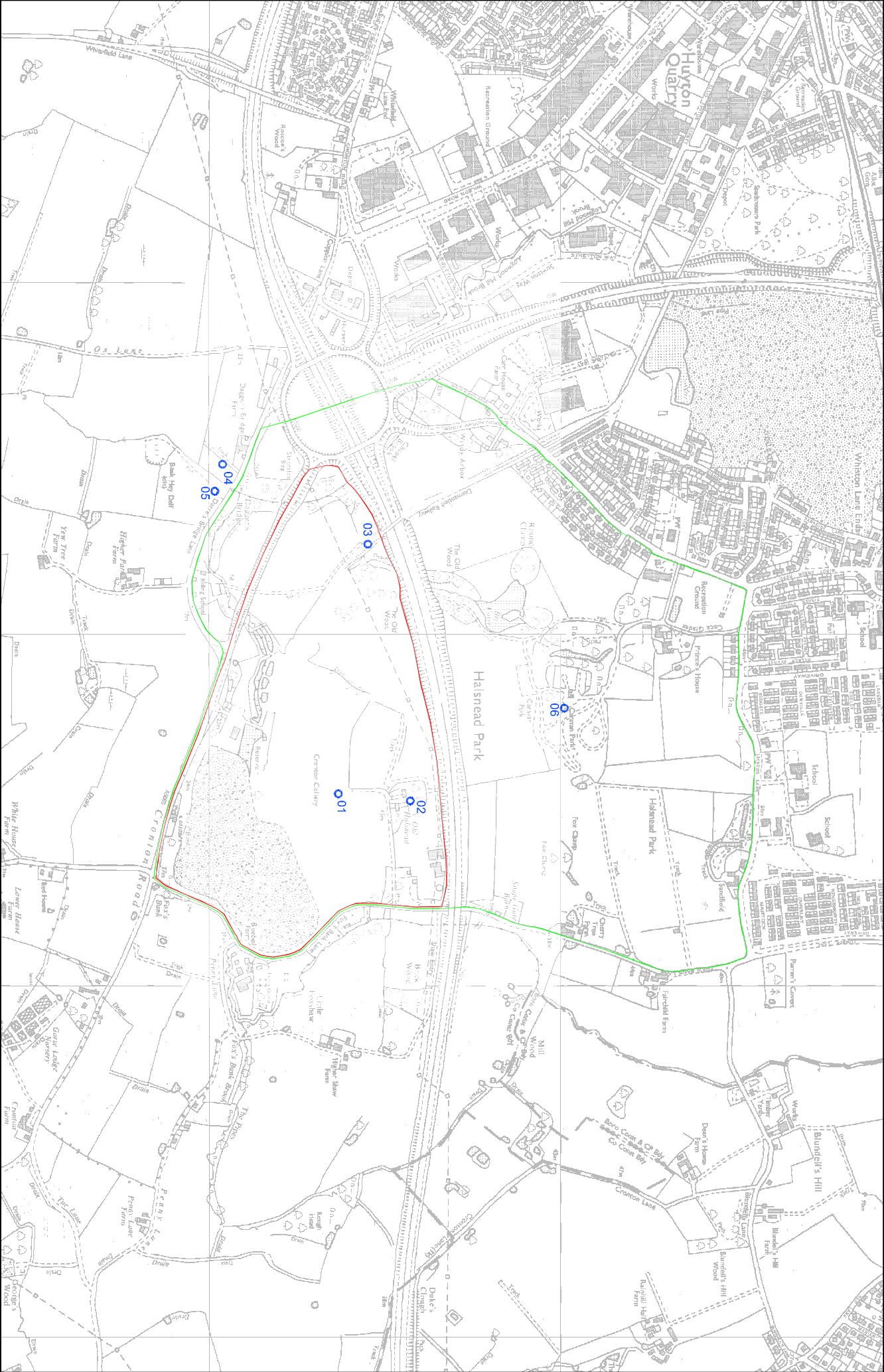


based upon the Ordnance Survey 1:50000
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0 500 1000
metres

Figure 1: Location Map



based upon the Ordnance Survey 1:10000
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— Halshead Park
— Study Area
○ 00 Gazetteer sites

