Northern Archaeological Associates

POCKLINGTON WASTE WATER TREATMENT WORKS

EAST RIDING OF YORKSHIRE

POST-EXCAVATION ASSESSMENT REPORT

prepared for

TEAM

on behalf of

YORKSHIRE WATER SERVICES LTD

NAA 05/117

October 2005

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Summary

An excavation was undertaken for TEAM on behalf of Yorkshire Water Services Ltd in August and September 2004 following the discovery of archaeological remains during the monitoring of topsoil stripping prior to an extension to Pocklington wastewater treatment works (SE 798 478). The site was situated at c.*30m OD on chalky glaciofluvial and river terrace drift, and was located within a landscape containing a concentration of Iron Age and Romano British occupation sites visible as cropmark complexes.*

The excavation revealed multiple phases of activity. The earliest features were three pits, probably domestic in nature dating to the late Neolithic period. Sherds of Durrington Walls style, Grooved Ware pottery were recovered from one pit. All three pits produced late Neolithic flint of a tradition associated with Durrington Walls style pottery, including a number of scrapers and one petit tranchet derivative arrowhead. Evidence of prehistoric quarrying was revealed in the form of a number of shallow depressions or hollows from which a fragment of a middle Bronze Age barrel urn, possible Iron Age pottery and two beaker style flint scrapers were recovered. Gravel or the locally derived flint, used in the production of much of the flint assemblage, appears to have been the desired raw material.

The majority of the remains excavated were Romano-British in date and comprised pits, and ditches associated with a possible ladder settlement identified from aerial photographs. The corner of a large enclosure visible as a cropmark marked the earliest phase of Romano-British activity, dating to the 2nd century. Pottery assemblages recovered from pits and ditches suggest that a second major phase belonged to the early to middle 4th century when further land division and settlement related activity occurred outside the main enclosure. The artefactual assemblages recovered are typical of a rural settlement in the region during this period.

A number of features remain undated including four inhumations. Two of these skeletons were laid supine in graves apparently aligned on a Romano-British boundary ditch although no grave goods confirming this date were recovered. Two further skeletons were positioned crouched, in crude sub-oval graves and were unrelated to any other feature. The presence of cropmarks indicative of square barrows to the south of the excavation site and the crouched position of these burials hints at a possible Iron Age date.

Further analysis of elements of the site archive will provide the opportunity to further our understanding of late Neolithic material culture and late Iron Age/Romano-British rural settlement in the region. A single sherd of possible Anglo-Scandinavian ware requires further research, no other evidence dating to this period was recovered

from the excavation and no significant remains are known from the Pocklington area. If the sherd is positively identified as belonging to this period it would provide evidence, though limited, of Anglo-Scandinavian activity in the vicinity and a reinterpretation of certain elements of the site, notably pit group 260 may be required. An integrated post-excavation report will be prepared on completion of the analysis works. A version of the report should be prepared to publication standard for submission to a regional or national journal.

1.0 INTRODUCTION

1.1 This document presents the results of an archaeological watching brief and subsequent archaeological excavation undertaken during the groundworks for the extension of Pocklington Wastewater Treatment Works. The work was undertaken by Northern Archaeological Associates for TEAM on behalf of Yorkshire Water Services Ltd.

1.2 The development comprised two areas. First, the sewage works extension, a triangular area measuring some 100m by 50m located immediately to the north-west of the existing works (Area 1); second, an outfall pipeline within an easement corridor approximately 15m wide to the south-west of the sewage works (Area 2).

1.3 An archaeological appraisal of the site undertaken in advance of the development identified a number of possible areas of archaeological interest. Geophysical survey identified the corner of a possible enclosure estimated to be just outside Area 1. Rectilinear enclosures, linear features and possible Iron Age square barrows, visible as cropmarks on aerial photographs (SMR 10 3 72), have also been identified immediately to the south of Area 1. In view of the close proximity of these features an archaeological watching brief was made a condition of the planning consent for the project.

1.4 During the course of routine monitoring in Area 1 the remains of part of a Romano-British occupation site comprising boundary ditches, pits and inhumations was identified and excavated. Evidence for prehistoric activity was also recorded on the site, most significantly a number of late Neolithic pits containing Durrington Walls style pottery and associated flint. The work was undertaken in August and September 2004.

2.0 LOCATION AND TOPOGRAPHY

2.1 Pocklington Waste Water Treatment Works is located off Canal Lane (SE 7975 4785), to the south-west of Pocklington, in the East Riding of Yorkshire (Figure 1). Area 1, a triangular area measuring approximately 50m by 100m, lay immediately to the north west of the existing works on *Barrow Flat*. Its extent was marked to the north-east by the works access track, and to the south-east by the boundary of the existing sewage works. Area 2, a corridor approximately 15m wide and 200m long, ran in a south-westerly direction between the sewage works and the A1079 (Figure 2).

2.2 The site was located at *c*.25m OD on coarse loamy gleyic brown calcareous earths, which are affected by high groundwater levels. The topsoil overlies chalky glaciofluvial and river terrace drift, characteristic of the Landbeach Association (Jarvis *et al* 1984).

3.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Prehistoric and Roman

3.1 The site of the development lies within an archaeological landscape containing a concentration of Iron Age/Romano-British occupation sites, which are visible as cropmark complexes from the air. One such complex of cropmarks, can be seen on aerial photographs (SMR 10 3 72) to the north-west of the existing sewage works, immediately to the south of Area 1 and extending into the area of development in places. It comprises rectilinear enclosures, linear ditches and at least four cropmarks indicative of Iron Age square barrows. The field name *Barrow Flat* would appear to provide further evidence for the presence of square barrows in the area.

3.2 A watching brief undertaken in 2000 (NAA 2001) during housing development at Balk Field, Pocklington, some 600m to the north-east of the development site, identified a series of ditches of late Iron Age or early Romano-British date overlain by medieval ridge and furrow. The ditches were considered to be a continuation of the cropmarks identified to the east of the excavated area (SMR 1073). Finds recovered from this site included a small assemblage of late Iron Age or early Romano-British pottery, a fragment of Samian ware and a large piece of mid- to late Iron Age smelting slag.

3.3 The line of the Roman road from York to Brough-on-Humber is thought to lie to the south-west of the sewage works and approximates to the route of a section of the A1079. The formalisation of this route during the Roman period made it a focus for settlements such as those at Hayton and Shiptonthorpe to the east of Pocklington which have been the subject of research projects in recent years (Halkon and Millet 1999). At Shiptonthorpe settlement enclosures and the remains of a roundhouse and aisled building represent a multi phase site dating from the 2nd to 3rd century AD (Millet 1991). At Hayton work has examined the impact of the 1st century fort and road on the late Iron Age landscape and rural settlement. A site at Burnby Lane, Hayton has provided evidence of a settlement with Iron Age, early Roman and later Roman elements (Halkon *et al*. 1996; 1997; 1998). A probable villa site has also been identified *c*. 2.5km to the north of Pocklington sewage works on the north side of Pocklington. Field survey and geophysical survey have revealed a winged-corridor building lying within an enclosure and overlying part of an earlier 'ladder' field system. Pottery scatters suggest the main period of occupation was during the 4th century (Esmonde Cleary 1999).

3.4 A considerable number finds of prehistoric and Romano-British date are known from the area around Pocklington, attesting to the concentration of activity in this area. These include finds of Romano-British metalwork, prehistoric flint implements and bronze socketed axes dating to the Neolithic and early Bronze Age.

Medieval

3.5 Pocklington gets its name from the Anglian settlement of Pocel's (Pocela's) people, and the borough of Pocklington is named in the Domesday Survey of 1086 as having

15 burgenses and a manor. All Saints Church in Pocklington dates from the 12th to 13th century. Although there is no evidence of medieval activity on the development site medieval ridge and furrow has been recorded in the vicinity and its location would suggest it lies within the feudal field systems.

Post-medieval

3.6 The First Edition Ordnance Survey Map of 1854–55 records field boundaries and a *Pump* in the development area which is labelled *Barrow Flat.* The field name may suggest that upstanding barrows were once present on the land and have since been ploughed out.

Modern

3.8 Five airfields are located in close proximity to Pocklington and these played an active role in the Second World War.

4.0 AIMS AND OBJECTIVES

4.1 The aim of the project was to monitor the groundworks within the development area in order to assist in the formulation of an appropriate strategy which would mitigate against the loss of any surviving archaeological features prior to, or during the course of, the development.

4.2 The principal objectives of the archaeological watching brief were:

- to investigate and record any archaeological features identified during the course of topsoil stripping prior to construction works and recover any associated artefacts

- to establish the location, date and nature of any areas of archaeological activity and assess the degree of preservation of any remains encountered

- to prepare an illustrated report on the results of the monitoring to be deposited with both the Humber Sites and Monuments Record and the National Monuments Record

- to prepare a report on the results of the excavation of any significant archaeological remains for publication in a local, regional or national journal as appropriate

5.0 METHODOLOGY

Geophysical survey methodology

5.1 Approximately 1.1ha of detailed gradiometer survey was conducted around the existing sewage works. The survey was divided into three blocks; firstly the area of the sewage works extension (Area 1), secondly along the outfall pipeline corridor (Area 2) and finally along the northern perimeter of the sewage works, outside the development area.

Excavation methodology

5.2 Topsoil stripping was implemented using a 360º, back-acting, mechanical excavator.

5.3 Topsoil stripping within the selected monitoring areas was undertaken under the direct supervision of the monitoring archaeologist. Visible archaeological features within the development area were recorded and sample excavated and their location tied into the Ordnance Survey National Grid.

5.4 All archaeological features were recorded at an appropriate scale with sections drawn at a scale of 1:10 and plans at a scale of 1:20. A written description of features was recorded using the NAA context recording system. The site code used was PSW 04. A photographic record of the site was taken using black and white prints and colour slides at a format of 35mm.

5.5 Finds were recorded and processed using the NAA system and submitted for post-excavation assessment. Bulk palaeoenvironmental samples were taken from appropriate deposits and submitted for assessment. Recovery and sampling of environmental remains was in accordance with guidelines prepared by English Heritage (2002).

6.0 RESULTS

Geophysical survey results

6.1 A full report on the results of the geophysical survey has been prepared (GSB 2003).

6.2 Apart from weak linear trends attributed to former and current agricultural practice, only one anomaly of archaeological potential was identified. This took the form of a relatively strong rectilinear anomaly just to the south of the area designated for the extension of the sewage works (Area 1). The anomaly appears to relate to the corner of the rectilinear enclosure identified from cropmarks.

Excavation results

Area 1 (Figs. 3–4)

6.3 Excavations in Area 1 identified a multiphase occupation site with prehistoric, Romano-British and medieval elements (Plate 1). The site comprised a series of negative features, including ditches, pits and four inhumations, overlain by medieval ridge and furrow and modern topsoil. All features were cut into natural chalk and flint gravel (267).

Phase 1: Neolithic

6.4 The earliest phase of activity appears to be represented by three circular pits. In the northern section of Area 1, a shallow circular pit (129) measuring 0.61m by 0.5m and 0.13m deep was recorded. It contained two fills, a primary fill (202) of greyish brown, weathered gravel 0.04m thick and a secondary fill (130), a mid-brown gravelly silt 0.1m thick. Fill 130 produced a substantial assemblage of 84 pieces of worked flint including 12 scrapers and a petit tranchet derivative arrowhead. The arrowhead in particular is characteristic of a tradition associated with Durrington Walls style Grooved Ware pottery dating to the late Neolithic period. During post excavation sample processing fragments of probable prehistoric pottery were also recovered from fill 130.

6.5 Some 25m to the south of pit 129 two discrete, circular pits less than 1m apart were excavated. Pit 167 measured 1.19m across by 0.38m deep and contained two fills (Fig.6, Section 46; Plate 2). The primary fill (168), a light grey gravelly, silty sand 0.11m thick produced sherds of Late Neolithic Durrington Walls-style Grooved Ware pottery. Seven pieces of struck flint including two cores were also recovered from this fill. The secondary fill (169) was a mid-brown gravelly silt 0.29m thick and produced sherds of Durrington Walls style pottery and thirteen pieces of struck flint including a core and a scraper. A number of fragments of animal bone were also recovered from this fill. Pit 200 measured 0.75m across by 0.29m deep and contained only one fill (201), a dark brown gravelly silt (Fig.6, Section 48). Four pieces of struck flint were recovered from fill 201, all are flakes, stylistically late-Neolithic in date. During post excavation sample processing fragments of probable prehistoric pottery were also recovered from fill 201.

Phase 2: Bronze Age/Iron Age

6.6 A group of large, shallow depressions (Group 260) was located to the north of pits 167 and 200. Of these only one (118) was a discrete feature, it measured 4m across by 0.36m deep and contained a mid-brown gravelly silt fill (119: Fig.6, Section 30). One sherd of probable Iron Age pottery was recovered from fill 119.

6.7 A large irregular depression to the south-west of 118 measuring 10.5m by 5.5m was composed of at least seven inter-cutting pits or scoops (141, 243, 246, 252, 256, 258, 218) which were identified in section being largely indistinguishable in plan (Fig. 6,

Section 58). The pit group (260) appears to represent a succession of pits/hollows in a concentrated area, occurring over some period of time.

6.8 Pit 243 was truncated by pit 141 and pit 246 and seen only in section. It measured 2.67m east to west and was 0.41m deep. It contained a yellow brown gravelly sand primary fill (244) 0.13m thick and a mid-brown silty sand secondary fill (245) 0.4m thick. Two small 'Beaker' type scrapers were recovered, from fills 244 and 245 suggesting an Early Bronze Age.

6.9 Pit 141 truncated pit 243, it was apparently sub circular in shape and measured 2.53m by 1.67m. Excavated to a depth of 0.53m, it contained a primary fill (241) of mid-brown silty gravel 0.15m thick, a secondary fill (240) of mid-brown gravelly silty sand 0.14m thick and a tertiary fill (142) of mid-reddish brown gravelly silt 0.41m thick. Fill (142) contained three sherds of probable Iron Age pottery and three sherds belonging to a middle Bronze Age bucket or barrel urn.

6.11 Pits 218, 252, 256, 258 and 262 were also recorded as part of Group 260 but are as yet unphased (see below).

6.12 Two sherds of second century Roman grey ware pottery were recovered from a mid-brown silty deposit (51) which sealed Group 260.

Phase 3: Romano-British

6.13 The large rectilinear enclosure identified on aerial photographs and the magnetometer survey appeared to be the focus for the earliest phase of Romano-British activity. The north-east corner of the enclosure ditch encroached into the excavation area and took the form of a substantial ditch (181) some 2.33m wide and 0.8m deep, containing three fills (Plate 3). The ditch was aligned north-west to south-east before curving round and running north-east to south-west. Five joining sherds of pottery which form the profile of a dog-bowl attributed to the Antonine period (2nd century), were recovered from the pale grey silty gravel primary fill (182). The secondary fill (183), a mid-brown gravelly sandy silt and the tertiary fill (184), pale grey silty sand produced no further dating evidence.

6.14 Though 2nd-century pottery was found elsewhere on the site, enclosure ditch 181 is the only feature that can be securely dated to this phase.

Phase 4: Romano-British

Group 161

6.15 To the north-east and 'outside' the enclosure ditch (181), a large group of inter-cutting pits and gullies were identified on the surface as an extensive silty spread (02) containing 78 sherds of pottery all but seven of which were Romano-British in date. The pottery assemblage is chronologically mixed but the great majority belongs to the 4th century. The remaining seven sherds were medieval in date. A fragment of Romano-British tile and a fragment of lava stone quern were also recovered. It was

only through the excavation of three sondages across the extent of 02 that individual features were exposed, sealed by the deposit. Group 161 was composed of 16 inter-cutting sub circular and sub oval pits, and three gullies. The sections recorded across 02 revealed a process of cutting and re-cutting of small pits and gullies in a concentrated area. Many of the recorded pits were merely remnants of an original pit which had been almost completely truncated by the digging of later pits.

Sondage 1

6.16 Features 238 and 239 were the heavily truncated remnants of possible pits. Both features were irregular in shape and approximately 0.5m across and 0.15m deep. They contained pale yellowish brown sandy silt fills (265 and 266) respectively. Both features were truncated by gully 45 and ditch 56.

6.17 Gully 45 was 0.52m wide and was recorded for a length of 0.67m extending beyond the area of excavation to the east. It was excavated to a depth of 0.29m and contained a weathered greyish brown silty gravel primary fill (58) 0.08m thick and a dark brown sandy silt secondary fill (46) 0.21m thick. Six sherds of pottery dating to AD 300–50 were recovered from fill 46.

6.18 Directly to the north of gully 45 a parallel gully (47) was located. The gully was recorded for a length of 2.2m extending west into Sondage 2 where it terminated, and east beyond the limit of excavation. It was 0.5m wide and recorded to a depth of 0.26m. It contained a weathered greyish brown silty gravel primary fill (59) 0.06m thick and a dark brown sandy silt secondary fill (48) 0.23m thick. A fragment from a flat rotary quern of a type introduced into Britain by the Romans was recovered from fill 48. No stratigraphic relationship was recorded with gully 45 but in Sondage 2 this gully was seen to truncate pit 226 and be truncated by pit 88.

Sondage 2

6.19 Feature 203 was the heavily truncated remnant of a sub-circular pit measuring 0.9m across and 0.2m at its deepest. It contained one fill (204), a mid-yellowish brown sandy gravel. No dating evidence was recovered. Pit 203 was truncated by pit 222.

6.20 Pit 226 was again badly truncated. What remained measured 0.46m across and was excavated to a depth of 0.28m. It contained a silty gravel primary fill (228) 0.11 thick and mid-brown sandy silt secondary fill (227) 0.18m thick. No dating evidence was recovered. Pit 226 was truncated by pit 177 and gully 47.

6.21 Pit 177 was sub-circular measuring 0.82m in diameter and 0.48m deep. It contained a mid-brown silty gravel primary fill (225) 0.10m thick and a dark brown sandy silt secondary fill (178), 0.43m thick. No finds were recovered from this feature.

6.22 Pit 222 was sub-circular in shape, measuring 0.89m across by 0.37m deep. It contained a mid-brown silty gravel primary fill (224) 0.27m thick and a mid-brown sandy silt secondary fill (223). The pit was truncated by gully 175 and pit 120.

6.23 Gully 175 measured 0.7m across and was excavated to a depth of 0.41m. It was recorded for a length of 4m extending to the west into and beyond Sondage 3 where it was recorded as gully 147. Its eastern terminal was recorded in Sondage 2 but no western terminal was recorded due to truncation. It contained a mid-brown silty gravel primary fill (221) 0.08m thick, and a mid-grey brown sandy silt secondary fill (176) 0.4m thick. Thirteen sherds of Romano-British grey ware pottery and one sherd of Roman calcareously tempered ware were recovered from fill (176=148) suggesting a 4th-century date. One sherd of decorated Samian pottery was also recovered from this fill.

6.24 Feature 88 was a circular pit on the northern edge of Group 161 and was distinguishable as a feature in plan. It measured 1.45m across and was excavated to a depth of 0.37m. It contained one fill (89), a dark brown sandy silt. No finds were recovered from this feature.

Sondage 3

6.25 Feature 90 was the remnant of a sub oval pit truncated by pit 120 and pit 88. What remained measured 0.7m across and was excavated to a depth of 0.26m. It contained a yellowish brown silty gravel primary fill (91) 0.11m thick and a mid-brown sandy silt secondary fill 0.15m thick. No dating evidence was recovered from this feature.

6.26 Pit 120 measured 1.9m across and was excavated to a depth of 0.4m. It contained a mid-grey brown silty gravel primary fill (127) 0.08m thick and a mid-brown sandy silt secondary fill (121) 0.36m thick. This pit was also recorded in Sondage 2 and fill (121) produced 12 sherds of Roman grey ware pottery.

6.27 Pit 151 measured 0.7m across by 0.28m deep and truncated pit 120, and gully 175. It was filled by a mid-grey brown sandy silt (152), no finds were recovered.

6.28 Small pit 159 measured 0.29m across by 0.17m deep and truncated pit 120. It was filled by a mid-brown gravelly silt (160).

6.29 Pit 215 measured 6.5m across by 0.18m deep, it truncated gully 175. It was filled by a mid-brown gravelly silt (216). No finds were recovered.

6.30 Pit 143 measured 0.55m across by 0.25m deep and truncated pit 215. It contained a mid-grey brown sandy silt fill (144) which produced three sherds of Roman grey ware pottery.

6.31 Pit 122 measured 0.65m across by 0.35m deep and truncated pit 143. It contained a grey brown silty gravel primary fill (128) and a mid-brown sandy silt secondary fill (123). No finds were recovered.

6.32 Features 145 and 149 were the remnants of heavily truncated pits and were not recorded in section. As a result a stratigraphic relationship with the other pits in Sondage 3 was not determined. Pit 145 measured 1.1m across and contained a mid-brown sandy silt fill (146) which produced one sherd of Roman grey ware pottery.

The remains of pit 149 measured 0.3m across and contained a greyish brown sandy silt fill (150). No finds were recovered.

6.33 A small assemblage of Romano-British pottery and fragments of animal bone were recovered from the features in Group 161. The inter-cutting nature of the pits and gullies means that material from the earliest features may form the fill of later features. As a result dating evidence recovered cannot be anything more than a broad indicator of the period of activity in this area.

Group 232

6.34 A smaller group of pits and gullies of a similar nature were located immediately to the south west of Group 161. Pits 83, 78, 96, 99, 102 and 211, and gully 71 and ditch 74 were inter-cutting in a similar fashion to Group 161 and produced a small assemblage of Romano-British pottery. They were recorded primarily in section and were largely indistinguishable in plan prior to excavation.

6.35 Pit 83 measured 0.94m across and was excavated to a depth of 0.24m. It contained a pale yellowish brown weathered silty gravel primary fill (84) and a dark brown silty sand secondary fill (185). It was truncated by pit 78 and produced no finds.

6.36 Feature 74 was the remnants of a heavily truncated ditch aligned north-east to south-west. It measured 0.68m wide by 0.49m deep and was recorded for a length of 3m. It contained a mid-brown sandy gravel primary fill (75) overlain by a lens of redeposited natural gravel (76) suggesting the side had slumped in the past. The secondary fill (77) was a dark brown sandy silt. This ditch was truncated by pits 78 and 102 and produced no finds.

6.37 Feature 99 was the heavily truncated remnant of a pit measuring 0.59m across by 0.16m deep. It contained a yellowish brown gravelly silt primary fill (100) 0.07m thick and a dark brown sandy silt secondary fill (101) 0.39m thick. Neither fill produced any finds and the feature was truncated by pit 96.

6.38 Pit 96 measured 0.83m across by 0.35m deep. It contained a light brown silty gravel primary fill (97) 0.16m thick and a dark brown sandy silt secondary fill (98) 0.24m thick. One sherd of Roman grey ware pottery was recovered from the primary fill of this feature which was truncated by pits 102 and 211.

6.39 Pit 211 measured 0.58m across by 0.25m deep. It contained a mid-yellow brown sandy silt primary fill (212) 0.13m thick, a mid-yellow brown gravelly silt secondary fill (213) 0.05m thick and a mid-brown sandy silt tertiary fill (214) 0.1m thick. Fill 212 produced one sherd of Roman grey ware pottery.

6.40 Pit 102 measured 1.32m across and was excavated to a depth of 0.30m. It was filled by a dark brown sandy silt (103) 0.29m thick. No finds were recovered and the feature was truncated by gully 71.

6.41 Pit 78 measured 0.84m across it was excavated to a depth of 0.30m and contained four fills. Primary fill (79) was a mid-grey brown silty gravel 0.04m thick, secondary fill (80) was a dark brown sandy silt 0.09m thick, this was overlain by a gravelly lens 0.04m thick, and finally by fill 82, a dark brown sandy silt 0.16m thick. No datable finds were recovered from this feature which was truncated by gully 78, however, a fragment of probable human bone was recovered from fill (80).

6.42 Gully 71 measured 0.73m across by 0.34m deep and extended for at least 1.25m north-east to south-west. It contained a greyish yellow silty gravel primary fill (72) 0.02m thick and a dark brown sandy silt secondary fill (73) 0.25m thick. No finds were recovered.

6.43 To the north-west of Group 232 a sub-oval pit (138) was recorded measuring 1.17m by 0.7m by 0.28m deep. It contained a mid-grey brown silty gravel primary fill (139) 0.08m thick and a secondary fill (140) consisting of a dark brown sandy silt. One sherd of Roman grey ware pottery and a number of residual worked flints were recovered from fill (140).

6.44 A number of features (74, 102, 147, 173, 238) identified as part of Groups 161 and 232 were truncated by a more substantial ditch (56) aligned south-west to north-east extending across the excavated area. The ditch was identified in plan and through sondages (1–3) excavated across the areas of concentrated, inter-cutting archaeological features identified above. The ditch measured a maximum of 1.96m wide by 0.79m deep and was recorded for a length of 16.9m. At its intersection with the enclosure ditch, ditch 56 truncated ditch 181. Excavation revealed a mid-brown silty gravel primary fill (67) a maximum of 0.09m thick which probably resulted from weathering processes whilst the ditch was in use. A silty gravel lens (196) 0.05m thick also appeared to be the result of weathering of the ditch sides. The ditch also contained a secondary fill (70) of mid- to dark brown sandy silt up to 0.66m thick, with up to 20% gravel inclusions. In sections of ditch (56) a tertiary fill of mid-brown sandy silt (195) up to 0.57m thick with 15% gravel inclusions was recorded, overlying the secondary fill. However, in other areas the secondary fill appeared homogenous and distinct deposition layers were not identifiable. Two sherds of Roman grey ware pottery dating from the later 3rd to 4th century, were recovered from the primary fill (193). A single sherd of pottery of Severan or late-Antonine date was recovered from gravel lens 196. The secondary and tertiary fills produced pottery of later-3rd- to 4th-century date including possible Crambeck greyware. A small assemblage of poorly preserved animal bones and residual worked flint was also recovered from the various fills of ditch 56.

6.45 During this phase of activity the rectilinear enclosure ditch (181) also appeared to have been re-cut. The re-cut (187) measured 1.45m wide by 0.67m deep and contained two fills (Section 43, Fig. 6). A mid-grey brown sandy silt primary fill (185) 0.06m thick, was overlain by a mid-brown sandy silt secondary fill (188), 0.63m thick. Fill (185) produced pottery dating to the late third to early 4th century and fill (185) contained Crambeck grey ware dating to the early 4th century and a sherd of Roman mortarium dating to the early 3rd to early 4th century. The pottery dates suggest that re-cut (187) may be contemporaneous with linear ditch 56 and that

ditch 56 is a branch or extension of an existing enclosure ditch (181) which was re-cut during the same period.

6.46 At the interface between ditches 187 and 56) the possible remains of an earlier feature (205) were recorded, seen only in section and highly truncated. The area measured 1.13m across by 0.44m deep and contained two fills. The primary fill (206) consisted of a grey silty gravel 0.05m thick and the secondary fill (207) consisted of a mid-brown sandy silt 0.4m thick. Although recorded as a distinct feature it could also be an area of disturbed ground or slumping resulting from the initial cutting and re-cutting of the ditches. Too little of this feature (205) remained to fully interpret it. Sherds of pottery dating from the Iron Age through to the 4th century AD were recovered from fill 207.

6.47 Two parallel linear ditches (153 and 124) were recorded aligned south-west to north-east in the north of the excavation area (Fig.6, Sections 29 and 39). Ditch 153 measured 1.43m wide by 0.47m deep and occurred across the extent of the excavated area (3m). The ditch was a U-shaped and contained a greyish brown sandy gravel primary fill (154), 0.33m thick, which produced Romano-British pottery dating to the 4th century. The ditch had also been re-cut, the re-cut (155) measured 0.82m wide by 0.35m deep. The dark grey sandy primary fill (156) was 0.16m thick and produced Romano-British pottery sherds dating to the 4th century, as well as residual worked flint. The re-cut contained two further fills, a gravel layer 0.06m thick (157) and a dark grey sandy silt upper fill (158) 0.17m thick which produced two sherds of Romano-British grey ware.

6.48 Linear ditch 124 was located 9m to the south-east of ditch 153. It had a V-shaped profile and measured 0.95m wide by 0.28m deep. It extended across the extent of the excavated area (8.4m) and contained two fills. A mid-brown sandy silt primary fill (125) 0.23m thick was overlain by a yellow brown silty sand secondary fill (126) 0.6m thick. Neither fill produced secure dating evidence, although three iron nail fragments indicative of Romano-British settlement activity were recovered from fill 126. Its parallel alignment with ditch 153 would support this date.

Phase 5: Medieval

6.49 Plough furrows orientated north-east to south-west were recorded across two thirds of the site. The furrows were spaced four to six metres apart and were a maximum of 1.44m wide with an average depth of 0.1m. The exception to this were furrows 30 and 32 which were 0.77m and 0.9m wide respectively and located less than 1m apart. It seems that these features represent two phases of ridge and furrow. This was supported by a second furrow which upon excavation was found to be composed of two furrows (60 and 62) less than 1m apart. Each furrow was filled by a similar mid-brown sandy silt. Sherds of medieval pottery were recovered from furrow fills 09, 33 and 39 and a sherd of residual Roman grey ware was recovered from furrow fill 163. The furrows did not occur in the north-west corner of the area of excavation.

Unphased (Fig.5)

6.50 Two inhumations (40 and 64) were excavated to the north-west and south-east of ditch 56 respectively. Skeleton 40 was laid supine in grave cut 41, with the head to the north-east and was badly damaged during machining. As a result of this and poor soil conditions only fragmentary remains were recovered. The northern corner of grave 41 was truncated by a sub-square posthole (52), which appeared to have also truncated and destroyed the right shoulder of skeleton 40, this suggests it was not a marker post but part of a later phase of activity. The posthole measured 0.3m in diameter and was 0.14m deep, it contained one dark brown gravelly silt fill (53). Skeleton 64, which was more complete, was laid supine in grave cut 65 with the head to the north-east. No grave goods or dating evidence were found associated with these inhumations. They were, however, aligned along the same orientation as ditch 56 and may have been focused on this Romano-British boundary. Grave cut 65 truncated hollow 236, an undated feature.

6.51 Two further inhumations were excavated in the north of the excavation area between ditches 124 and 153. Skeleton 172 was positioned crouched on its right side in a sub-circular grave cut (170). Skeleton 208 (Plate 4) was located *c*. 2m to the west and was laid prone in a tightly crouched/contracted positioned in a crude oval grave cut (209). No grave goods or dateable finds were recovered from either grave and they were not stratigraphically related to any other feature.

6.52 Linear ditch 114 was located 26m south-east of and parallel to, ditch 124, and 8m to the south of and parallel to ditch 56. It had a U-shaped profile and measured 0.79m wide by 0.33m deep. It occurred across the extent of the excavated area (19m). Its three fills produced no dating evidence, however, it did truncate pits 218 and 230 in Group 260. This and it parallel alignment with ditches 56 and 153 suggest it is Romano-British.

6.53 During the excavation of ditch 114 it was found to truncate a sub-circular pit 136. The pit measured 0.64m across and was 0.18m deep with a shallow rounded base. It contained one mid-brown silty sand fill (137) which produced no dating evidence.

6.54 Gully 164 measured 0.47m wide by 0.14m deep and was aligned south-west to north-east for 6m before turning and running south-east to north-west for a further 2m. The gully appeared to terminate within ditch 114 although no stratigraphic relationship could be determined (Fig.6, Section 41). No finds were recovered from the single dark brown silt fill (165) of this feature.

6.55 Situated 10m to the north of 164, a similar gully 111, was orientated south-east to north-west and appeared to terminate within ditch 56 although a stratigraphic relationship could not be determined (Fig. 6, Section 27). The feature was a maximum of 0.15m deep and contained two fills from which nor finds were recovered.

6.56 A number of hollows or pits in Group 260 remain unphased. Pit 252, visible only in section is estimated to have survived for approximately 3.1m north to south having

been truncated by pits 249 and 219, and ditch 114. It contained two fills a mid-grey brown sandy silt primary fill (254) 0.17m thick and a mid-grey brown, slightly gravely, sandy silt secondary fill (253) 0.3m thick. One sherd of pottery, preliminarily identified as belonging to a local Anglo-Scandinavian tradition, was recovered from fill (253). A more secure identification of this pottery is needed before assigning a phase to this feature.

6.57 Pit 246 truncated pits 243 and 252 and was again only distinguishable in section (Fig. 6, Section 58). It measured 2.29m north to south and was 0.51m deep. It contained a mid-brown silty sandy primary fill (247) 0.27m thick and a mid-brown gravelly sandy silt secondary fill (249), a lens of redeposited natural gravel 0.15m thick (248) was also present. No dating evidence was recovered from this feature but it was truncated by plough furrow (163).

6.58 Pit 256 truncated pit 246 and was visible for a width of 1.1m but extended beyond the excavation area to the west. It was excavated to a depth of 0.32m and contained one mid-brown silty gravel fill (257). No dating evidence was recovered from this feature.

6.59 Pit 258 truncated pits 252 and 262 and measured 0.96m across in section. It was excavated to a depth of 0.47m and contained one mid-brown gravelly silt fill (259) from which no finds were recovered.

6.60 On the southern edge of Group 260 sub oval pit 218 truncated pit 252. It measured 1.34m across and was excavated to a depth of 0.28m. It contained a sandy gravel primary fill (219) 0.15m thick and a mid-brown sandy silt secondary fill (229) 0.23m thick. No dating evidence was recovered from this feature.

6.61 The remnant of a hollow/depression (236) similar in nature to those in Group 260 was truncated by ditch 56 and grave cut 65. The feature measured 1.8m across and was excavated to a depth of 0.2m. It contained a mid-brown gravelly silt fill (237) from which no finds were recovered.

6.62 A number of other, isolated pits and post holes are also unphased at present.

6.63 A sub circular pit (132) measuring 0.85m by 0.85m and 0.35m deep, was recorded 1.3m to the south east of the late Neolithic pit (129). It contained a light brown silty gravel primary fill (133) 0.08m thick and a light brown sandy silty gravel secondary fill (134) 0.16m thick. A mid-brown silt tertiary fill (135) 0.12m thick appeared to have been disturbed by roots. No dating evidence was recovered.

6.64 Located 1.5m to the east of pit 132 an irregular feature (179) measuring 3.5m by 0.58m was excavated to a depth of 0.2m. It contained a mid-brown silty sand fill (180). The edges of the feature were poorly defined and although the fill contained 29 struck flints including flakes and utilized natural the feature is thought to be natural. It is likely to have been the result of a probable former hedge line or tree boles which had caused substantial disturbance in the natural in this area of site.

6.65 To the north of group 232 an isolated sub-oval posthole (109) was recorded. It measured 0.37m by 0.29m and was 0.11m deep. A single dark brown silty sand fill (110) produced no dating evidence.

6.66 Approximately 1m to the south of plough furrow 62 an isolated pit, possibly a post pit (104) was recorded. The pit was circular and measured 0.68m by 0.76m, it was steep sided and excavated to a depth of 0.45m deep. The pit contained a grey gravelly silt primary fill (106), 0.1m thick. Above this, the fills were very disturbed possibly as a result of the removal of a post and /or animal burrowing. Secondary fill 106 was a very dark brown sandy silt with evidence of burning, 0.25m thick. This was overlain by a tertiary fill (107) consisting of a mid-brown sandy silt up to 0.39m thick. Fill 108 represents a disturbed area in the centre of the pit consisting of light brown silty gravel up to 0.32m thick. No dating evidence was recovered from this feature.

6.67 Ditch 56 truncated a small pit (197) the remnant of which was excavated on the southern edge of the ditch. The remains measured 0.36m across and 0.30m deep and contained two fills. A pale yellow brown sandy gravel primary fill (198) 0.07m thick was overlain by a mid-brown silty sand secondary fill (199) 0.23m thick. No finds were recovered from this feature.

6.68 A group of large irregular depressions/hollows (Group 11) was located in the southern corner of the excavated area. The features ranged from 1.5m to 9.3m in width and were an average of 0.5m deep with an irregular base. A homogenous light grey brown silty sand filled all the hollows. The features may be the result of quarrying in the area but the sterile nature of the fill suggests they are more likely to be natural hollows.

6.69 All features in Area 1 were sealed by a dark brown silty topsoil (01) an average of 0.35m thick. Sherds of residual Roman grey ware and medieval Humber ware pottery were recovered from (01).

Area 2

6.70 Excavations in Area 2 produced no evidence that the prehistoric and Romano-British activity extended to the south-west of the sewage works. Features encountered were limited to medieval plough furrows and relatively modern drainage ditches.

6.71 Remnants of medieval ridge and furrow field systems were encountered in the form of plough furrows (306) cut into the natural gravel (309). The furrows were limited to the north-western half of Area 2, extending in a south-easterly direction for around 100m from the sewage works boundary. The width of the furrows was variable ranging from 0.6m to 1.8m and all were aligned south-west to north-east, extending across the entire width of Area 2 (15m). All of the furrows were less than 200mm deep. The furrows were spaced 6.5m to 8m apart, although towards the north-western end the furrows were noticeably closer together, only 3 to 4m apart in some cases. This would suggest that in this area the plough furrows recorded represent two phases of ridge and furrow cultivation on the same alignment. One furrow (303) was

sample excavated and recorded and produced sherds of medieval pottery. Other furrows were investigated in order to dismiss the possibility that they were earlier ditches but not fully excavated.

6.72 Two relatively modern, irregular ditches were excavated in Area 2. Sample excavation produced fragments of ceramic field drain, brick, and rope. These features are most likely connected with modern agricultural practices or the excavation of the original sewer outfall the cut of which was partially visible within the excavated corridor.

6.73 All features in Area 2 were sealed by a dark brown silt top soil (301) an average of 0.4m thick.

7.0 ASSESSMENT OF THE SITE ARCHIVE

Preliminary analysis

7.1 As part of the assessment of the site records the following level of analysis has been undertaken:

- Provisional matrices were drawn up showing the stratigraphic relationships of contexts recorded.
- Plans and sections were checked against context record sheets to ensure cross-referencing. Catalogues of context and finds records have been put onto a computerised database (Microsoft Access).
- Catalogues of slide and print photographs, and illustrations have been entered onto a computerised spreadsheet (Microsoft Excel)

7.2 The combined quantifications of the site record are as follows:

Table 1: Primary archive inventory

Context descriptions	263
Plans	29
Sections	64
Colour slides (films)	10
Black and white prints (films)	10

Table 2: Summary of contexts

Feature type	0
Pits	39
Post Holes	4
Ditches/Gullies	15
Graves	4

Plough furrows	10
Undefined features	13
Soils and subsoils	5
Natural layers	2

Recommendations for further analysis

Storage and curation

7.3 The written, drawn and photographic records and the artefacts are currently held by Northern Archaeological Associates.

7.4 The archive will be deposited with the appropriate museum after completion of specialist studies.

Processing and quantification

7.5 Artefactual material was processed immediately after the conclusion of the fieldwork. All of the finds have been recorded, marked where appropriate, packed in labelled bags and placed in labelled museum storage boxes. Finds databases were produced in order of context number. The finds database tabulates the artefact type, quantity and includes a brief description. The artefact assemblages are summarised below.

Table 3: Finds Assemblage

Artefact type	**Quantity**
Flint	179
Pottery sherds	370
Animal bone	899
Human Skeletons	4
Human bone	5
Metal objects	9
Ceramic building material	3
Worked Stone	2

8.0 SPECIALIST FINDS ASSESSMENTS

Flint (P. Makey: Appendix B)

Summary

8.1 The flint assemblage consists of 179 struck prehistoric lithics, including four pieces of edge utilised natural. The assemblage came from 19 separate contexts although nearly 47% of the material came from the fill of pit 129. All the material is domestic in nature.

8.2 Despite there being few datable pieces in the assemblage, there is a marked degree of stylistic consistency in the debitage and the material appears to be of a fairly restricted chronological span. Un-retouched flakes are stylistically Neolithic in date but the retouched pieces are, on the whole, not period diagnostic. The assemblage is domestic and residual in nature and the high proportion of scrapers is of note. Of the 16 scrapers in the assemblage, fourteen are of a style associated with later Neolithic Grooved Ware pottery of the Durrington Walls style. The remaining two small scrapers are of 'Beaker' aspect. The most diagnostic implement in the assemblage is a petit tranchet derivative arrowhead from the fill of pit 129. Again, this piece is associated with Late Neolithic, Durrington Walls style Grooved Ware pottery. A single, residual, tabular core recovered from ditch 153 may be of a later Mesolithic date.

Recommendations

8.3 The potentially narrow date range of the material and its association with dateable pottery is important. Regionally the associations of Neolithic flint work with datable pottery, of Durrington Walls style are in need of further research. A selection of the material from pits 129, 167 and 200, where Neolithic pottery/flint associations are present should be catalogued with a view to publication. A selection of flints, predominantly scrapers, from pit 129 along with the arrowhead and retouched flake, should be illustrated.

Prehistoric pottery (T. Manby: Appendix C)

Summary

8.4 A total of 147 sherds (including 101 crumbs or pieces) of prehistoric pottery weighing 152g were recovered from three contexts

8.5 Sherds representing up to four vessels were recovered from pit 167. The profile and decorative features of the pottery sherds, particularly the applied strips, mean that they can be attributed to the Durrington Walls style, a sub-style of Grooved Ware dating to the Late Neolithic. One sherd provides evidence of use in the form of a patch of carbonised material suggesting scorching. Three sherds forming part of one vessel were recovered from context 142. There are few diagnostic features but the use of angular stone tempering would be consistent with a Middle Bronze Age bucket or barrel urn.

Recommendations

8.6 It is not recommended on this occasion that radiocarbon dating or lipid analysis should be undertaken in view of the small size of the assemblage and limited diagnostic characteristic of the sherds. The rejoined sherd from context 142 preserves within the wall body the cast of a straight cylindrical body created by an inclusion such as a grass stem. Examination by an archaeo-botanical expert may confirm this.

Late Prehistoric, Roman and Medieval Pottery (Pete Didsbury: Appendix D)

Summary

8.7 A total of 223 sherds of ceramic material weighing 3351g and having an average sherd weight of 15.0g were recovered from the excavations at Pocklington. The material was principally of Roman date with smaller amounts of Iron Age and medieval pottery.

8.8 Two pits in Group 26) contained pottery, one sherd of probable Iron Age date and a second of possible Anglo-Scandinavian 'gritty ware' tradition. Other Iron Age pottery recovered from site was of a residual nature. The chronological range of the Roman pottery is from the 2nd century through to the late 4th or early 5th. The majority of the features containing diagnostic pottery, however, suggest that the first half of the 4th century was the main period of deposition. This would seem the case with the features of Group 161, with overlying silt 02 showing that ceramic deposition on the site continued past the middle of the 4th century. Material from the primary fill of enclosure ditch 181, is, however, of 2nd-century date and appears to be the earliest phase of Roman activity. Pottery assemblages suggest that a re-cut (187) of ditch 181 is contemporaneous with a ditch (56) which branched off the enclosure and dated to the early 4th century.