Scale 1:15000 at A4

0 250m



Figure 2 : Gazetteer sites. OS 1:10000

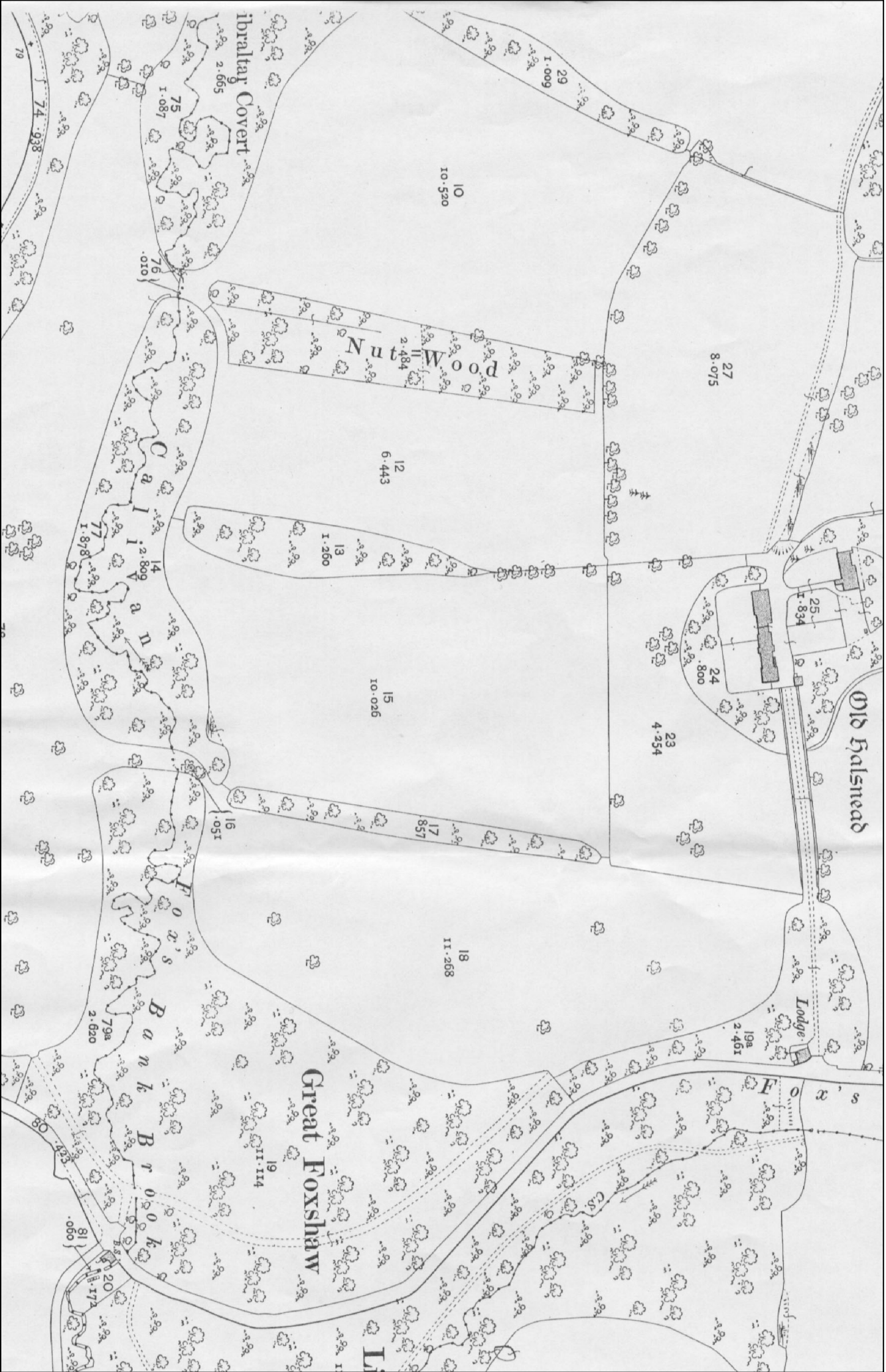


Figure 4 : Extract from 1st edition OS 25" to 1 mile map (1893)