Recommendations

8.9 The assemblages are of low average sherd weight and of limited evidential value. A very small number of vessels would justify illustration if it were decided to bring the site to full publication, and in this case specialist opinion on the mortaria and samian has the potential to refine the site dating to some extent. The sherd of possible Anglo-Scandinavian 'gritty ware' also needs further research. The majority of the assemblage is essentially typical of those from rural sites in the region at this period.

Ceramic Building Materials (J. Tibbles and S. Tibbles: Appendix E)

Summary

8.10 A small assemblage that comprised three fragments of material with a total weight of 385g was submitted for assessment. The material was recovered from three contexts. Of the three fragments submitted, two were identified as Romano-British building material comprising one fragment of *imbrex* and a fragment of tile, from contexts 44 and 02 respectively. The remaining fragment was identified as a land drain from 305.

8.11 The extremely small assemblage of three fragments of ceramic building material, although limited in interpretative value, represents the residual elements of Romano-British structures within the vicinity. The surfaces of some of the material were abraded and post-breakage burning/heat discoloration was noted which maybe attributed to re-use or occurred at source. The land drain reflects agricultural activity during the mid- to late 19th century.

Recommendations

8.12 The Romano-British material is relevant evidence for comparative analysis with other ceramic building material assemblages recovered within the region and should be made available if such work is undertaken. The Romano-British material should be deposited within the relevant museum. The land drain is recommended for discard. No further work is deemed necessary.

Worked Stone (S. Wilkinson: Appendix F)

Summary

8.13 A total of two quern stone fragments were recovered from excavations at Pocklington. One small fragment of lava quern (02 AE) was recovered from layer 2. The surviving piece has a small, well-worn grinding surface area remaining with part of the outer edge. Lava stone querns were manufactured intensively during the Roman period. A fragment of fine-grained sandstone quern (48 AA) was recovered from the upper fill of ditch 47, possibly part of a flat rotary quern type introduced to Britain by the Romans. The base and the edge have been roughly finished with a well-worn, sloping grinding surface. The heat-reddened surface and two broken edges suggest possible re-use in a hearth or the base of an oven

Recommendations

8.14 No further work is considered necessary on either of the stones. They should, however, both be deposited in the relevant museum.

Conservation Assessment (J. Jones: Appendix G)

Summary

8.15 Nine objects were received for examination and X-radiography, comprising eight Fe and one copper-alloy. The copper-alloy object (02AD) was found to be stable and lightly corroded. The majority of the iron objects were not in a very stable state, despite suitable storage conditions, with some cracking (126AA) and spalling (02AG) of the corrosion products.

8.16 The objects were sorted into groups of a similar density, which were X-rayed together. Most of the objects were confirmed as nails or nail fragments. 02AF is probably a very highly corroded blade point. The copper-alloy pin (02AD) appears to have a wound head.

Recommendations

8.16 The material was received suitably packed for short to medium term storage. It should continue to be stored in an airtight container at a stable temperature and below 20% RH, to inhibit further corrosion. The RH should be controlled by active silica gel, which is regularly monitored and regenerated as necessary.

Small Finds Assessment (M.C. Bishop: Appendix H)

Summary

8.17 A small assemblage of material (one copper-alloy and eight ferrous items) were recovered during excavations at Pocklington. These consisted of one copper-alloy pin, two ferrous knife blade fragments and five nail fragments. Most of the material is indicative of Romano-British settlement in the vicinity. The nails presumably derive from structures whilst the blade fragments point to associated domestic or industrial activity. The copper-alloy pin is probably a modern intrusion. Little more can be said from such a comparatively small assemblage.

Recommendations

8.18 It is recommended that no further work be undertaken on the finds and, whilst the blade fragments and pin merit retention for possible future study, the nail fragments can be discarded.

Human skeletal remains (C.K. Russell: Appendix I)

Summary

8.19 A total of four contexts containing human bone were recovered; two extended supine burials (Sk40 and Sk64) and two crouched (Sk172 and Sk208). These represent the remains of four adult individuals, probably two males and two females. Sex and age assessments have been provided, however the generally fragmentary and incomplete nature of the remains means these could not be as comprehensive or precise as would be desirable. There is evidence of infection, trauma and joint disease only within one individual. This is likely to reflect the poor preservation of the bones, rather than being indicative of good health in the remaining individuals. All dental remains display some form of dental pathology, reflecting the generally poorer oral health of past populations.

Recommendations

8.20 No further osteological work needs to be undertaken on this collection. However the provision of secure dates for these burials would enable the relatively isolated data presented here to be included in studies of larger combined samples.

Biological Remains (J. Mant, J. Carrott and Ö. Akeret: Appendix J)

Summary

8.21 Remains recovered from 36 sediment samples processed by NAA and small quantities of hand-collected shell and bone, recovered from deposits encountered during excavations were submitted for an evaluation of its bioarchaeological potential. Archaeological cut features of prehistoric through to medieval date were revealed.

8.22 For most of the samples, ancient plant remains were restricted to trace amounts of small fragments of unidentified charcoal. A few of the deposits gave small to medium-sized assemblages of generally rather poorly preserved charred grains (including wheat, barley and oat), presumably from cultivated crops. The poor preservation rendered these remains of little interpretative value, though some would provide suitable material for radiocarbon dating of the deposits to be attempted.

8.23 All of the deposits gave small assemblages of snails (primarily terrestrial forms). In many cases, these were dominated by the burrowing, and almost certainly intrusive, *Cecilioides acicula*, but where other taxa were present some environmental reconstruction was sometimes possible. The tiny quantity of hand-collected shell was mostly fragments of catholic land snails, with a single oyster valve and of no interpretative value.

8.24 The vertebrate assemblage is of little interpretative value, being rather small and poorly preserved. The remains appeared to represent domestic refuse, with a small component of butchery waste.

Recommendations

8.25 Further study of the snail assemblages, including the processing of additional sediment to maximise the material available for interpretation, may allow some more detailed environmental reconstruction, but no further work on the other classes of biological remains is warranted.

9.0 SIGNIFICANCE OF THE RESULTS

Stratigraphic Analysis

9.1 The excavation at Pocklington has recorded the remains of a multiphase site with late Neolithic, Bronze Age, Iron Age and Romano-British elements. Romano-British pits, ditches related to a cropmark enclosure to the south of the site were found to overly at least two phases of prehistoric activity. Many of the features, most notably the four inhumations, are stratigraphically isolated. This is in part due to the small excavation area. Where a stratigraphic relationship between features was present, initial analysis has enabled a provisional sequence to be established. This applies mainly to the Romano-British remains where two broad phases were identified. The only areas where complex stratigraphy was present on site was in pit groups 161, 232 and 260, further stratigraphic analysis is not warranted in these cases.

9.2 Despite the long sequence of activity on the site, none of the archaeological features (with the exception of the burials) are of special significance. However, the excavations have allowed a detailed investigation into part of a known cropmark complex identified from aerial photographs. The excavation has provided the opportunity to classify the rectilinear enclosure in more detail with regard to its date and function, and examine its relationship with other boundary ditches visible as cropmarks in the vicinity.

Flint

9.3 The flint assemblage displays a marked degree of stylistic consistency and the majority is likely to be late Neolithic in date and of a domestic and residual nature. This narrow date range is important in that regionally, associations of late Neolithic flint-work and datable pottery are scant. Pit 167, which produced Durrington Walls style Grooved Ware and late Neolithic flint, has the potential to provide further data in this respect. Positive identification of pottery fragments, recovered during post-excavation sample processing from pits 129 and 200, which also contained flint assemblages, would supplement this. The flint assemblage from pit 129 is particularly notable for a number of scrapers and a petit tranchet derivative arrowhead. These tools are predominantly associated with Durrington Walls style Grooved Ware pottery and their association at Pocklington would be significant.

Pottery assemblages

9.4 The pottery recovered from Pocklington has enabled the results of the excavation to be placed in a broad chronological framework. Much of the assemblage, comprises common forms and is typical of this part of East Yorkshire. This certainly applies to Romano-British assemblage which is typical of a rural settlement of this period within the region. The majority of the assemblage does not warrant further analysis although a specialist opinion on the mortaria and samian would refine the dating of the site.

9.5 The occurrence of late Neolithic Durrington Walls style Grooved Ware pottery is in itself not especially significant. The small assemblage was recovered from an isolated pit (167) and Grooved Ware is not uncommon in the region. However, the pottery is more significant in light of its association with the flint assemblage. Analysis of a number of fragments of probable pottery recovered during post-excavation sample processing is also required. The material was recovered from the fills of two pits (129 and 200) which have been dated from flint assemblages to the late Neolithic period. In view of the importance of late Neolithic flint in association with Durrington Walls style pottery formal identification of these fragments is required.

9.6 A small assemblage of Bronze Age and Iron Age pottery recovered during excavations attests to activity dating to this period in the area. The small size of the Iron Age assemblage means that it does not considerably add to the understanding of the site and although much of it is not positively identified, further analysis is not warranted. A single sherd of possible Anglo-Scandinavian ware requires further research, no other evidence dating to this period was recovered from the excavation and no significant remains are known from the Pocklington area. If the sherd is positively identified as belonging to this period it would provide evidence, though limited, of Anglo-Scandinavian activity in the vicinity and a reinterpretation of certain elements of the site, notably pit group 260 may be required.

Ceramic building materials

9.7 The small size of the assemblage has resulted in a very limited potential. No structural elements were excavated at Pocklington and the ceramic building material is likely to be the result of casual deposition. It possibly represents residual elements of a Romano-British building in the vicinity.

Worked stone

9.8 Two quern stone fragments, Romano-British in date, were recovered during excavations. Most notable is the fragment of imported lava quern, almost certainly from the Mayen-Niedermendig region of Germany. In northern England such lava querns are generally found in association with military sites or prestigious civilian settlements such as villas or towns. This may suggest the presence of a high-status site of the period in the vicinity of Pocklington.

Small finds

9.9 With the exception of a copper-alloy pin, likely to be a modern intrusion, the material is indicative of Romano-British settlement in the vicinity. Nail fragments recovered are likely to derive from structures and blade fragments represent domestic or industrial activity. This small assemblage has no further potential.

Human skeletal remains

9.10 The remains of four individuals were excavated at Pocklington. The fragmentary and incomplete nature of the remains means that the results of the analysis were limited and there is little scope for further osteological work. Two of the skeletons appear to be aligned on a Romano-British boundary ditch and as such appear to represent a form of simple burial outside the main settlement area characteristic of Romano-British sites. Two further burials, however, were interred in crouched positions within grave pits stratigraphically unrelated to any other archaeological feature. The crouched position may be indicative of a prehistoric date and the possible presence of Iron Age square barrows in the vicinity suggest they warrant further analysis. Secure radiocarbon dates for these burials would also allow the osteological data to be incorporated into larger studies.

Biological remains

9.11 The excavation produced a small assemblage of animal bone. Although the majority of the material was too poorly preserved to provide detailed zoological information the remains appear to represent butchery waste with a small component of domestic waste. The charred grains and other plant remains recovered are of little value due to their poor condition. The small assemblage of land snails does, however, allow some environmental reconstruction. The land snail species recovered from prehistoric and Romano-British contexts are indicative of a surrounding environment of short-turfed grassland. Further analysis of the land snail assemblage may provide a more detailed

picture of land use and the environment during the prehistoric and Romano-British period.

10.0 RECOMMENDATIONS AND FURTHER ANALYSIS

Introduction

10.1 The excavation at Pocklington Waste Water Treatment Works has revealed Romano-British remains associated with a rectilinear enclosure identified from aerial photographs and previously unknown prehistoric remains. Further analysis of elements of the site archive will provide the opportunity to further our understanding of late Neolithic material culture and late Iron Age/Romano-British rural settlement in the region. In accordance with the procedures of analysis and report preparation established by English Heritage (1991) this should concentrate upon those aspects of the excavation results where the post-excavation assessment has identified the potential to fulfil both national and regional research objectives. The potential for further analysis in respect of the excavation at Pocklington can be summarised as follows:

Stratigraphic record

10.2 Further analysis of the site archive in conjunction with a detailed study of available aerial photographs of the area, and the results of the Vale of York and Yorkshire Wolds National Mapping Programmes, will enable a number of research objectives to be tackled. In accordance with English Heritage research agenda MTD4 (1997) further analysis of the site archive will provide supplementary evidence indicating date and probable function of known cropmarks and allow the classification to be critically assessed. Furthermore, a study of aerial photographs may enable the site to be placed in a wider context in relation to the Romano-British settlements at Hayton and Shiptonthorpe, and the Roman road between York and Brough.

Artefactual record

10.3 The potential for further analysis of the artefactual record has been set out in the individual specialist assessments. Those material types which in particular have potential for further analysis include:

- Late Neolithic flint
- Durrington Walls style Grooved Ware pottery
- Roman samian and mortaria
- Possible Anglo-Scandinavian pottery
- Human skeletal remains

- Land snail assemblages

10.4 The value of each category of material within the site archive for further analysis will be enhanced by association within an integrated study combining the artefacts and environmental material with the stratigraphic record and documentary evidence,

10.5 Between six and twelve flints from pit 129 were recommended for illustration. These should include a selection of scrapers, the petit tranchet derivative arrowhead and the miscellaneously retouched flake.

Reporting and publication

10.6 An integrated post-excavation report will be prepared on completion of the analysis works. A version of the report should be prepared to publication standard for submission to a regional or national journal.

10.7 The analysis report shall contain:

- A summary of the project background
- The site location
- A methodology
- A summary of the results including phasing
- An interpretation of the results in relation to other sites in the region
- A post-excavation analysis of the stratigraphic and other written, drawn or photographic records
- Catalogues and post-excavation analyses and/or summary reports of all scientific dating procedures or other analyses carried out
- Appendices and figures as appropriate
- References and bibliography for all sources used

11.0 CONCLUSION

11.1 Excavations at Pocklington Waste Water Treatment Works revealed a concentration of archaeological remains representing multiple phases of activity. Previously unknown prehistoric features were recorded as well as elements of Romano-British field systems associated with known cropmarks identified from aerial photographs. Whilst such remains are not uncommon in the region certain aspects have the potential to fulfil certain regional research objectives.

11.2 A number of late Neolithic pits containing Durrington Walls style Grooved Ware pottery and a substantial assemblage of associated flint with a high proportion of diagnostic tools are particularly significant. Associations of Neolithic flint work with datable pottery of Durrington Walls style are scant in the region. Further analysis of these assemblages would provide useful chronological data and contribute to the study of Late Neolithic material culture in the region.

11.3 Evidence of Bronze Age and Iron Age activity on the site was represented by possible quarry pits and residual pottery and flint. The main phase of activity at Pocklington, however, belonged to the Romano-British period and was associated with a large rectilinear cropmark enclosure to the south-west of the site. Two main Romano-British phases have so far been identified dating to the Antonine period (2nd century) and the first half of the 4th century. Excavation of the north-eastern corner of the enclosure suggests that it dates to the 2nd century and that other boundary ditches and pits on the site represent the 4th century when a degree of reorganisation of the field systems and land use appears to have taken place. Artefactual and environmental data recovered from Pocklington has the potential to address certain research objectives (English Heritage: MTD4. 1997) regarding the classification of cropmarks in the region. The work at Pocklington has provided the opportunity to sample excavate a concentration of archaeological remains identified from cropmarks and collect valuable data regarding their date and function.

11.4 The late Neolithic and Romano-British remains from Pocklington are considered to be regionally significant in terms of adding to the corpus of current data and furthering our understanding of both periods in the region. A final publication report should be produced on selective aspects of the excavation for inclusion within an appropriate regional journal.

Report No: NAA 05/117
Date: October 2005
Project No. 591
Text: Jonathan L Tabor
Edited by: Paul Johnson, Mike Bishop
Illustrations: Andy Durkin, Catherine Chisman

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Appendix A

CONTEXT AND FINDS CATALOGUE

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
1		Top soil		4	1							7					
2		Layer	Spread over ditch 56 group 161	19	4?		1		1	5	4	75			1		1
3		Layer	Silty spread in south of site									3					
4	10	Cut of possible post hole	More likely root hole														
5	10	Fill of possible post hole (04)															
6		Void															
7		Void															
8		Cut of plough furrow															
9		Fill of plough furrow (08)										2					
10	10	Group of possible post holes	More likely root holes														
11	11	Group of hollows/ tree boles?															
12	10	Cut of small pit/root bole?															
13	10	Fill of pit (12)															
14	11	Cut of tree bole/hollow															

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
15	11	Fill of pit (14)															
16	11	Cut of tree bole/hollow															
17	11	Fill of pit (16)															
18	11	Cut of tree bole/hollow															
19	11	Fill of pit (18)															
20	11	Cut of tree bole/hollow															
21	11	Fill of pit (20)															
22	11	Cut of tree bole/hollow															
23	11	Fill of pit (22)															
24	11	Cut of tree bole/hollow															
25	11	Fill of pit (24)															
26		Cut of plough furrow remnant															
27		Fill of furrow remant (26)															
28		Cut of possible post hole	Possibly animal burrow														
29		Fill of possible post hole (28)		1													
30		Cut of plough furrow															
31		Fill of plough furrow (30)															
32		Cut of plough furrow															

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
33		Fill of plough furrow (32)										1					
34		Cut of post hole															
35		Fill of post hole (34)															
36		Fill of post hole (37)															
37		Cut of post hole															
38		Cut of plough furrow															
39		Fill of plough furrow (38)										2					
40		Human skeleton in (41)														1	
41		Cut of grave, contained (40) (42)															
42		Fill of grave (41)															
43		Cut of linear ditch segment	Feature number 56														
44		Upper fill of ditch (43)		242			1				5						
45	161	Cut of possible small ditch/pit															
46	161	Upper fill of ditch (45)										6					
47	161	Cut of ditch															
48	161	Upper fill of ditch (47)												4			1

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
49		Cut of ditch segment		28							1	1					
50		Upper fill of ditch (49)	Feature number 56	1							13						
51		Layer	Silty spread over group 260									2					
52		Cut of post hole															
53		Fill of post hole (52)															
54		Primary fill of ditch (49)															
55		Cut of ditch	Feature number 56														
56		Feature number for linear ditch	Feature number 56														
57		Primary fill of ditch (43)															
58		Primary fill of ditch (45)															
59		Primary fill of ditch (47)															
60		Cut of plough furrow															
61		Fill of plough furrow (60)															
62		Cut of plough furrow															
63		Fill of plough furrow (62)															
64		Human skeleton														1	

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
		in (65)															
65		Cut of grave, contained (64) (66)															
66		Fill of grave (65)															
67		Primary fill of ditch segment (55)															
68		Secondary fill of ditch segment (55)		1								1					
69		Tertiary fill of ditch segment (55)	Same as 70	12								13					
70		Tertiary fill of ditch segment (55)	Same as 69	24							13	6		4	2		
71		Cut of possible gully															
72		Primary fill of pit (71)															
73		Upper fill of pit (71)															
74		Cut of possible small ditch															
75		Primary fill of ditch (74)															
76		Secondary fill of ditch (74)															

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
77		Tertiary fill of ditch (74)															
78		Cut of possible ditch															
79		Primary fill of ditch (78)															
80		Secondary fill of ditch (78)		2													
81		Tertiary fill of ditch (78)															
82		Upper fill of ditch (78)															
83		Cut of small pit															
84		Primary fill of pit (83)															
85		Upper fill of pit (83)												2			
86		Cut of post hole															
87		Fill of post hole (86)															
88		Cut of pit															
89		Fill of pit (88)		9										4			
90		Cut of pit															
91		Upper fill of pit (90)															
92		Primary fill of pit (90)															
93		Void															
94		Void															

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
95		Void															
96		Cut of small pit															
97		Primary fill of pit (96)										1					
98		Upper fill of pit (96)		3													
99		Cut of small pit															
100		Primary fill of pit (99)															
101		Upper fill of pit (99)															
102		Cut of pit															
103		Fill of pit (102)															
104		Cut of pit															
105		Primary fill of pit (104)															
106		Secondary fill of pit (104)															
107		Upper fill of pit (104)												4			
108		Fill of pit (104)	Result of animal disturbance														
109		Cut of post hole															
110		Fill of post hole (109)															
111		Cut of gully															
112		Primary fill of gully (111)															
113		Upper fill of												4			

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
		gully (111)															
114		Cut of ditch	Same as 131														
115		Primary fill of ditch (114)															
116		Secondary fill of ditch (114)									1			3			
117		Upper fill of ditch (114)												3			
118	260	Cut of pit															
119	260	Fill of pit (118)										1		4			
120	161	Cut of pit															
121	161	Upper fill of pit (120)		6							1	13		3			
122	161	Cut of pit															
123	161	Upper fill of pit (122)															
124		Cut of ditch															
125		Primary fill of ditch (124)												4			
126		Upper fill of ditch (124)								3				4			
127	161	Primary fill of pit (120)															
128	161	Primary fill of pit (122)															
129		Cut of small circular pit															
130		Upper fill of small circular pit (129)									150			1			

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
131		Cut of ditch	Same as (114)														
132		Cut of small circular pit															
133		Primary fill of small circular pit (132)															
134		Secondary fill of small circular pit (132)												1			
135		Upper fill of small circular pit (132)												1			
136		Cut of small pit															
137		Fill of pit (136)												2			
138		Cut of small pit															
139		Primary fill of small pit (138)															
140		Upper fill of small pit (138)									7	1		3			
141		Cut of a pit															
142		Upper fill of pit (141)										5		4			
143	161	Cut of pit															
144	161	Fill of pit (143)										1					
145	161	Cut of pit															
146	161	Fill of pit (145)										1					
147	161	Cut of small ditch															

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
148	161	Upper fill of small ditch (147)	Same as 175									3		4			
149	161	Cut of possible pit	Same as 176														
150	161	Fill of possible pit (149)															
151	161	Cut of possible pit															
152	161	Fill of possible pit (151)															
153		Cut of ditch															
154		Primary fill of ditch (153)										2		4			
155		Re-cut of ditch (153)															
156		Primary fill of re-cut (155)		20							1	2		2	1		
157		Secondary fill of re-cut (155)												1			
158		Upper fill of re-cut (155)		21							13	2		4			
159	161	Cut of post hole/small pit															
160	161	Fill of post hole/small pit (159)															
161	161	Group of pits to north of ditch (56)															

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
162		Cut of plough furrow	Same as 250														
163		Fill of plough furrow (162)	Same as 251									1					
164		Cut of gully															
165		Fill of gully (164)												4			
166		Primary fill of 114 (duplicate)	Same as 115														
167		Cut of circular pit															
168		Primary fill of circular pit (167)		6		1					11	35		3			
169		Secondary fill of circular pit (167)		4							16	5	1	4			
170		Cut of grave, contained (172) (170)															
171		Fill of grave (170)									12						
172		Human skeleton in (170)														1	
173		Cut of ditch segment	Feature number (56)														
174		Upper fill of ditch (173)		46								6		4			
175	161	Cut of small ditch	Same as (147)														

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
176	161	Upper fill of small ditch (175)	Same as (148)									12		4			
177	161	Cut of pit															
178	161	Upper fill of pit (177)												3			
179		Cut of possible irregular gully	Possibly natural?														
180		Fill of possible irregular gully (179)	Possibly natural?								175			4			
181		Cut of ditch															
182		Primary fill of ditch (181)										2		4			
183		Secondary fill of ditch (181)															
184		Tertiary fill of ditch cut 181															
185		Primary fill of re-cut of ditch (187)		10								7		1			
186		Void															
187		Re-cut of ditch (181)															
188		Secondary fill of re-cut of ditch (181)		17							1	6		4			
189		Void															
190		Void															
191		Void															

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
192		Cut of ditch segment	Feature number (56)														
193		Primary fill of ditch (192)		3								2					
194		Secondary fill of ditch (192)		45							2	9					
195		Tertiary fill of ditch (192)		34								3					
196		Lense in ditch (192)	Lens of slumped natural gravel									1					
197		Cut of small pit															
198		Primary fill of pit (197)															
199		Upper fill of pit (197)															
200		Cut of pit															
201		Fill of pit (200)									8			4			
202		Primary fill of small circular pit (129)															
203	161	Cut of pit															
204	161	Fill of pit (203)															
205		Cut of possible small pit															
206		Primary fill of possible small pit (205)		172													
207		Upper fill of possible small pit (205)		34								6					

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
208		Human skeleton in (209)														1	
209		Cut of grave contained (208) (210)															
210		Fill of grave (209)									3						
211		Cut of possible small pit															
212		Primary fill of possible small pit (211)										4					
213		Secondary fill of possible small pit (211)	Gravel lens/layer														
214		Upper fill of possible small pit (211)															
215	161	Cut of pit	Part of group number (161)														
216	161	Fill of pit (215)															
217	161	Primary fill of small ditch (147)	Part of group number (161)														
218	260	Cut of pit															
219	260	Primary fill of pit (218)															
220		Primary fill of ditch (173)															
221	161	Primary fill of															

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
		ditch (175)															
222	161	Cut of pit															
223	161	Upper fill of pit (222)															
224	161	Primary fill of pit (222)															
225	161	Primary fill of pit (177)															
226	161	Cut of pit															
227	161	Upper fill of pit (226)															
228	161	Primary fill of pit (226)															
229	260	Secondary fill of pit (218)															
230	260	Cut of pit	Same as 252														
231	260	Fill of pit (230)	Same as 253														
232		Void															
233		Void															
234		Void															
235		Void															
236		Cut of pit															
237		Fill of pit (236)															
238		Truncated pit cut	Possible disturbance														
239		Truncated pit cut	Possible disturbance														
240	260	Secondary fill of pit (141)															

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
241	260	Primary fill of pit (141)	Same as 242														
242	260	Primary fill of pit (141)	Same as 241														
243	260	Cut of large pit															
244	260	Primary fill of large pit (243)									2						
245	260	Upper fill of large pit (243)									1			4			
246	260	Cut of pit															
247	260	Primary fill of pit (246)															
248	260	Secondary fill of pit (246)															
249	260	Upper fill of pit (246)												4			
250	260	Cut of plough furrow	Same as (162)														
251	260	Fill of plough furrow (250)	Same as (163)									5					
252	260	Cut of pit	Same as (230)														
253	260	Upper fill of pit (252)	Same as (231)								2	1					
254	260	Primary fill of pit (252)	Same as (255)														
255	260	Primary fill of pit (230)	Same as (254)														
256	260	Cut of pit															
257	260	Fill of pit (256)															
258	260	Cut of pit															

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
259	260	Fill of pit (258)															
260	260	Group of pits /depressions															
261	260	Gravel lens in 230															
262	260	Cut of pit															
263	260	Primary fill of pit (262)															
264	260	Secondary fill of pit (262)															
265		Void															
266		Void															
267		Natural sub-soil	Yellow, brown, sandy gravel														
301		Top soil	Area 2 – Watching Brief									1					
302	306	Cut of recorded plough furrow	Area 2 – Watching Brief														
303	306	Fill of recorded plough furrow	Area 2 – Watching Brief									2					
304		Cut of modern ditch	Area 2 – Watching Brief				1										
305		Cut of modern ditch	Area 2 – Watching Brief					1									
306		Group number for plough furrows	Area 2 – Watching Brief														
307		Fill of cut 304	Area 2 – Watching Brief														
308		Fill of cut 305	Area 2 –														

Context	Group no	Description	Notes	animal bone	human bone	charcoal	cbm	ceramic	cu alloy	fe	flint	pottery	pottery?	sample	shell	skeleton	stone
			Watching Brief														
309		Natural sub soil	Area 2 – Watching Brief, yellow brown sandy gravel														
			Total	764	1	1	3	1	1	8	442	259	1	117	4	4	2

Appendix B

FLINT

P. Makey

Introduction

The composition and incidence of the assemblage is given in tables 1 and 2. The excavation produced a total of 179 struck prehistoric lithics, including 4 pieces of edge utilised natural. The assemblage comes from 19 separate contexts. Nearly 47% of the material comes from the fill of pit 129. Unstruck pieces of natural flint and chert accounted for a further 266 pieces. Despite a restricted range of diagnostic implements the assemblage appears to be of a fairly restricted chronological span. Most of the material appears to have early to later Neolithic affinities, although a component of 'Beaker' type lithic material is also present. All the material is of a domestic nature.

State

Only 17 (9.5%) of the pieces exhibit traces of breakage. Seven of the broken pieces came from pit 129. The majority of the material is residual. The lithics from ditches 43, 49, 55 and pit 167 have been re-deposited. Flint material from gully 179 is in a variable state. The material from pit 129 is in a moderate state. Some flint from all of these features exhibits a slight degree of plough or agricultural damage; that is probably consistent with a degree of feature truncation.

Knapping and Raw Material

Approximately 39 (22%) of the pieces have been manufactured on coarse, grained chert, that varies in colour from brown to light grey. The remaining raw material is flint. A minor degree (10 pieces, 5.6%) of the flint raw material is chalk derived, seven of these pieces come from the fill of pit 167. Coarse on-site gravel, derived flint has been used in the manufacture of at least 68 pieces (38%). The remainder of the struck flint has been manufactured on local till derived raw material. The till material is finer-grained and olive grey in colour.

The assemblage is dominated by flake debitage. Chunky debitage constitutes a higher (23.5%) percentage of the assemblage than might normally be expected. . Nearly 70% (125 pieces) of the material is non-cortical and comes from final stages of knapping. The cores and core fragments are irregular examples with the exception of a tabular, two (record 212) platformed, bladelet core from a re-cut (context 155) of ditch 153's upper fill. The assemblage contains two flakes from cores (context 168) but no core rejuvenation flakes.

Traits

Patination

Patination is present on 103, of the pieces. The colour of patination varies from light grey to white. The degree and incidence of the trait is variable.

Use Wear

Use wear is present on 43 (24%) of the pieces. These pieces are predominately retouched. All the scrapers have been utilised. The scrapers tend to have been heavily used. An unusual feature of the

assemblage is the presence of use wear on natural flakes. Three of these came from gully 179 and one from pit 129.

Flint Typology and Function

The range of retouched implements is restricted.

Date

There are few datable pieces in the assemblage, although there is a marked degree of stylistic consistency in the debitage and it is probable that most of the material is of a similar date. The un-retouched flakes are stylistically early to later Neolithic in date. With the exception of a hollow based, arrowhead (record 134) from pit 129, most of the retouched pieces are not period diagnostic.

Most of the scrapers are large (*c.* 40mm long) sub circular forms with retouch on various areas. Some examples have a sub-squared end retouch. Most tend to have steep retouch and many specimens have faceted buts. These are consistent with specimens usually associated with later Neolithic Grooved Ware pottery of the Durrington Walls, style. The fill of pit 243 produced two small circular (c25mm long) scrapers of 'Beaker' aspect.

The most diagnostic implement in the assemblage is a petit tranchet derivative arrowhead (record 134) this came from the fill of pit 129. Such pieces have predominately Durrington Walls style Grooved Ware associations. The re-cut (context 155) of the upper fill of ditch 153 produced a single, residual, tabular core that may be of later Mesolithic date.

Archaeological Potential

The assemblage is domestic and residual. The relatively high proportion of scrapers is of note. The proportion of scrapers is consistent with un-stratified fieldwalked assemblages but here the proportion might have a functional explanation. Much of the raw material appears to have been procured on site; the use of a large proportion of chert is atypical for the region and has led to a large proportion of the debitage being very crude and almost indistinguishable from natural.

Although predominately residual, the potentially narrow date range of the material is important. Regionally the associations of Neolithic flint work with datable pottery, of Durrington Walls style is in need of further data. Firm early Bronze Age flint / pottery associations are equally scant.

Recommendations

A selection of the material should be catalogued with view to publishing if pottery and radiocarbon dates are consistent with the flintwork.

Illustration Requirements

A selection of flints (predominately scrapers) from pit 129 should be illustrated along with the arrowhead and miscellaneously retouched flake from the same feature. Depending on associations it might be useful to illustrate some debitage. Approximately 6–12 illustrations may be required.

TABLE B1: Composition of the Flint Assemblage

Artefact	**Number**	**Percentage (%) Total (Rounded)**	**Breakage**	**Use-Wear**	**Contexts**
Debitage					
Cores	4	2.2	2	1	158, 168 (×2), 169
Core Flakes & Rejuvenation	2	1.1	2	NA	168 (×2)
Chunks & Chippings / Spalls	42	23.5	NA	4	044 (×2), 130 (×29), 156, 158, 169 (×2), 180 (×7)
Flakes	91	51	6	11	049, 050 (×6), 070 (×5), 130 (×35), 140 (×5), 158 (×3), 168 (×2), 169 (×7), 171 (×2), 180 (×18), 201 (×4), 210, 253 (×2)
Blades & Bladelets	6	3.4	2	NA	002, 50 (×2), 130 (×3)
Utilised					
Edge Utilised Flakes	3	1.7	NA	2	121, 130, 158
Edge Utilised Blades	1	0.5	NA	NA	158
Edge Utilised Natural	4	2.2	NA	4	130, 180 (×3)
Retouched					
Miscellaneous Ret Flakes	5	2.8	2	2	130, 140, 158, 168, 180
Edge Retouched Flakes	2	1.1	NA	2	169 (×2)
Piercers?	1	0.5	1	1	130
Denticulates	1	0.5	NA	NA	050
Scrapers	16	9	2	16	130 (×12), 158, 169, 244, 245
Arrowheads: Ptd G	1	0.5	NA	NA	130
Totals	**179**		**17 (9.5%)**	**43**	

TABLE B2: Context/Composition of the Flint Assemblage

Context	**Number of Flints**	**Flint Forms**
002	1	Bladelet 1
044	2	Chunks & Chippings 2
049	1	Flake 1
050	9	Flake 1, Blades 2, Denticulate Flake 1
070	5	Flakes 5
121	1	Edge Utilised Flake 1

Context	**Number of Flints**	**Flint Forms**
130	84	Chunks & Chippings 27, Spalls 2, Flakes 35, Blades & Bladelets 3, Utilised Natural 1, Edge Utilised Flake 1, Misc Ret Flake 1, Piercer 1, Scrapers 12, Arrowhead 1
140	6	Flakes 5, Misc Ret Flake 1
156	1	Chipping 1
158	9	Core 1, Chipping 1, Flakes 3, Edge Utilised Flake 1, Edge Utilised Blade 1 Misc Ret Flake 1, Scraper 1
168	7	Cores 2, Core Flakes 2, Flakes 2, Misc Ret Flake 1
169	13	Core 1, Chunks & Chippings 2, Flakes 7, Edge Ret Flakes 2, Scrapers 1
171	2	Flakes 2
180	29	Chunks & Chippings 7, Flakes 18, Utilised Natural 3, Misc Ret Flake 1
201	4	Flakes 4
210	1	Flake 1
244	1	Scraper 1
245	1	Scraper
253	2	Flakes 2

Appendix C
PREHISTORIC POTTERY

T.G. Manby

Treatment

The material was received washed and stored in plastic containers by context. All the pottery is fragmentary, some pieces show fresh broken edges. All pieces were examined: they were was compared for joins (secured using UHU), all surfaces and fractures were searched for evidence of organic material as carbonised residues or as voids in the fabric wall; tempering agents were identified with the aid of a ×10 hand lens.

Analysis

Recording of the sherd assemblage was based on the Prehistoric Ceramic Research Group's, *The Study of Later Prehistoric Pottery: Guidelines for Analysis and Publication.* (1992).

Size: Sherd: Pieces in excess of 2.5 cm. square described.

Small Sherd: A piece between 1 cm. to 2.5 cm. square.

Flake: An angular piece split off vertically from the sherd wall.

Crumb: A featureless piece less than 1 cm. square.

No complete or reconstructable profiles were represented.

Catalogue

Depression Context 142.

Three small sherds, three flakes and twelve crumbs. Weight 11gm.

The three small wall sherds and a flake join into a wall fragment 4 × 2.5 cm., freshly broken edges all round.

Fabric: hard, laminated, rough brown exterior, dark grey interior.

Temper: sharp sand and much angular stone <3 mm. that erupts through the external surface; mostly chalk or an off-white limestone, rare dolerite, and angular voids.

Wall thickness: 9 mm.

The profile is featureless except for part of a hollowing in the exterior surface that is broken across and of extent unknown. Exposed within the fractured wall edge of the joined sherds there is a smooth walled cylindrical cast void, 16mm long and less than 1mm diameter that runs parallel to the exterior surface. (Such voids can be left by grass stems incorporated into the pot clay during manufacture that burn would burn out during firing).

This rejoined sherd does not show any evidence of weathering, the voids developing from solution of calcareous temper in the burial environment. There are few diagnostic characteristic in support of dating and cultural attribution. The exterior surface hollowing may be part of the vertical fluting left on the body surface of Middle Bronze Age bucket or barrel-shaped jars and urns. Also the use of some much angular stone tempering would also be consistent with a Middle Bronze Age Bucket/Barrel pottery of eastern Yorkshire (Manby *et al.* 2003, 65) that is well represented at the Catfoss Cemetery in Holderness (McInnes 1968, 7, P.2 and P.A).

Pit 167 Context 168

A total of 124 Pieces (including 86 minute crumbs) Weight 97 gm.

Two Vessels represented:

a. Rim, five pieces joining 5 × 5 cm., freshly broken edges. Incurving, internally expanded lip. Plain, two short converging scratch lines on the inner surface.

Fabric: rough dark grey to brown toned exterior, compact dark grey interior. Temper: fine angular sand, some sub-rounded quartz, rare white flint, some angular voids. Wall thickness 16mm. A patch of carbonised encrustation on the interior surface.

b. Base angle sherd 3 × 3 cm, Broken-off along the junction with a disc base. Applied vertical strip pinch-moulded, flanked by spaced diagonal lines made with a blunt point. Also eight exterior surface flakes, largest 3 × 3 cm, four showing short length of an applied strip flanked by diagonal lines and one piece has paired vertical lines flanked by diagonals.

Fabric: brittle layered orange-buff exterior, brown interior. Temper: scattered crushed chalk <3 mm, some angular voids. Also four featureless flakes and 20 crumbs in this fabric.

PIT 167. Context 169

A total of five pieces Weight 44 g.

Two vessels represented

a. Rim sherd, 3 × 3.5 cm. Broken edges slightly weathered. Pointed lip, slightly hollow internal bevel.

Fabric: plain. Compact orange-buff exterior, buff interior, dark grey core.

Temper: profuse grog and fine sand. Wall thickness 7 mm. Also two small flakes.

b. Two joining wall sherds, 5 × 5 cm fresh breaks. Applied horizontal strip with finger tip imprint. Orange-buff exterior, brown interior, dark grey core. Temper: fine sand, scattered angular chalk <3 mm, an angular fragment of dark shale or mudstone >5mm. Wall thickness 13–15 mm. From a vessel of large diameter.

The sherd characteristics of all the material from contexts 168 and 169 are those of Late Neolithic Grooved Ware of the Durrington Walls style.

Comments and Dating Pits 167 and 168

The small-size of the sherd material from the Pit 167 does provide enough profile and decorative features for an attribution to the Durrington Walls style, that is one of the four wide-spread styles, or sub-styles Grooved Ware identified by Wainwright and Longworth (1971, 240–2). Characteristic of this style are Grooved Ware are large flat-based barrel and bucket profiled jars, internally developed rims, and a particularly favoured decoration of applied strips vertical sub-dividing the pot body, with the intervening spaces commonly infilled with incised diagonal lines.

The temper agents used are consistent with local manufacture, sharp sand and chalk pebbles readily available in the site landscape composed of fluvio-glacial-laid sands and gravels..

Evidence of use is provided by the patch of carbonised material on interior of 168.a.; coupled with the dark surface tones below the rim suggesting scorching, this is either a by-product from a cooking usage of the vessel or it is a residue of a stored contents produced by fire-cleansing. Analysis for residual animal fats absorbed into the ceramic body of Neolithic pottery (Evershed *et al.* 1997) has recognised pig fats traces associated with Grooved Ware that contrasts with the Peterborough styles that are associated with dairy products in the determinations for assemblages from Walton Basin, Powys (Dudd and Evershed 1999). These results have been obtained on the recently excavated Grooved and Peterborough Ware assemblages from Sewerby Cottage Farm, Bridlington (info C. Fenton-Thomas)

The Grooved Ware styles are well represented in the chalkland of the eastern half of the Yorkshire Wolds, particularly in pit associations at numerous sites on Rudston Wolds and in Garton and Wetwang Slacks (Manby 1974, 16–76; 1999, 71–3). In recent years there has been a recognition of new sites in lowland areas such has the Vales of Pickering, York and Mowbray; the Pocklington site and another at Hayton (In prep. M. Millet and P. Halkon), in the sandy woldfoot zone setting close to a watercourse, is comparable with Heslerton in the Vale of Pickering (Haughton and Powlesland 1999, 69; and in prep.).

In its wider geographically distribution the Durrington Walls style, the most widespread of the Grooved Ware tradition, its distribution has recently been confirmed as far north as Inverness, in Scotland (Connolly and MacSween 2005, 39–42). And it has an eastern coastland bias extending south down to the south coast of England and westwards into Wales and Cornwall (Wainwright and Longworth 1971, 268–306: Cleal and MacSween 1999, 177–206).

The dating of Grooved Ware tradition's four designated styles based on radiocarbon determined associations extends from the end of the 4th millennium BC down to the middle or later 3rd millennium BC.; a range of *c.* 3000–2000 BC being advocated by Garwood (1995, 157–9, Fig. 15.5 and 6) from a refined analysis of radiocarbon dates from southern England. For the Durrington Walls style its earliest dated associations are in Scotland: at Hillend (Beta-73955) 4410+70 BP. range 3340–2910 cal BC. (Armit *et al.* 1994); and four dates from Milton of Leys (GU-9610–13) 4540±65, 4470±65, 4445±75, 4490±50 BP, range 3370–2920 cal BC (Connolly and MacSween 2005, 39). These early determination for the turn of the 4th to 3rd millennia BC are effected by the 3100–2900 Cal BC. radiocarbon dating plateau (Brindley 1999, 133). However there is a comparable assemblage from Littleour in eastern Scotland, of (AA-22906) 3750± 50 BP. in a later range of 2350–2030 cal. BC. (Barclay and Maxwell 1998. 58–67). For Yorkshire there are determinations in an early to mid-3rd millennium cal BC range from sites in the Vale of Mowbray (Abramson in Manby *et al.* 2003, 115) and the Wolds, but unlike the some dated associations from Southern England there are no dates that continue the Durrington Walls style's range down to the end of that millennium (Manby 1999, 68).