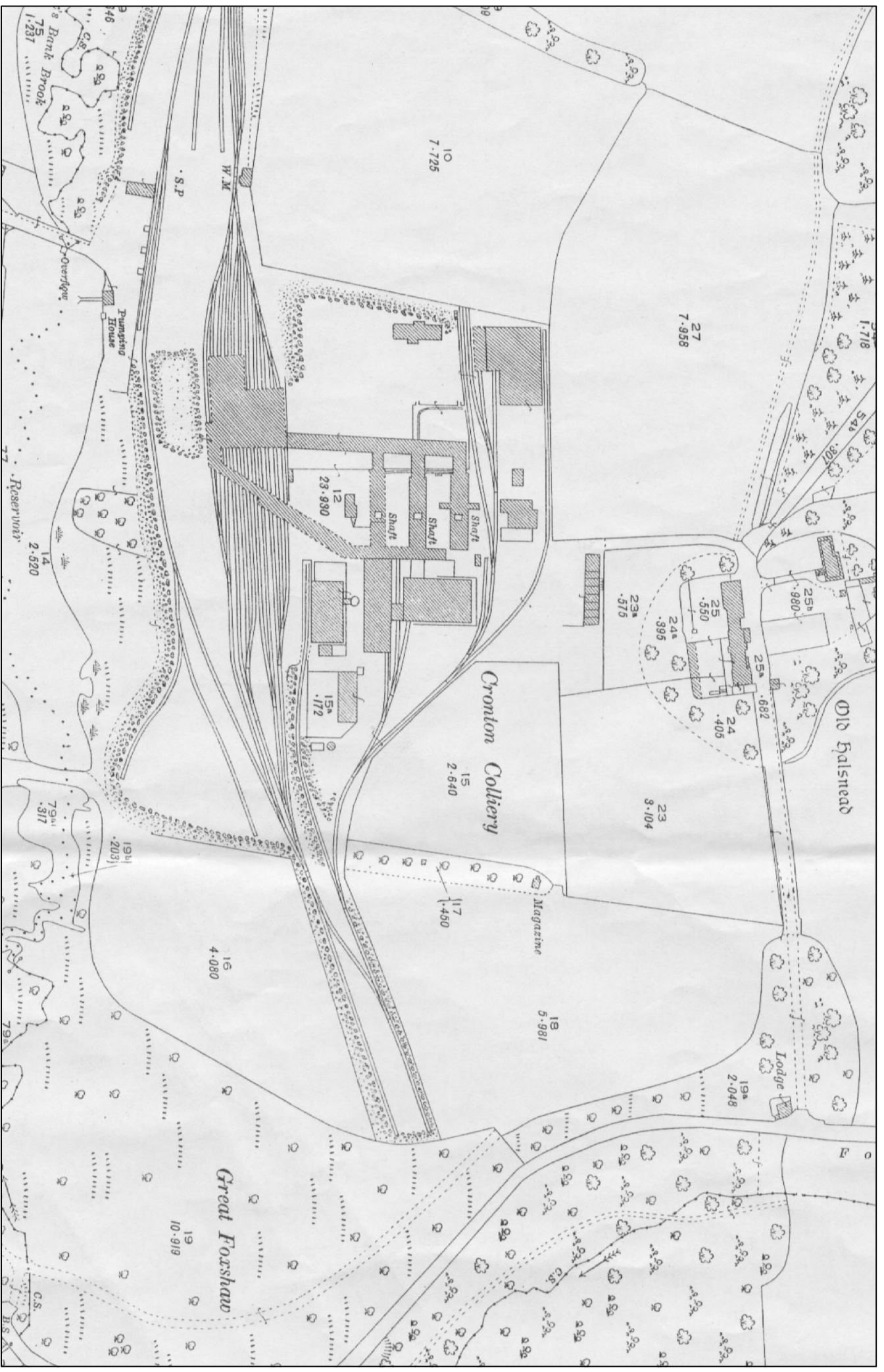




Figure 6 : Extract from 3rd edition OS 25" to 1 mile map (1936)



Plate 1: Railway embankment, looking north-west



Plate 2: The capped mine shafts, looking south



Plate 3: The Colliery site, looking south-west



Plate 4: The now levelled spoil heap area, looking south-east



Plate 5: Old Halshead, south facing front elevation



Plate 6: 1960s view of the colliery, looking north-west