Further Analytical Processes

It is not recommended on this occasion that radiocarbon dating or lipid analysis should be undertaken in view of the small size of the assemblage and limited diagnostic characteristic of the sherds.

The rejoined sherd from Context 142 preserves within the wall body the cast of a straight cylindrical body created by an inclusion such as a grass stem. Examination by an archaeo-botanical expert may confirm this.

Appendix D

POTTERY

P Didsbury

Introduction and methodology

A total of 223 sherds, weighing 3351g and having an average sherd weight (ASW) of 15.0g, was recovered from the excavations. Material was quantified by the two measures of sherd count and sherd weight, according to fabric category within archaeological context. The data was entered onto an Access database, which is submitted as an integral part of this report and which should be consulted on matters of detail where appropriate. Fabric codes employed in the database are presented in an Appendix, below.

The site assemblage: fabric distribution

The material submitted was principally of Roman date, with smaller amounts of Iron Age and medieval pottery. The relative incidence of wares within the whole site assemblage is presented in Table D1, below. For fabric codes, see Appendix.

Table D1. Proportional fabric distribution within the site assemblage

Fabric	% no sherds n=223	% wt sherds n=3351 g	ASW (g)
Iron Age			
H1	1.3	0.3	3.0
H2	0.4	0.6	20.0
H4	0.4	0.4	14.0
Roman			
DW/DT	0.9	0.6	10.5
RCC	0.9	0.1	1.0
RCG	16.6	17.8	16.1
RG	42.6	44.2	15.6
RG1	16.6	14.2	12.9
RG1?	5.4	4.1	11.6
RM	1.3	4.6	51.3
RO	0.4	1.2	41.0
RO?	0.4	0.3	11.0
RS	0.9	0.4	6.5
Medieval			
SPB	0.4	1.3	43.0
SPB-T	0.9	0.7	25.0
UMED	8.1	7.2	13.3
YORGL	0.9	1.4	24.0
Uncertain/other			
FC	0.4	0.3	9.0
UNAT	0.9	0.2	4.0
TOTALS:	99.7	99.9	

Discussion: the context assemblages

Phase 1

A single amorphous fragment of apparently ceramic material was submitted from fill 169 of pit 167. This has provisionally been characterised as fired clay, and is fully described in the database. It should have been submitted to the appropriate specialist along with the rest of the prehistoric material from this feature.

Two pits ascribed to this phase in the 'Site Summary' provided, both belonging to Group 260, contained pottery. Fill 119 of pit 118 contained a single sherd of hand-made pottery from a calcareously tempered jar. An Iron Age date is probable. Upper fill 253 of pit 252 contained a single jar rim sherd in a black, gritty fabric. The sherd requires further research. It is possible that it comes from a vessel in the regional Anglo-Scandinavian 'gritty ware' tradition, cf. Holdsworth 1978, fig. 10, no. 132 for form but not fabric. A full description is given in the database. Group 260 was covered by silty spread 051, which contained two sherds of Roman greyware. A 2nd-century date may be appropriate for these sherds (see database).

Phase 2

Silty spread 002, which sealed the Romano-British features of Group 161, yielded a large, chronologically mixed assemblage (78 sherds, 938g). This represents *c.* 28–35% of the whole site assemblage, according to measure of quantification adopted. All except seven of the sherds are of Romano date. The full chronological range of the Roman component is not entirely clear, though the great majority would seem to be of 4th-century date, the latest diagnostic material being the Huntcliff jar, a type which is now held to have come into production in the mid-350s AD (Evans 1996, 76). The remaining seven sherds are medieval, the only diagnostic material being Staxton/Potter Brompton ware, which has a *c.* 13th- to 14th-century *floruit*.

Cut features of Group 161 yielded pottery from a small number of features, i.e. from two ditches and three pits. Pit 120 (fill 121) contained twelve sherds (ASW 15.6g) of greyware, the only chronologically diagnostic element being four sherds from a Crambeck Type 1 (*sensu* Corder 1937) straight-sided flanged bowl. Crambeck greyware was in production from *c.* AD 270/280, but was probably fairly localised until enjoying a wider distribution from the early fourth century onwards (Evans 1989, 79). Pits 143 and 145 (fills 144 and 146 respectively) each yielded single sherds of Roman greyware, not chronologically diagnostic. Ditch 045 (upper fill 046) yielded a small assemblage of six sherds (ASW 8.3g). A calcareously tempered jar is closely similar to earlier 4th-century vessels from the lower well deposit at Rudston Villa (Rigby 1980, see database for parallels), while a Dalesware or Dales-type jar rim could be contemporary. A *terminus post quem* in the period *c.* AD 300–50 would be the optimum for this deposit. Ditch 147=175 yielded twelve body sherds, weighing 83g. The presence of Crambeck greyware and Holme on Spalding Moor type fabrics (hereafter HOSM) together suggest a 4th-century date. Fill 176 yielded three sherds (ASW 8.0g) of greyware and samian. The samian is from a decorated bowl, the motifs including a scarf-dancer (see database for further description). The sherd can not be dated in advance of specialist opinion, though it serves to provide a *terminus post quem* within the samian importation period for the feature.

Group 161 was truncated by linear ditch 056. Two segments of this ditch produced pottery, viz. 174 (upper fill 173) and 192 (primary fill 193, tertiary fill 195 and lens 196). The upper fill of 174 contained six sherds (ASW 13.5g), and there is clear evidence, in the form of a proto-Huntcliff jar and sherds of Crambeck greyware, that this is at least an earlier 4th-century group. Further details and parallels are given in the database. In the case of segment 192, there is only a little evidence from the

primary fill, which contained two sherds (ASW 10.5g) of greyware. The most that can be said is that the fabric of these sherds is probably within the range of later 3rd- or 4th-century HOSM greywares. The tertiary fill of this segment contained three sherds (ASW 68.0g). Two of these sherds are in similar fabrics to those from the primary fill and one of them, indeed, is a physical join to a sherd from the lower deposit. The vessel in question is a wide-mouthed bowl of later 3rd- or 4th-century type. The dating tends to be strengthened by a sherd of *possible* Crambeck greyware. Interestingly, the only sherd from the above-mentioned lens is a dish of probable late Antonine or Severan date. Ditch 056 also yielded pottery from secondary and tertiary fills (068 and 069=070 respectively. Fill 068 contained the shoulder of a 4th-century calcareously tempered jar (30g), while 069=070 contained fifteen greyware sherds (ASW 13.9g) including *possible* 4th-century Crambeck greywares. Material of the 2nd-century, judged on fabric grounds, may also be present.

Another group of pits, also truncated by Ditch 056, lay to the south-west of Group 161. Pottery was recovered from two of these features. Primary fill 097 of pit 096 contained a single sherd from the base of a greyware jar, chronologically undiagnostic. Upper fill 140 of pit 138 contained a single sherd of greyware. The fabric *possibly* pre-dates the mid-3rd century, but no reliance should be placed upon this.

Primary fill 182 of enclosure ditch 181 yielded five joining sherds (131g), giving the complete profile of a dog-bowl with short outbent rim and deep basal chamfer. An Antonine date is to be preferred for this vessel (see database for parallel and further description). The ditch was recut as 187. Primary fill 185 of this recut contained seven sherds (ASW 34.8g) of calcareously tempered ware and greywares, the latter probably of 4th-century date; secondary fill 188 of this recut contained six sherds (ASW 24.8g). The most datable component is the rim of a mortarium which typologically is probably of early 3rd- to early 4th-century date, though this cannot be confirmed without specialist opinion. Further description is given in the database. The presence of Crambeck greyware in the same context suggests an early 4th-century *terminus post quem* for the fill.

To the north-west of ditch 056 are parallel ditches 124 and 153. In ditch 153, primary fill 154 contained single sherds (ASW 6.5g) of calcareously tempered ware and greyware. The most that can be said without further research is that fabric of the calcareously tempered sherd is closely similar to the fabrics of undoubted 4th-century vessels in the rest of the site assemblage. This ditch was recut as 155, and pottery came from both the primary and upper fills (156 and 158) of the recut. Primary fill 156 also had two sherds (ASW 6.5g) and is of similar composition and date to 154. Upper fill 158 contained two sherds (ASW 23.5g) of greyware and Roman oxidised ware. The latter is from a hemispherical flanged bowl of Dr. 38 type. It post-dates the mid-3rd century in this type of fabric. The form is particularly common regionally in 4th-century groups.

No dating evidence was recovered from the inhumations on the site.

Phase 3

Pottery was recovered from the fills of a number of plough-furrows, viz. furrows 008, 032, 038, 162, and 250. No feature number is recorded for fill 303, also apparently from a plough furrow. Diagnostic material suggests that the main period of deposition into these features was the thirteenth and fourteenth century. Residual Roman material occurs in furrow 250 and forms the sole content of furrow 162. The database may be consulted for further details.

Other features

A number of features not referred to in the 'Site Summary' also yielded pottery. These are summarised in numerical order below.

Topsoil 001 contained seven sherds (94g) of Roman and medieval pottery. The latest diagnostic material is of 13th-century date.

Silty spread 003, in the south of the site, contained three sherds (48g) of unattributed medieval pottery. The database may be consulted for details.

Context 50, the fill of a ditch segment, produced a single large sherd (85g) from the rim of a Huntcliff jar with double lid-seating groove. This dates from the mid-350s AD through to the early 5th century.

Possible small pit 205 had pottery in upper fill 207, amounting to six sherds (ASW 7.2g). The earliest material is a hand-made sherd, possibly Iron Age, though an earlier date cannot be ruled out. The latest was 4th-century, comprising a fragment from the rim of a calcareously tempered jar and a Crambeck greyware sherd.

Possible small pit 211 had pottery in primary fill 212 comprising four sherds (15g) from a single chronologically undiagnostic Roman greyware vessel.

Topsoil 301, from Watching Brief Area 2, produced a single body sherd (8g) of possible medieval material.

Conclusions and recommendations

The chronological range of the Roman pottery from the site is from the 2nd century through to the late 4th or early 5th. It will be evident from the above, however, that the majority of features containing diagnostic pottery suggest the first half of the 4th century as the main period of deposition. This would seem to be the case with the features of Group 161, with overlying silt 002 showing that ceramic deposition on the site continued past the middle of the 4th century. The 'Site Summary' states that ditch 056 branches from ditch 181, and that they appear to be contemporary. Material from the primary fill of 181 is, however, of 2nd-century date, and it is the recut of this ditch, 187, which appears to have similar assemblages to those from 056. Incidence of both 2nd-century and *later* 4th-century pottery is noted in the above discussion.

The assemblages are principally of low average sherd weight and limited evidential value. A very small number of vessels would justify illustration if it were decided to bring the site to full publication, and in this case specialist opinion on the mortaria and samian has the potential to refine the site dating to some extent. There is no over-riding need, however, to do any further work on these pottery assemblages, which are essentially typical of those from rural sites in the region at this period. The material should be retained in an appropriate material archive in the interests of future research.

Appendix D: fabric nomenclature and database codes

Roman fabric types are for the most part given generic codes. Named Roman fabrics follow accepted usage. Medieval fabric nomenclature, where specific, also follows accepted regional usage.

Code	**Fabric common name/remarks**
DW	Dalesware
DT	Dales-*type* ware
FC	Fired clay
H1	Hand-made pottery with calcareous temper, in the regional Iron Age tradition
H2	Hand-made pottery with non-soluble stone temper, in the regional Iron Age tradition
H4	Hand-made pottery, vesicular, in the regional Iron Age tradition
RCC	Roman colour-coated ware
RCG	Roman calcareously tempered ware
RG	Roman greyware
RG1	Crambeck greyware
RM	Mortaria
RO	Roman oxidised ware
RS	Samian
SPB	Staxton/Potter Brompton ware
SPB-T	Staxton/Potter Brompton-*type* ware
UMED	Unattributed medieval wares
UNAT	Unattributed to ware or period
YORGL	York Glazed ware

Appendix E
CERAMIC BUILDING MATERIALS

By J. Tibbles and S. Tibbles

Summary

The extremely small assemblage of three fragments of ceramic building material, although limited in interpretative value, represents the residual elements of Romano-British structures within the vicinity. The surfaces of some of the material were abraded and post-breakage burning/heat discoloration was noted which maybe attributed to re-use or occurred at source. The land drain reflects agricultural activity during the mid- to late 19th century.

Introduction and Methodology

A small assemblage that comprised three fragments of material with a total weight of 385g was submitted for assessment. The material was recovered from three contexts.

The assemblage was examined using a ×15 magnification lens were applicable to aid dating, though fabric analysis was not undertaken as was considered beyond the scope of this assessment. Information regarding the dimensions, shape and fabric (where applicable) was recorded and catalogued accordingly and a Munsell colour code has been incorporated where appropriate. The presence of the original surfaces was also taken into consideration to aid identification

It should be noted that the diversity of size and colour within the brick and tile caused during the manufacturing process must be taken into consideration when comparing examples within collected assemblages and typologies. The varying sizes and colours can be attributed to that variation in the clays used, shrinkage during drying, firing within the kiln or clamp and the location of the brick/tile within the kiln.

The dating of brick and tile can be highly contentious due to its re-usable nature and therefore the date range given is that of known dates where material has been recorded.

The Assemblage

Of the three fragments submitted, two were identified as Romano-British building material and were recovered from phase 2 contexts; 02 a silty spread and 44, the upper fill of ditch cut 43 (secondary fill of SW–NE boundary ditch 56). The Romano-British material comprised one fragment of *imbrex* and a fragment of tile, from context 44 and 02 respectively. The remaining fragment was identified as a land drain from 305.

The Romano-British Material

The *imbrex*, with a weight of 245g was of Fabric 1 and displayed moulding sand from method of manufacture. Crisp breaks were also noted. The fragment was reduced near throughout and slightly blown, caused by over firing during manufacture. A thickness of 17mm to 22mm (22mm at the blown section) was recorded. This evidence is characteristic of a second/waster material and although misshapen and ‘discoloured’ in appearance, the material could still be used within construction.

Although no form could be identified, the fragment from 02 was of Romano-British fabric (Fabric 2) and was categorised as tile. The tile bore a thickness of 19mm and a weight of 65g. The surfaces were abraded and post-breakage burning/heat discolouration was noted. This may be attributed to re-use or occurred at source.

The Modern Material

One fragment of a semi-elliptical land drain was recovered form context 305. A weight of 75g and a thickness of 20mm were recorded. The outer surface displayed evidence of extrusion, indicating a machine-made product of mid- to late-19th-century date.

Discussion

Due to its small size, the potential of the ceramic building material assemblage is limited. There is a noticeable absence of other forms such a *bessales, pedales* (bricks) and *tegulae*, within the Romano-British assemblage.

Although activity during this period was evident in the form of boundary ditches and pits, there appears to be no structural elements; for example foundations and trackways, or archaeological features such as hearths, which would indicate the use of the ceramic building material on the site. This is also reflected by insufficient evidence to determine re-use of the material due to the paucity of mortar or *opus signinum* adhesions. Its presence within the finds assemblage is likely to be a result of casual deposition.

However, the ceramic building material possibly represents residual elements of a Romano-British structure/s within the vicinity.

The land drain reflects agricultural activity during the mid- to late 19th century.

Recommendations

The Romano-British material is relevant evidence for comparative analysis with other ceramic building material assemblages recovered within the region and should be made available if such work is undertaken.

The Romano-British material should be deposited within the relevant museum. The land drain is recommended for discard. No further work is deemed necessary.

Appendix E.I

Fabrics

Fabric 1
Non-Gritty
Frequent course Fe? residue/ironstone grains (1mm)
Moderate mica flecks
Occasional fine white firing clay particles (0.5mm)
Occasional White firing clay lenses
Occasional fine quartz grains (0.5mm)

Fabric 2
Gritty

Frequent course quartz grains (1mm)
Frequent mica flecks
Occasional small quartz (3mm × 1.5mm)
Occasional black speckles
Occasional course Fe?/Ironstone grains (1mm)
Occasional fine white firing clay particles (0.5mm)

Appendix E.II

Catalogue

Context: (2) Silty Spread Phase: 2

One non-diagnostic tile. Weight: 65g. Thickness: 19mm. Abraded surfaces. Post-breakage burning/ heat discolouration.

Context (44) Upper Fill of Ditch Slot 43 Phase: 2

One fragment of *imbrex*. Weight: 245g. Thickness: 17mm. Reduced near throughout. Slightly blown. Possible second or waster. Crisp breaks.

Context (305)

One fragment of Land drain. Weight: 75g. Thickness: 20mm. Outer surface displayed extrusion marks. Internal surface very smooth. Mid- to late 19th century date.

Appendix F
WORKED STONE

Sarah Wilkinson

Introduction

A total of two quern stone fragments were recovered from excavations at Pocklington wastewater treatment works. Both fragments were from phase 2 (Roman) features.

Catalogue

No. 1, 02 AE (phase 2)

Lavastone quern fragment from layer 2. Very small fragment with surviving worn face. Dimensions: 36mm × 25mm × 30mm Weight: 29g.

No. 2, 48 AA (phase 2)

Sandstone quern fragment from the upper fill of ditch 47. Dimensions: 125mm × 108mm × 40mm becoming thinner at 34mm towards outer edge. Original diameter: approx 0.48m Weight: 938g

Discussion

Only one small fragment of lava quern (02 AE) was recovered from layer 2. The surviving piece has a small, well-worn grinding surface area remaining with part of the outer edge.

Lavastone was extensively exploited for use as quern stones from Prehistoric times until the Medieval period, however it was during Roman times that production was more intensive. Much of the lavastone found in Britain derives from the Mayen-Niedermendig area of the Eiffel hills of Germany, however, other sources were exploited in central and southern France and around the Mediterranean (Wright in Wilson 2002). In comparison to the south-east of Britain lava querns in the northern areas are generally restricted to predominantly military sites and prestigious civilian settlements. For example, villas at Rudston, East Yorkshire (Stead, 1980) and the fortified town of Catterick (Wilson 2002).

A fragment of fine-grained sandstone quern (48 AA) was recovered from the upper fill of ditch 47, possibly part of a flat rotary quern type. Flat rotary querns were introduced to Britain by the Romans and are often found broken or fragmented due to the potential for re-use. Fragments are often recovered from hearths, walls, paved surfaces and occasionally fragments were used as whetstones, grinders, or rubbers. The base and the edge of the example from Pocklington have been roughly finished with a well-worn, sloping grinding surface. The heat-reddened surface and two broken edges suggest possible re-use in a hearth or the base of an oven. From the surviving circumference it is possible to suggest an approximate original diameter of 0.48m.

Recommendations

No further work is considered necessary on either of the stones, however they should both be deposited in the relevant museum.

Appendix G
CONSERVATION

J. Jones

Quantification and condition

Nine objects were received for examination and X-radiography, comprising eight iron and one copper-alloy. The copper-alloy object (**02AD**) was found to be stable and lightly corroded. The majority of the iron objects were not in a very stable state, despite suitable storage conditions, with some cracking (**126AA**) and spalling (**02AG**) of the corrosion products.

Lightly corroded metallic material is defined as having a thin, often compact corrosion surface, sometimes with good patination, which obscures little of the object's form or surface detail. There is significant metal remaining below the corrosion surface.

Moderately corroded metallic material is defined as having the surface detail, but not usually the general form of the object, obscured by corrosion products, and has some metal remaining below the corrosion.

Highly corroded metallic material is defined as either having both the form and the surface detail of the object obscured by corrosion, and/or having little or no metal remaining in its core.

X-radiography

The objects were sorted into groups of a similar density, which were X-rayed together. One XR plate was used.

Most of the objects were confirmed as nails or nail fragments. 02AF is probably a very highly corroded blade point. The copper-alloy pin (02AD) appears to have a wound head.

Database

Details of the artefacts examined were entered into a database which includes the context and small finds number, an identification of the material and of the object, where possible, the condition of the object when examined, its XR plate number, and any technological or other observations.

Storage

The material was received suitably packed for short to medium term storage. It should continue to be stored in an airtight container at a stable temperature and below 20% RH, to inhibit further corrosion. The RH should be controlled by active silica gel, which is regularly monitored and regenerated as necessary.

Appendix H
SMALL FINDS

M.C. Bishop

Introduction

A small assemblage of material (one copper-alloy and eight ferrous items) from Pocklington waste water treatment works was examined in order to assess its potential value for further study.

Methodology

The items were examined by eye in tandem with the conservation report and X-rays and a brief catalogue compiled.

Catalogue

1. Fine copper-alloy pin. L: 18mm. 02 AD.

2. Fragment of ferrous knife blade, probably of Manning's (1985) type 12b, consisting of part of the tang and the back of the blade. L: 35mm. 02 AB.

3. Fragments of the tip of a knife blade, possibly of Manning's (1985) types 11 or 12. The possibility exists that it that belongs with No.2 above. L: 38mm. 02 AF.

4. Nail fragment. L: 44mm. 02 AA.

5. Nail fragment. L: 15mm. 02 AB

6. Nail fragment. L: 51mm. 02 AG.

7. Nail fragment. L: 35mm. 126 AA.

8. Nail fragment. L: 12mm. 126 AB.

9. Nail fragment. L: 28mm. 126 AC.

Discussion and assessment

Most of the material is indicative of Romano-British settlement in the vicinity. The nails presumably derive from structures whilst the blade fragments point to associated domestic or industrial activity. The copper-alloy pin is probably a modern intrusion. Little more can be said from such a comparatively small assemblage.

Recommendations

It is recommended that no further work be undertaken on the finds and, whilst the blade fragments and pin merit retention for possible future study, the nail fragments can be discarded.

Appendix I
HUMAN SKELETAL REMAINS

C.K. Russell

Introduction

The bones presented for examination and analysis were excavated in 2004, in advance of groundworks at the sewage treatment plant at Pocklington near York, North Yorkshire. A total of four contexts containing human bone were recovered; two extended supine burials (Sk40 and Sk64) and two crouched (Sk172 and Sk208). These were also examined *in situ* during the excavation process.

Preservation

Of the four skeletons examined Sk40 was the least complete (approximately 25%), having lost most of the skull and upper torso prior to excavation (probably by ploughing activity in the area), and much of the lower body – femur to feet – to recent machine cleaning of the site. Some of the machined-out bone was subsequently recovered, but all bone from this context was in a highly fragmentary condition. Sk64 was approximately 50% complete, although fragmentary. The skull vault and one tooth were recovered from this context (it is supposed that the remainder of the face and jaw was removed by ploughing). Sk172 was recovered >50% complete but fragmentary, and Sk208 was the most complete (albeit fragmentary) skeleton recovered at approximately 75%. Dental remains and fragmentary crania were recovered from these latter two contexts.

Additionally, all skeletons were extremely fragile, although bone preservation in itself was reasonably good at grades 0–1 (Brickley and McKinley 2004, 16), and most elements recovered fragmented further upon lifting and washing. Unfortunately, the epiphysial ends (and therefore joint surfaces) of most long bones were not recovered intact, and the bones of the torso (pelvis, vertebrae, ribs) of all contexts were in very poor condition.

Methods

Methods used follow standards laid out in Brickley and McKinley (2004). Additionally, sexing and ageing estimates employed standard techniques as described by Bass (1995), Brothwell (1981), Krogman (1962) and White (2000). Supra-gingival calculus and alveolar resorbtion were scored according to Brothwell (1981). Stature was calculated using formulae provided by Trotter and Glesser (1970). Metric and non-metric variation was assessed following Brickley and McKinley (2004).

Sex

Sk40 – The greater sciatic notch of the pelvis and the overall gracile nature of the bones present suggest a probable female. No cranial remains were available.

Sk64 – The long bones were large and robust, with prominent muscle attachments, indicative of a probable male. A prominent nuchal crest and mastoid processes also suggest male. No pelvic remains survived for sex assessment.

Sk172 – Cranial features (mastoid processes, supraorbital ridges and the orbital margin) suggest a male individual, as do a relatively robust mandible and large teeth.

Sk208 – The greater sciatic notch and presence of a pre-auricular sulcus along with relatively gracile bones suggest this is a female individual. The pre-auricular sulcus in this case was extreme, measuring approximately 22mm in length, 6.5mm greatest width and 3.5mm deep. Cranially, very slight supra-orbital ridges support this assessment.

Age at death

The fragmentary nature of the remains means that age assessments provided here rely largely on molar attrition, employing ranges given for Neolithic to Medieval British populations by Brothwell (1981, 72).

Sk40 – epiphysial fusion of the femur heads was complete, and the nature of the cortical bone suggests an older adult individual – probably the oldest of the four skeletons. Unfortunately no more precise estimate can be given due to the lack of diagnostic elements (teeth, pubic symphysis etc) available for analysis.

Sk64 – no epiphyses were available for analysis, but the fusion of the cranial sutures suggests an adult individual, and attrition of the single molar recovered suggests an age range of 35–45 years.

Sk172 – this individual possessed a full set of 32 teeth, and the 3rd molars were fully erupted. The epiphysial union of observable long bones indicated developmental completeness, and molar attrition suggests an age estimate of 25–35 years.

Sk208 – both right side 3rd molars were fully erupted, indicating a minimum age of approximately 21 years, and molar attrition suggests an age range of 17–25 years.

Metric data

Due to the fragmentary nature of the remains, no craniometric measurements could be taken for any of the skeletons. Postcranially, a small number of measurements could be taken (some *in situ*) and these have been used to produce the stature estimations and platymeric and platycnemic indices below.

Stature

Stature was calculated where possible, using *in situ* measurements of bones taken by CKR, as no post excavation measurements could be taken due to fragmentation of the bones. Estimated heights are within the normal range for the period.

Skeleton	Sex	Bone used	Stature estimate (cm)	Stature estimate (in)
40	F	–	–	–
64	M	Femur (left)	167.32 (+/- 3.27)	Appx. 5 ft 6 in
172	M	Femur (right)	164.94 (+/- 3.27)	Appx. 5 ft 5 in
208	F	Humerus (left)	160.45 (+/- 4.45)	Appx. 5 ft 3 in

Platymeria and platycnemia

The proximal (upper) part of the femur and tibia shaft sometimes show differences in shape between populations, and this shape is recorded using the antero-posterior and transverse diameters of the shaft, which are used to generate an index (the platymeric for the femur, the platycnemic for the tibia) giving the degree of flattening of the shaft (antero-posterior in the femur, transverse in the tibia).

A low platymeric index has variously been thought to suggest a mechanical adaptation to supporting body weight (Townsley 1946 in Brothwell 1981) sometimes associated with pathological conditions such as osteoarthritis and osteoporosis, strain on the femur during childhood and adolescence (Cameron 1934 in Brothwell 1981) or a shortage of bone material due to calcium or vitamin deficiency (Buxton 1938 in Brothwell 1981).

Platymeria

Skeleton	Femur side? (left or right)	Index
40	left	88=eurymeric=moderate
64	Left	91.6=eurymeric=moderate
172	Left	80.7=platymeric=flattened
208	Left	74.8=platymeric=flattened

Platycnemia

Skeleton	Tibia side? (left or right)	Index
40	–	–
64	Left	75.4=eurycnemic=broad
172	Right	64.9=mesocnemic=moderate
208	Left	65.9=mesocnemic=moderate

Non-metric data

Cranially, Sk64 displayed a retained metopic suture (the suture that divides the frontal bone in childhood is not obliterated, but remains into adulthood) and wormian bones along the lambdoid suture (left side n=3, right side unobservable). The percentage frequencies of retained metopic suture and lambdoidal wormian bones in Iron Age Romano-British populations are 9.91% and 71.03% respectively.

Sk172 displayed a very pronounced lingual tuberculum (swollen into a separate 'cusplet') in both upper canines (Hillson 1996) and a 'double' supra-orbital notch.

The roots of each of the molars of Sk208 were fused.

No postcranial non-metric data were observed in any of the skeletons.

Pathological conditions

Trauma

A single instance of trauma was observed in the bones examined. Sk172 displayed an oblique fracture of the left fibula at about mid-shaft. This was well healed, apparently with minimal shortening, although it was impossible to compare the length of this fibula with that of the right side due to fragmentation and damage of these bones. There was no sign of infection of the fibula.

Infection

One instance of infection was observed in the bones examined. Sk172 had suffered from an episode of periostitis (inflammation) affecting the left tibia. This formed a patch of new bone approximately

90.5mm long and 15mm wide on the medial surface of the bone at about mid-shaft. This may have been related in some way to the fractured fibula also suffered by this individual, however the periostitis occurred on the medial side of the bone, while the interosseous surface, opposite the fibula, was unaffected, so any relationship which may exist between the two is unclear.

Joint disease

Sk172 was also the only skeleton to display evidence of joint disease, where slight osteophytosis (bony lipping) was observed affecting the distal joint surfaces of two unsided intermediate hand phalanges.

Dental disease

All the individuals with surviving dental remains displayed pathology to some degree.

Sk64 – Moderate lingual sub-gingival calculus on RM_2 (the only tooth recovered).

Sk172 – Slight to moderate sub- and supra- gingival calculus on most teeth, slight alveolar resorbtion visible in surviving sockets, and one serious caries (approximately 6.7mm wide and 5.5mm high) on the buccal (cheek side) crown surface of RM_3.

Sk208 – Slight to moderate supra-gingival calculus on most teeth, slight alveolar resorbtion (2–3mm) in observable sockets, and one small caries (approximately 1.5mm round) on the occlusal surface of LM_3.

Summary

These bones represent the remains of four adult individuals, probably two males and two females. Sex and age assessments have been provided, however the generally fragmentary and incomplete nature of the remains means these could not be as comprehensive or precise as would be desirable.

There is evidence of infection, trauma and joint disease only within one individual. This is likely to reflect the poor preservation of the bones, rather than being indicative of good health in the remaining individuals. All dental remains display some form of dental pathology, reflecting the generally poorer oral health of past populations.

In conclusion, no further osteological work needs to be undertaken on this collection, however the provision of secure dates for these burials would enable the relatively isolated data presented here to be included in studies of larger combined samples.

Quick summary table

Sk No.	**40**	**64**	**172**	**208**
Sex	Probable Female	Probable Male	Male	Female
Age	Adult	35–45	25–35	17–25
Stature	–	Appx 5ft 6in	Appx. 5ft 5in	Appx. 5ft 3in
Platymeria **Platycnemia**	Moderate –	Moderate Broad	Flattened Moderate	Flattened Moderate
Non-metrics	–	Metopic suture Wormian bones	Canine lingual tuberculum Double supra-orbital notch	Roots of molars fused
Pathology	–	–	Fibula fracture Tibial periostitis Osteophytosis of finger bones	–
Dental pathology	–	Moderate calculus	Slight to moderate calculus Slight alveolar resorbtion One buccal crown caries	Slight to moderate calculus Slight alveolar resorbtion One occlusal crown caries

Catalogue

Abbreviations used

LBS long bone shaft

EE epiphysial end

JS joint surface

Dental recording

1, 2, 3 etc permanent tooth and jaw present

– area/tooth missing

~~1, 2, 3~~ etc tooth present, jaw missing

c caries

Sk40

Right Leg: Large fragment femur head and neck (damaged). Large fragment femur shaft.

Left Leg: Fragment femur head and proximal shaft (damaged) ?Portion distal tibia

Right Arm: Nearly complete shafts of ulna and radius (in fragments) minus epiphysial ends.

Left Arm: Near complete humerus shaft including partial distal end. Ulna including some distal end and radius (no epiphysial ends).

Torso: Partial ascetabulum (L&R) (L&R). Numerous rib fragments and a few very small vertebral fragments. Many unidentifiable small fragments.

Small portion fibula and tibia shafts. Numerous unidentifiable long bone shaft fragments.

One complete and two partial (with distal joint surfaces) proximal hand phalanges. Nine metacarpal shaft fragments.

Three very small skull fragments.

Sk64

Right leg: Large section femur, minus epiphysial areas and small portion head. Large fragment tibia shaft and many smaller fragments of same.

Left leg: Large section femur, minus epiphysial areas and small portion head. Large fragment tibia shaft and many medium and smaller fragments of same. Three medium fragments of fibula (no EEs).

Right arm: Large fragments comprising almost complete shafts of humerus, radius and ulna (no EEs).

Left Arm: Large fragments comprising almost complete shafts of humerus, radius and ulna (no EEs), and smaller fragments of the same. One metacarpal shaft.

Right and Left clavicles: minus medial and lateral ends.

Numerous small rib fragments and unsided patella fragments. Numerous very small fragments of pelvis including small portion ascetabulum. Fragments of left and right scapulae (acromion process) and many very small fragments.

Five fragments of proximal hand phalanges, three with distal JSs. Shaft fragments of four metacarpals. Few smaller fragments hand bones.

fragment unsided cuboid, very damaged.

Skull (almost complete vault in large and smaller fragments) and mandible fragments. One tooth (lower right second molar).

Sk172

Right leg: Complete patella. Neck and partial head of femur, and large shaft fragment. Portion tibia shaft and partial distal end. Fragments of fibula shaft. Partial calcaneus. Partial ?cuboid. Numerous small unidentifiable fragments LBS.

Right foot, including partial calcaneus, talus, navicular, 1st and 3rd cuniform, four fragments metatarsals (including one distal and two proximal ends) and three fragments of foot phalanges.

Left leg: Most of femur shaft (no proximal or distal ends). Partial tibia shaft, including fragment distal end. Fibula shaft (including small fragments distal and proximal ends). Numerous small unidentifiable fragments LBS.

Left foot, including navicular, 1st, 2nd and 3rd cuniform, fragments talus, fragments of six metatarsals and four proximal foot phalanges (including one with proximal and distal ends).

Skull: Large fragments of frontal, temporal, occipital and parietal bones, and many small fragments of the same.

Torso: Many small and very small fragments of torso. Some medium fragments of pelvis, ribs, scapulae and unsided humerus head fragment.

Left arm: Section distal end humerus shaft (no EE), fragment humerus head, distal end radius. Left ulna complete (fragmentary) minus distal end. Several small unidentifiable fragments.

Right arm: Partial distal humerus shaft including partial distal end and fragments head. Proximal end and shaft of ulna. Fragments of radius shaft, proximal head. Fragments scapula.

Hand bones: Whole or fragments of nine distal hand phalanges, eight intermediate hand phalanges, one proximal hand phalanx and five metacarpals. R&L trapezoid, R& fragment L capitate, R&L scaphoid, L lunate, L&R hamate, fragment triquetral, fragment pisiform.

Maxilla	Right	8 7 6 ~~5 4 3 2 1 1 2 3 4 5 6 7 8~~	Left
Mandible		~~8 7 6 5 4 3 2 1 1 2 3 4 5 6 7 8~~	
		c	

Sk208

Right leg: Two large fragments femur shaft and small fragment head. One large fragment tibia mid-shaft. Fibula shaft (fragments × 2) minus EEs. Numerous small fragments of Femur, tibia and fibula.

Left Leg: Femur shaft complete in two fragments, including head (damaged). No distal end. Tibia shaft almost complete, no distal or proximal end. Fibula shaft almost complete, no distal or proximal ends. Fragments of patella and many small unidentifiable LBS fragments.

Torso: Several large and many smaller fragments of pelvis. Several large fragments ribs and many small unidentifiable torso fragments.

Right arm: Humerus and radius shafts in two fragments each, including fragments of distal humerus and distal radius. Fragment scapula.

Left arm: Humerus, ulna and radius shafts complete, each in two large fragments. Small fragment humerus head, fragment proximal radius, fragment scapula. No other EEs. Many small unidentifiable fragments.

Hand bones: R&L lunate and one other fragment unidentifiable carpal bone, Two metacarpals (including proximal joint surfaces), Three proximal hand phalanges (including distal joint surfaces), three intermediate hand phalanges (including proximal and distal joint surfaces) .

Foot bones: Fragments of seven metatarsals (including one partial proximal JS), fragments of nine proximal foot phalanges including seven distal JSs and three proximal JSs), six very small foot bones – four may be intermediate foot phalanges, and two may be sesamoid bones. One unidentifiable tarsal bone, and numerous small fragments.

Skull: Almost complete skull, but very fragmentary, including partial mandible and maxilla. Three unsided auditory ossicles.

Maxilla	Right	8 7 6 5 ~~4 3 2 1~~ ~~1 2 3 4 5~~ – – ~~8~~	Left
Mandible		8 7 6 5 4 ~~3~~ – ~~1~~ ~~1 2 3 4 5~~ 6 7 ~~8~~	

c

Appendix J
BIOLOGICAL REMAINS

Juliet Mant, John Carrott and Örni Akeret

Introduction

An archaeological excavation was carried out by Northern Archaeological Associates (NAA) at Pocklington Waste Water Treatment Works, Canal Lane, Pocklington, East Riding of Yorkshire (NGR SE 798 478) during 2004.

The excavation took place in advance of an extension to the treatment works. Archaeological features of prehistoric, Roman and medieval date, including pits, ditches and graves, were revealed.

Remains recovered from thirty-six sediment samples ('GBA'/'BS' *sensu* Dobney *et al*. 1992) processed by NAA and small quantities of hand-collected shell and bone (the latter previously reported separately as Mant 2005) were submitted to Palaeoecology Research Services Limited (PRS), County Durham, for an evaluation of their bioarchaeological potential. The remains from 25 of the deposits were scanned, whereas those from the other eleven (those selected by the excavator) were examined in more detail.

Methods

Sediment samples

The sediment subsamples were processed by NAA prior to delivery to PRS, and the unsorted dried 'flots' (hereafter termed washovers) and biological remains recovered from the residues submitted for assessment. The weights and volumes of the subsamples were recorded before being placed onto 500 micron nylon mesh in a sieving tank. The light organic fraction was washed over into a 500 micron sieve to collect the washovers. Both the washover and residue fractions of the processed subsamples were dried.

For seven of the deposits, the charred plant remains submitted for identification were also examined for their suitability for submission for radiocarbon dating by standard radiometric technique or accelerator mass spectrometry (AMS).

Nomenclature for plant species follows Stace (1997) and identification of charcoal follows Schweingruber (1978).

Each of the evaluation subsamples examined gave small assemblages of land snails. The washovers were scanned and the remains were identified to species (main source, Kerney and Cameron 1979) where possible (within the constraints of the assessment). The abundance of the snail taxa present was recorded semi-quantitatively on a four-point scale: f – few (up to four individuals); s – some (four to twenty individuals); m – many (21–50 individuals); v – very many (more than 50 individuals). Where minimum numbers of individuals could be readily determined counts were recorded.

Hand-collected shell

A very small quantity of hand-collected shell (representing material from four contexts) was submitted. Brief notes were made on the preservational condition of the shell and the remains

identified to species where possible. The weight (in grammes) of shell from each context was recorded.

For oyster (*Ostrea edulis* L.) shell additional notes were made regarding: numbers of left and right valves; evidence of having being opened using a knife or similar implement; measurability of the valves; damage from other marine biota (e.g. polychaet worms and dog whelks); encrustation by barnacles. Preservation was recorded using two, subjective, four-point scales for erosion and fragmentation—scale points were: 0 – none apparent; 1 – slight; 2 – moderate; 3 – high.

Hand-collected vertebrate remains

For the hand-collected vertebrate remains, subjective records were made of the state of preservation, colour of the fragments, and the appearance of broken surfaces ('angularity'). Other information, such as fragment size, dog gnawing, burning, butchery and fresh breaks, was noted where applicable.

Fragments were identified to species or species group using the PRS modern comparative reference collection. The bones that could not be identified to species were described as the 'unidentified' fraction. Within this fraction, fragments were grouped into three categories: large mammal (assumed to be cattle, horse or large cervid), medium-sized mammal (assumed to be caprovid, pig or small cervid) and completely unidentifiable. These are shown as 'unidentified' in Table J4.

Results

Sediment samples

The results are presented in context number order, with archaeological information provided by the excavator presented in square brackets. A brief summary of the processing method and an estimate of the remaining volume of unprocessed sediment follows (in round brackets) after the sample numbers (this information was also provided by the excavator).

All of the washovers that were examined in more detail were mostly of rootlets (with the exception of that from Context 182 which was mostly of land snails) and a range of uncharred seeds and fruits were also present. These were considered to be modern contaminants and are not listed. All of the ancient plant remains presented below were preserved by charring.

No ancient insect remains were recovered but modern contaminant beetles and/or other arthropods were present in Contexts 89, 121, 165, 168, 174, 176, 245 and 249.

Notes on the components of those washovers not discussed more fully in the following text are presented in Table J1.

All of the bone recovered from the samples was poorly preserved with considerable surface erosion. Table J2 gives notes on the bone from the residues from those samples not considered in more detail.

Context 89 *fill of Pit 88; Romano-British*

Sample AA (11.5kg/8 litres sieved to 500 microns with washover; approximately 30 litres of unprocessed sediment remain)

The small washover from this sample (~30ml) produced six grains of emmer/spelt wheat (*Triticum dicoccum* Schübl./T. *spelta* L.), one grain of oat (*Avena*), one grain of barley (*Hordeum distichon* L./*H.*

vulgare L.), and three more cereal grains that could not be identified more precisely. There were some small unidentified charcoal fragments. Land snails recovered included three *Trichia ?hispida* (L.) and single individuals of *Cochlicopa ?lubrica* (Müller) and *Vallonia ?excentrica* Sterki (both represented by apex fragments), but most of the remains (from 25 or more individuals) were of the burrowing land snail *Cecilioides acicula* (Müller).

Context 113 *upper fill of Gully 111; unknown date*

Sample AA (11kg/? litres sieved to 500 microns with washover; approximately 30 litres of unprocessed sediment remain)

The small washover (~15ml) gave nine cereal grains that were poorly preserved and could not be identified more closely. One caryopsis of brome (*Bromus*) and a few small charcoal fragments were also found. There was a small land snail assemblage dominated by *C. acicula* (at least 50 individuals), with six *T. ?hispida* apex fragments and a single *Pupilla muscorum* (L.)/*Lauria cylindracea* (da Costa)—this last could not be identified to species because of adhering sediment obscuring the diagnostic features of the mouth of the shell.

Shell remains recovered from the sample residue consisted of a single *Aegopinella ?nitidula* (Draparnaud) and a fossilised fragment of a Jurassic bivalve *Gryphaea* sp. (Devils' toenails).

Context 117 *upper fill of Ditch 114; unknown date*

Sample AA (11.25kg/ 8 litres sieved to 500 microns with washover; approximately 20 litres of unprocessed sediment remain)

There was a small washover from this sample of approximately 15 ml. Ancient plant remains consisted of a small number of tiny charcoal fragments. The land snail assemblage was rather more diverse than those from the preceding samples but again dominated by *C. acicula* (30 or more individuals). Other snail taxa present included *T. hispida* (five or more individuals), *V. ?costata* (Müller) (two), *V. ?excentrica* (three), *C. lubrica* (three, two as apex fragments only) and single remains of *Vertigo ?pygmaea* (Draparnaud) and *Carychium ?tridentatum* (Risso).

Context 121 *upper fill of Pit 120; Romano-British*

Sample AA (10kg/8 litres sieved to 500 microns with washover; approximately 20 litres of unprocessed sediment remain)

Of the deposits examined in more detail this one yielded the largest number of plant remains (Contexts 154, 156 and 157 all gave more, see Table J1). The small washover (~30 ml) contained five grains of emmer/spelt wheat, one barley grain and 24 other cereal grains that could not be identified more precisely. Some chaff was also present, with three glume bases of spelt wheat being identified. There were also three caryopses of brome and some unidentified charcoal. Shells of *C. acicula* again dominated the small land snail assemblage (at least 30 individuals being represented), but there were also five apex fragments of *T. hispida* and a single *V. ?costata*.

Context 165 *fill of Gully 164; unknown date*

Sample AA (14kg/10 litres sieved to 500 microns with washover; approximately 30 litres of unprocessed sediment remains)

There was a small washover (~20ml) from this sample. Of the three cereal grains found two could be identified: one was barley and the other emmer/spelt wheat. There were also tiny and unidentified charcoal fragments. The snail assemblage was mostly *C. acicula*, but there were also a few other identifiable remains including one each of *V.* ?*costata* and *V.* ?*excentrica* and fragments of six ?*Trichia* sp., together with further unidentified fragments.

A single small fragment (to 10mm) of very soft ?marine shell was recovered from the sample residue.

Context 168 *primary fill of circular Pit 167; Neolithic*

Sample AA (10kg/? litres sieved to 500 microns with washover; approximately 20 litres of unprocessed sediment remain)

Two cereal grain fragments, which could not be identified more precisely, were present in the tiny washover (~10ml). There was also a small land snail assemblage of twenty or more *C. acicula*, a single *V.* ?*costata* and a few other unidentified fragments.

Thirteen fragments of medium-sized mammal shaft (weight 2g) were recovered from this sample.

Context 174 *upper fill of Ditch 173; Romano-British*

Sample AA (11kg/9 litres sieved to 500 microns with washover; approximately 30 litres of unprocessed sediment remain)

The small washover (~25 ml) contained four cereal grains, one of which was barley and one wheat, the two others being unidentifiable. In addition, there were two caryopses of brome. The land snail assemblage from this sample included *P. muscorum* (four individuals), *V.* ?*excentrica* (twelve), apex fragments of *T. hispida* (six) and ?*C. lubrica* (one) and twenty or more *C. acicula.*

The residue from this sample produced nine shell fragments (probably all of a single *Cepaea/Arianta* sp. snail) and five fragments of medium-sized mammal vertebrae and shaft (weight 2g).

Context 176 *upper fill of small Ditch 175; Romano-British*

Sample AA (10kg/8 litres sieved to 500 microns with washover; approximately 30 litres of unprocessed sediment remain)

Of the 13 cereal grains in the tiny washover (~10ml) only five could be identified to genus level; they were all wheat (*Triticum*). The land snail assemblage from this sample was similar in composition to that from the preceding deposit including *P. muscorum* (one adult and one juvenile), *V.* ?*excentrica* (five), *T. hispida* (three) and twenty or more *C. acicula*, but with two additional taxa, *V. pygmaea* (one) and *C.* ?*tridentatum* (two) present.

Context 182 *primary fill of Ditch 181; Romano-British*

Sample AA (13kg/10 litres sieved to 500 microns with washover; approximately 30 litres of unprocessed sediment remains)

The small washover (~15ml) from this sample was mostly of land snails including *T. hispida* (eleven individuals), *Cochlicopa* ?*lubricella* (Porro) (three), *C.* ?*lubrica* (three), *P. muscorum* (nine),

Carychium ?*minimum* Müller (one), *V.* ?*excentrica* (seven) and *C. acicula* (fifteen). There was also a single shell tentatively identified as the freshwater snail *Valvata cristata* Müller. No ancient plant remains were found.

This sample produced a small, unidentifiable fragment of bone (weight <1 g).

Context 245 *upper fill of large Pit 243; Bronze/Iron Age*

Sample AA (11kg/7.5 litres sieved to 500 microns with washover; approximately 30 litres of unprocessed sediment remain)

No seeds or fruits were recovered in the small washover (~15ml) from this sample. There was a little charcoal, mostly as very small unidentified pieces, though one larger fragment (measuring approximately 9 × 8 × 4 mm) was stem wood of oak (*Quercus*). There was a small snail assemblage present which included some terrestrial forms—*C.* ?*tridentatum* (one), *T.* ?*hispida* (four, mostly as apex fragments), *V.* ?*costata* (one) and V. ?*excentrica* (two)—and two freshwater snails, *Bithynia* ?*leachii* (Sheppard) (a further apex fragment may have represented a third individual of this species).

Context 249 *upper fill of Pit 246; Bronze/Iron Age*

Sample AA (10kg/8 litres sieved to 500 microns with washover; approximately 30 litres of unprocessed sedimeni remain)

There was a small washover from this sample (~15ml) in which ancient plant remains were restricted to some very small unidentified charcoal fragments and a single whole, but poorly preserved, grain of barley. A small land snail assemblage was also present which included *V.* ?*costata* (three individuals), *V.* ?*excentrica* (five), *T. hispida* (five) and a single *P. muscorum/L. cylindracea* (this last could not be identified to species because of adhering sediment obscuring the diagnostic features of the mouth of the shell).

Hand-collected shell

Three of the four deposits from which shell was recovered (Contexts 70, 156 and 206) by hand-collection gave only a few land snail remains. For each the total weight of shell was 1 g or less and the remains represented one or at most two (Context 70) individuals of *Cepaea/Arianta* sp.

The fourth deposit, context 02, gave a single left oyster valve (26 g). This was rather poorly preserved (both erosion and fragmentation being recorded as '2' – moderate) and not measurable. There was perhaps the remains of evidence of the oyster having been opened using a knife (or similar), but this could not be definitely determined owing to the poor preservation. There was no fresh breakage evident and no damage to the shell from other marine biota was detected.

Hand-collected vertebrate remains

In total, one box (of approximately 20 litres) of vertebrate remains, amounting to 899 fragments was recovered from 25 deposits. Of these fragments, four were measurable and so of use for providing biometrical data. Many of the deposits were from pits and ditches dated to the Roman period, although material was also recovered from a pit dated to the late Neolithic and from several undated features. Pottery spot dates indicated that some of the Roman material could be further sub-divided into a number of date groups: 1st to 3rd century AD, 2nd to 4th century AD, 3rd to 4th century AD, 4th century AD and mid-4th to early 5th century AD (see Table J4).

Preservation of the remains was generally poor, although material from two deposits (Contexts 50 and 69) was described as well preserved. Several deposits (Contexts 44, 49 and 188) included remains of variable appearance, which may suggest the presence of some residual or re-deposited material. Two deposits (Context 2 and 80) included probable human remains, which may also indicate material of mixed origin. Fragmentation of the remains resulting from fresh breakage was extensive and affected material from most deposits. One piece of burnt bone was recovered (Context 44) and evidence of dog gnawing was limited to three contexts (Contexts 156, 185 and 207). Some of the remains had been butchered, including cattle and large mammal metapodials that had been chopped or split through the shaft (Contexts 69, 193 and 207) and a cattle tibia with knife marks on the shaft (Context 194). However, some evidence of butchery may have been obscured by the poor preservation of the material, as the surfaces of the bones were severely eroded.

Over 90% of the assemblage could not be identified to species as a result of the poor preservation of the remains. Of the species that could be identified, cattle were the most common but pig, horse, dog and sheep/goat were also present. A large part of the unidentified remains appeared to be large mammal, although some of the material was very fragmented.

There is a clear bias towards isolated teeth in the skeletal elements represented. Two-thirds of the cattle remains were teeth and they were also the most common element of horse recovered. This represents a preservation bias as when conditions for preservation are poor, enamel usually survives better than bone. The other cattle elements present were mostly bones from the head and feet, which probably represent primary butchery waste. However, the remains of medium-sized mammals, such as pig and caprovid, suggest that there was also a component of domestic waste. The bone-bearing deposits were mostly the fills of pits and ditches which were probably used as convenient places to dispose of rubbish.

Discussion and statement of potential

All of the examined deposits contained some intrusive modern contaminant remains (modern rootlets, *Cecilioides acicula*). Concentrations of ancient charred plant remains were very low in all contexts, and in most cases, their preservation was rather poor. Small fragments of charcoal were also present in all of the contexts, but, with the exception of one piece in Context 245 (which was of oak), were too small to be identified.

Small numbers of cereal grains (mostly poorly preserved and often not identifiable) were present in four of the five Romano-British contexts examined in more detail, but the largest concentrations were seen in three of the deposits from which the remains were only scanned, Contexts 154, 156 and 157 (Context 156 also exhibited the best preservation). Remains of wheat, barley and oats were found, presumably deriving from cleaned (there were few weed seeds) cultivated crops, but the low numbers and poor preservation render these assemblages of little interpretative value.

The determination of the presence or otherwise of material for radiocarbon dating was of particular interest to the excavator for seven of the deposits (Contexts 89, 113, 117, 121, 165, 245 and 249). Suitable material for AMS dating was present in each (with the exception of Context 117), mostly in the form of the charred cereal grains, though for Context 249 there was only a single grain and this could be close to the lower limit of the method. Context 245 gave no cereal grains and the only appropriate material was the fragment of oak stem wood charcoal (though see following paragraph).

Charred cereal remains are excellent candidates for submission for radiocarbon dating as, ideally, items selected for this purpose should be the product of one or a very few years of growth. For wood and charcoal, small twigs should be submitted when possible. If wood or charcoal of unknown age is

used for dating, the piece(s) may be from the centre of the trunk or a large branch of the tree (stem wood), and the time span between the growth of this wood (its carbon content being fixed at the point of cell formation) and the death of the tree may be several tens (sometimes hundreds, in the case of oak for example) of years. Secondly, prior to becoming burnt the wood may have been stored or formed part of a structure, also perhaps for many years. Both of these 'old wood' problems may result in a radiocarbon date significantly earlier than the charring event being returned.

Each of the processed subsamples examined in more detail (and also those scanned) gave some snails. In a few cases, these were only of the burrowing land snail *Cecilioides acicula* (which were present in all of the samples) and almost certainly intrusive to the deposits, but for most there were also other snail taxa more likely to be of ancient origin.

The identified remains from the single Neolithic deposit (Context 168) were too few for interpretation.

The two Bronze/Iron Age deposits examined (Contexts 245 and 249 – both pit fills) each gave small assemblages of snails. Both contained taxa (*Vallonia* species) indicative of dry, calcareous lightly vegetated places (such as short-turfed grassland). Context 245 also contained hints of slightly denser vegetation (most likely longer grass) in the form of a single *Carychium* ?*tridentatum* and also at least two freshwater snails (*Bithynia*? *leachii*). The latter may suggest standing water within the large Pit 243 at the time of the deposition of this fill, but equally may have arrived with waste or flood water. The current assemblage is too small to indicate if one of these interpretations is more likely than the others.

Five of the processed sample fractions examined in more detail were from deposits of Romano-British date. Three of these (Contexts 174, 176 and 182 – all ditch fills) gave slightly larger and more diverse assemblages than those from the deposits of earlier date, all of which were of a similar character. As for the deposits of Bronze/Iron Age date, species indicative of dry, calcareous, short-turfed grassland were present (*Vallonia* species, *Vertigo* ?*pygmaea*), together with *Pupilla muscorum* probably indicating areas of exposed rock. There were also smaller components suggesting damper/more shaded conditions (*Cochlicopa* and *Carychium* species). Most likely these smaller components reflect areas of longer grass growing within the ditches, with the dry short-turfed grassland species reflecting the surrounding environment. A single freshwater species was tentatively identified from Context 182 (?*Valvata cristata*), here perhaps most likely to have arrived with waste or flood water (if the identification is confirmed). The two other Romano-British deposits were both pit fills and each gave only a few snails (other than the ubiquitous *C. acicula*), too few to be of any interpretative value.

Three deposits of unknown date (Contexts 113, 117 and 165) all contained some land snails. From the first and last (both gully fills) the assemblages were mostly of *C. acicula*, with only a few other snails present which were insufficient for an environmental reconstruction. The third, Context 117 (ditch fill), gave a small assemblage very similar to those from the Romano-British ditch fills (see above) and interpreted in much the same way, i.e. reflecting a general environment of dry, calcareous, short-turfed grassland (though without the suggestion of exposed rock surfaces seen in the earlier fills), with longer grass growth within the ditch itself.

The hand-collected land snail remains were of no interpretative value, all being fragments of *Cepaea/Arianta* sp.—catholic taxa of no value in environmental reconstruction. The only other hand-collected shell was a single oyster valve recovered from Context 02, also of no interpretative value in isolation.

These excavations produced a small assemblage of vertebrate remains that were mostly well dated. A large proportion of the material was poorly preserved and few fragments were complete enough to

provide zooarchaeological information. Overall the remains appeared to represent primary butchery waste, with a small component of domestic refuse.

On the basis of the current material, should further excavation be undertaken in this area the likelihood of recovering well preserved assemblages of biological remains other than snails is small. The possibility of recovering better preserved assemblages of charred plant remains should not be entirely discounted, however.

Recommendations

Though occasionally present in moderate numbers, the poor preservation of the charred grains and other plant remains renders further study of these assemblages of little value. If material is required for radiocarbon dating of the highlighted contexts to be attempted then the remains listed in Table J3 are recommended.

Small assemblages of land snails were present in many of the washovers and, where these included remains of taxa other than *Cecilioides acicula*, further study may allow some more detailed environmental reconstruction. In order to maximise the size of the assemblages available for interpretation, it is recommended that all of the remaining sediment from Contexts 117, 174, 176, 182, 245 and 249, and all of those deposits listed in Table J1 with a score of 's' or 'm' in the 'Land snails' column, be processed to 300 microns.

No further work on the current hand-collected material is warranted.

Retention and disposal

All of the current material should be retained for the present.

Archive

All material is currently stored by Palaeoecology Research Services (Unit 8, Dabble Duck Industrial Estate, Shildon, County Durham), along with paper and electronic records pertaining to the work described here.

Table J1. Notes on the composition of other (not reported in the text) washovers from the processed subsamples from Pocklington Waste Water Treatment Works, Canal Lane, Pocklington, East Riding of Yorkshire. Key: mr – modern rootlets; sp – small particles of undisaggregated sediment; f – few (1 to 3); s – some (4 to 20); m – many (21–50). In 'Main component' constituents are listed in decreasing order of abundance.

Context/Sample	Main component	Charcoal fragments	Charred grains/seeds	Land snails	*Cecilioides acicula*
48/AB	mr	f (to 6 mm)	–	f	yes
70/AA	mr; sp	–	–	s	yes
85/AA	mr; sp; stones (to 10 mm)	f (to 5 mm)	–	s	yes
107/AA	mr	f (to 3 mm)	–	s	yes
116/AA	mr	f (to 3 mm)	–	s	yes
119/AA	mr; stones (to 12 mm)	f (to 4 mm)	–	f	yes
125/AA	mr; snails	f (to 5 mm)	–	m	yes
126/AA	snails	f (to 4 mm)	–	m	yes
130/AC	mr; sp	f (to 7 mm); also a little cinder	–	s	yes
134/AA	sp; mr	f (to 4 mm)	–	s	yes
135/AA	mr	f (to 5 mm)	–	s	yes
137/AA	mr	f (to 6 mm)	–	s	yes
140/AA	mr	s (to 7 mm)	–	s	yes
142/AA	mr; sp	f (to 6 mm)	–	f	yes
148/AA	mr	f (to 5 mm)	–	s	yes
154/AA	charred grains	f (to 5 mm)	The sample contained ~50 poorly preserved cereal grains. Those that could be identified were mostly emmer/spelt wheat, but at least two barley grains were also present and there was one caryopsis of brome.	s	yes
156/AA	charred grains	f (to 4 mm)	Of all the contexts investigated this was the one with the largest number of plant remains. Around 250 cereal grains were found, both emmer/spelt wheat and hulled barley being present. Some spelt wheat chaff was preserved and one seed of garden pea (*Pisum sativum* L.) – the only record of a pulse from the site. Weeds included corncockle (*Agrostemma githago* L.), brome, thistle	f	yes

Context/Sample	Main component	Charcoal fragments	Charred grains/seeds	Land snails	*Cecilioides acicula*
			(*Carduus/Cirsium*), knotweed (*Persicaria*) and dock (*Rumex*). Preservation was slightly better that in most other contexts.		
157/AA	charred grains; charcoal	s (to 8 mm)	Approximately 80 cereal grains, hulled barley and emmer/spelt wheat being present in more or less equal numbers. There was also a small amount of spelt wheat chaff and some brome caryopses.	f	yes
158/AA	charred grains	f (to 5 mm)	~12 poorly preserved cereal grains.	f	yes
169/AA	mr; sp	f (to 5 mm)	–	s	yes
178/AA	mr	f (to 5 mm)	–	s	yes
180/AA	mr	f (to 4 mm)	–	s	yes
185/AA	mr; sp; charcoal	f (to 4 mm)	–	f	yes
188/AA	mr; sp	f (to 12 mm)	f	s	yes
201/AA	mr	f (to 6 mm)	–	s	yes

Table J2. Notes on the bone recovered from other (not reported in the text) residues from the processed subsamples from Pocklington Waste Water Treatment Works, Canal Lane, Pocklington, East Riding of Yorkshire.

Context/Sample	No. fragments	Notes
70/AA	6	Small unidentifiable fragments.
148/AA	1	Unidentifiable.
156/AA	4	Sheep/goat lower molar.
158/AA	4	Medium-sized mammal shaft.
169/AA	4	Fragmented large mammal tooth and calcined medium-sized mammal shaft.

Table J3. Recommendations for material to be submitted for radiocarbon dating of highlighted deposits (if required) from Pocklington Waste Water Treatment Works, Canal Lane, Pocklington, East Riding of Yorkshire.

Context/Sample	Material recommended for radiocarbon dating	Recommended dating method
89/AA	Grains of emmer/spelt wheat	AMS
113/AA	Unidentified cereal grains	AMS
117/AA	No suitable material found	n/a
121/AA	Grains of emmer/spelt wheat	AMS

Context/Sample	Material recommended for radiocarbon dating	Recommended dating method
165/AA	Grain of barely	AMS
245/AA	Oak charcoal	AMS
249/AA	Grain of barley	AMS

Table J4. Hand-collected vertebrate remains from Pocklington Waste Water Treatment Works, Canal Lane, Pocklington, East Riding of Yorkshire. NB: Dating is based on pottery spot dates; 'undated' includes material from deposits from which no pottery was recovered.

species		**late neolithic**	**?iron age to 4thC**	**1st–3rdC**	**2nd–4thC**	**3rd–4thC**	**4thC**	**mid–4th-early 5thC**	**Roman**	**undated**	**total**
Canis f. domestic	dog	–	–	–	–	–	1	1	–	–	2
Equus f. domestic	horse	–	1	1	–	5	–	1	2	1	11
Sus f. domestic	pig	–	–	–	–	9	–	3	1	–	13
Bos f. domestic	cattle	2	–	–	8	2	3	19	9	2	45
caprovid	sheep/goat	–	–	–	–	–	–	1	–	–	1
Homo sapiens	human	–	–	–	–	–	–	–	–	1	1
?Homo sapiens	?human	–	–	–	–	–	–	–	4	–	4
unidentified		16	39	4	28	33	28	98	298	278	822
total		18	40	5	36	49	32	123	314	282	899

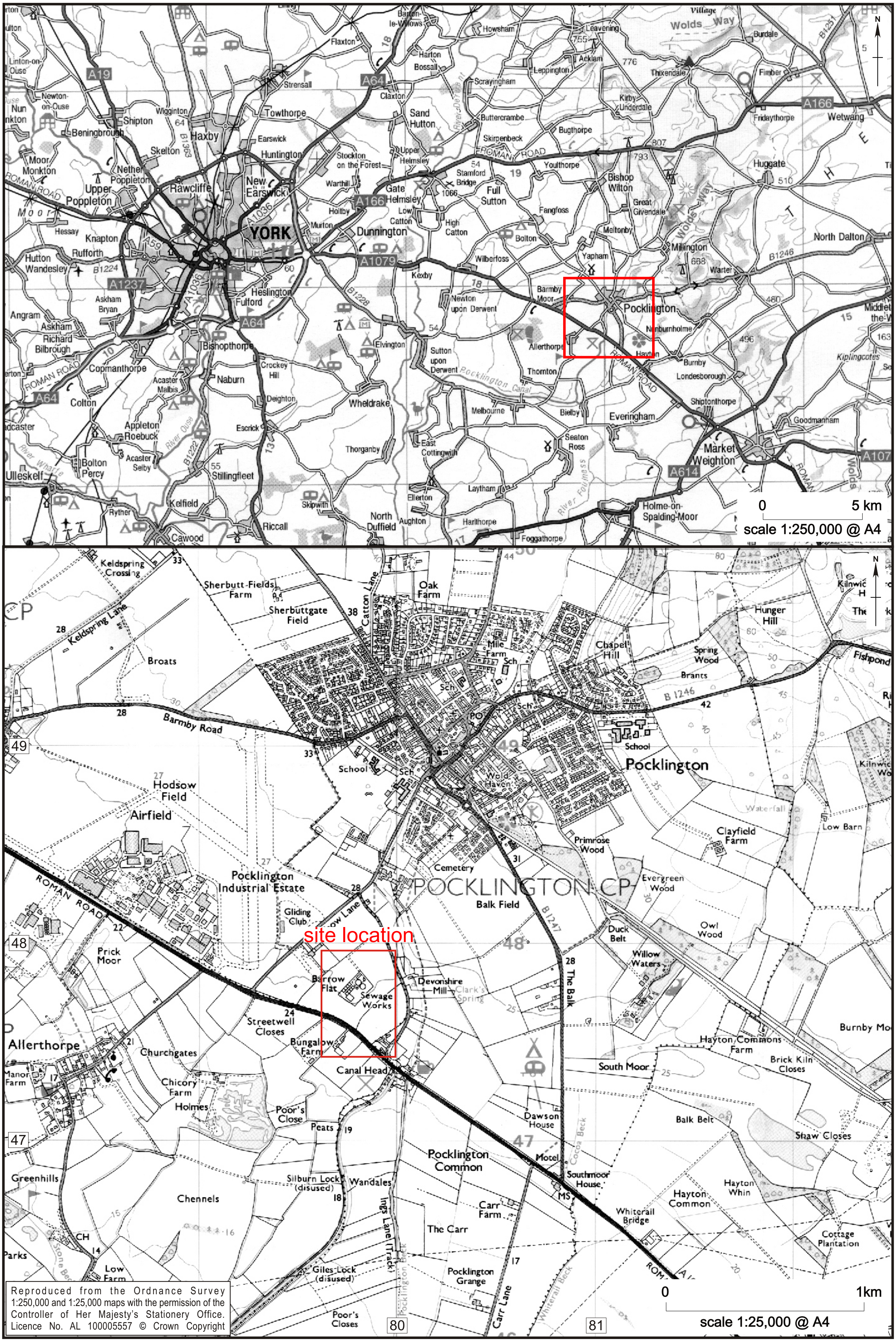

Figure 1 Pocklington Waste Water Treatment Works: site location

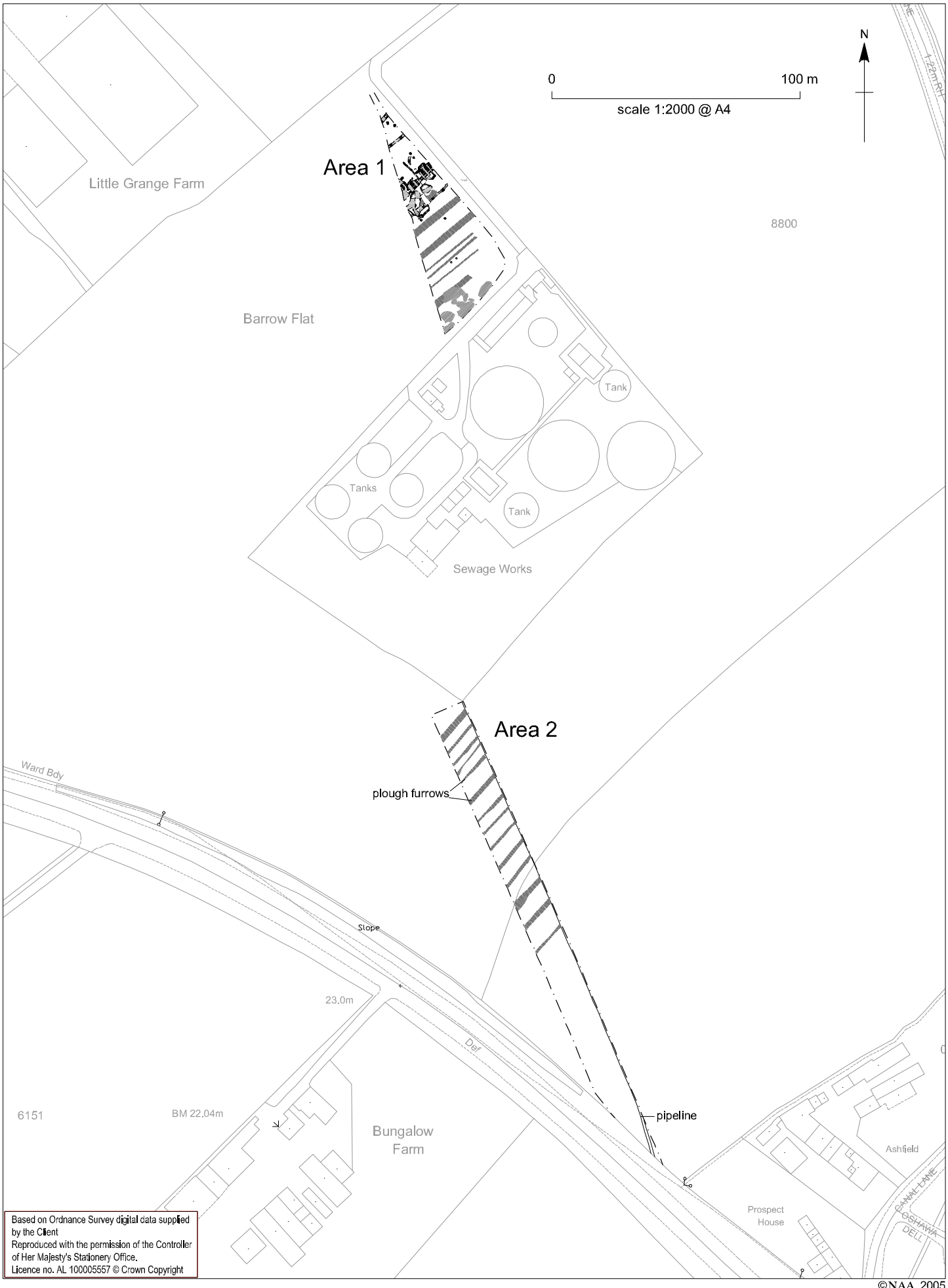

Figure 2 Pocklington Waste Water Treatment Works: areas of watching brief

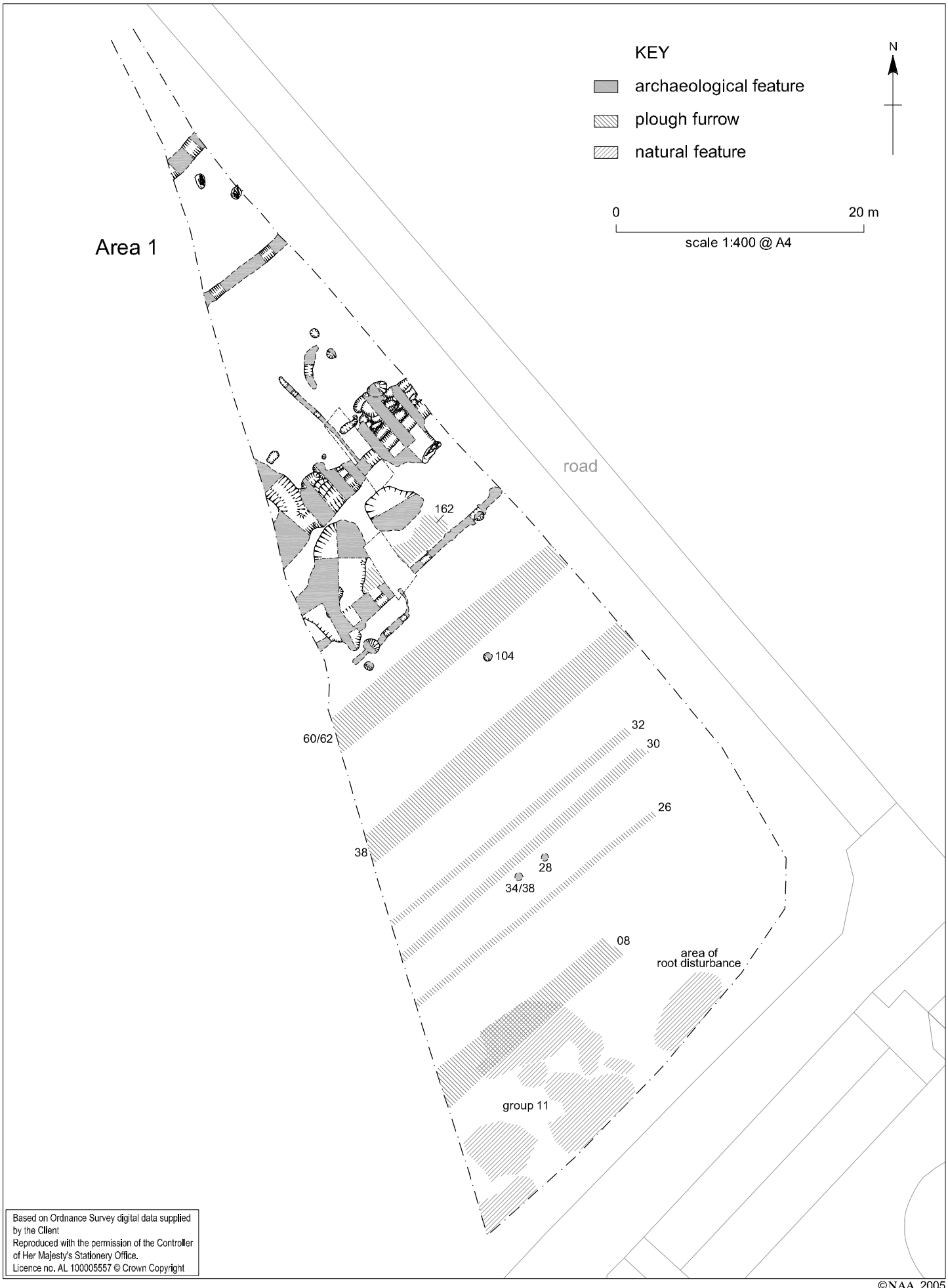

Figure 3 Pocklington Waste Water Treatment Works: plan of Area 1

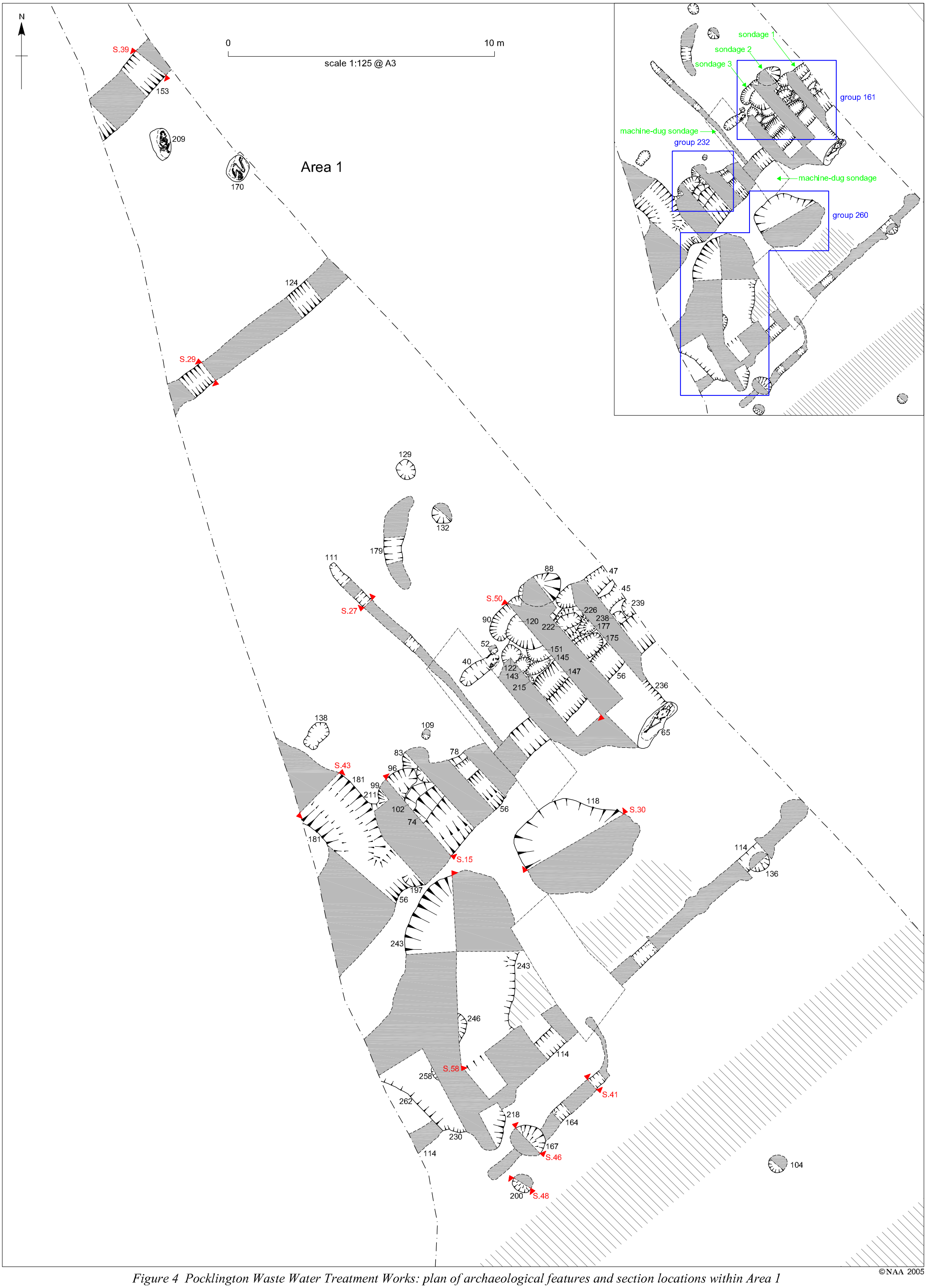

Figure 4 Pocklington Waste Water Treatment Works: plan of archaeological features and section locations within Area 1

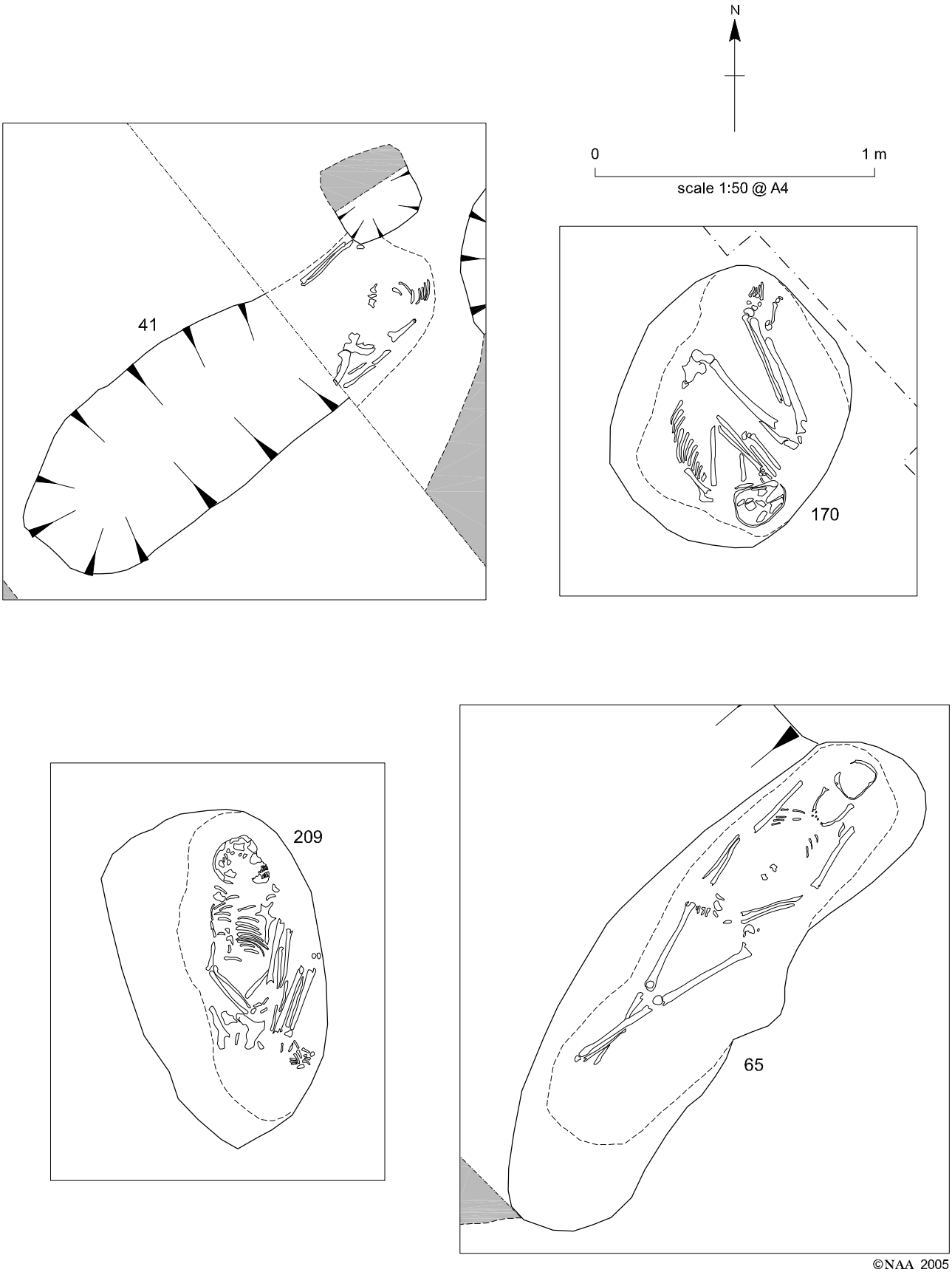

Figure 5 Pocklington Waste Water Treatment Works: skeleton plans

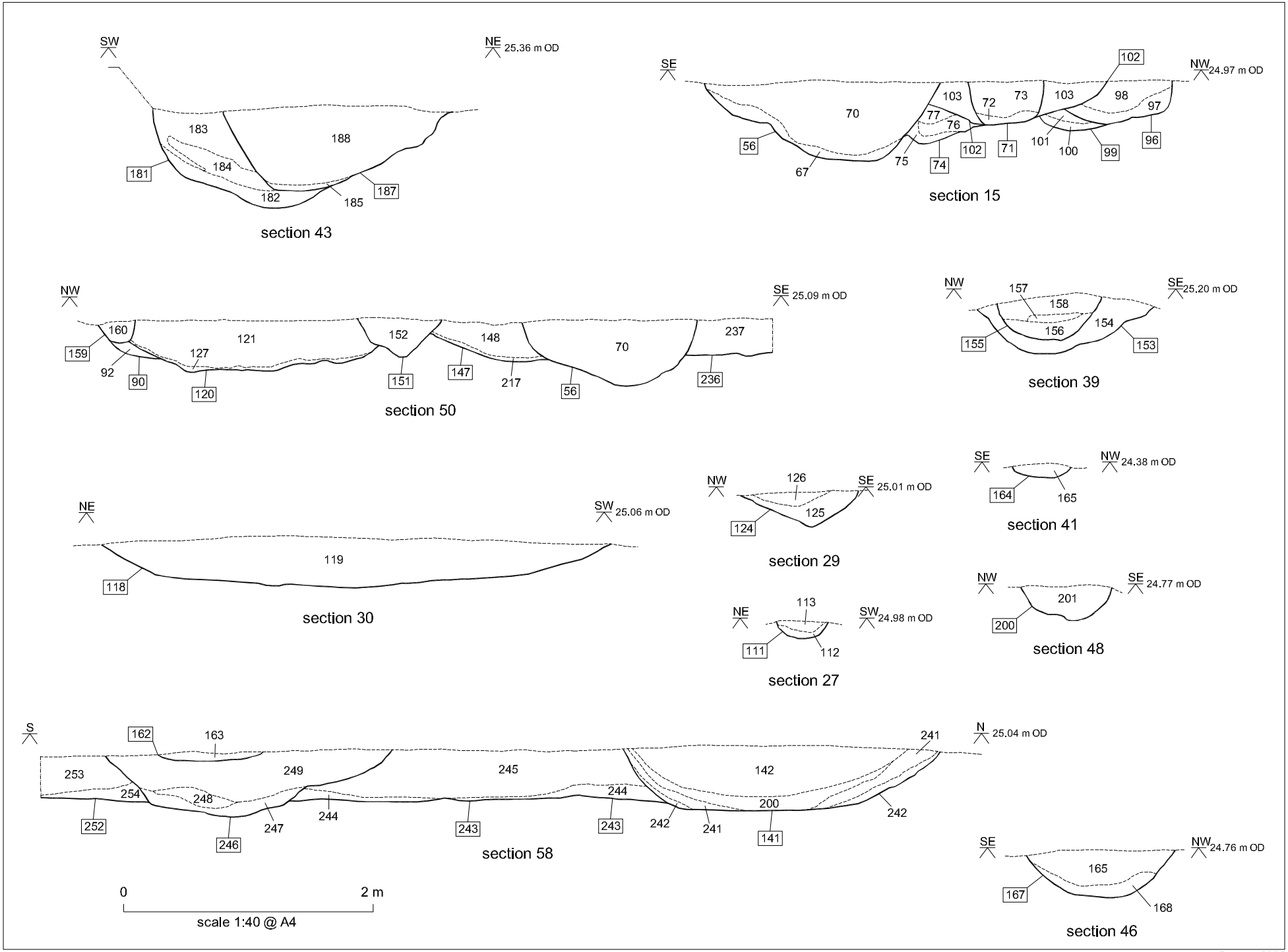

Figure 6 Pocklington Waste Water Treatment Works: sections

Plate 1 Pocklington Waste Water Treatment Works: hand excavation of the site

Plate 2 Pocklington Waste Water Treatment Works: late Neolithic pit 167

Plate 3 Pocklington Waste Water Treatment Works: enclosure ditch 181

Plate 4 Pocklington Waste Water Treatment Works: skeleton 208