

**WEST HOATHLY BRICKWORKS
SHARPTHORNE
WEST SUSSEX**

**PROGRAMME OF
ARCHAEOLOGICAL RECORDING FOR
PHASE 2 EXTRACTION (PART 4)**

For

IBSTOCK BRICK LIMITED

CA REPORT: 06119

APRIL 2007



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CA PROJECT: 2151
CA REPORT: 06119

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SUMMARY

Site Name: West Hoathly Brickworks
Location: Sharpthorne, West Sussex
NGR: TQ 3763 3286
Type: Watching brief
Date: 25 April-15 June 2006 & February 2007
Planning Reference: HO/36/98
Location of Archive: To be deposited with East Grinstead Museum
Site Code: WHS 06

A programme of archaeological recording was undertaken by Cotswold Archaeology (CA) as part of the latest phase of works associated with the extension of the clay quarry at West Hoathly Brickworks, Sharpthorne, West Sussex.

A large number of quarry pits, likely to have been the result of medieval iron ore extraction were identified within the former extent of Mare Pit Wood. Beyond and north of the wood the foundations of a building along with several pits likely to have been associated with medieval iron ore processing and smelting were also present. Post-medieval features were present within the former woodland and comprised two large clay extraction pits and several short drainage ditches.

1. INTRODUCTION

- 1.1 During April and June 2006 and February 2007 Cotswold Archaeology (CA) carried out a programme of archaeological recording for Ibstock Brick Ltd at West Hoathly Brickworks, Sharpthorne, West Sussex (centred on NGR: TQ 3763 3286; Fig. 1).
- 1.2 The programme of archaeological recording formed part of ongoing archaeological work required to fulfil a condition attached to planning consent for an extension to the clay quarry attached to the brickworks (planning ref.: HO/36/98). The objective of the archaeological work was to record any archaeological remains exposed during the development.
- 1.3 The archaeological fieldwork was carried out in accordance with a *brief* for archaeological recording prepared by Mr John Mills, Archaeologist for West Sussex County Council Economic and Environmental Policy Service, the archaeological advisor to the Local Planning Authority (LPA), and with a subsequent written scheme of investigation (WSI) produced by CA (2003) and approved by the LPA acting on the advice of Mr Mills. The fieldwork also followed the *Standard and Guidance for an Archaeological Watching Brief* issued by the Institute of Field Archaeologists (1999) and the *Recommended Standard Conditions for Archaeological Field work, Recording and Post-excavation Work (Development Control), Version 2b* issued by West Sussex County Council.

The site

- 1.4 The current works form the fourth part of the Phase 2 Extraction. They comprised two distinct topographical areas: the northern extent of Mare Pit Wood which occupies a hill crest and which contains archaeological earthworks, and an area of agricultural grassland which occupies a gentle north-facing slope to the north-east of Mare Pit Wood within which no earthworks are visible (Fig. 2).
- 1.5 The underlying geology of the area is mapped as Wadhurst Clay overlying Ashdown Beds Sandstones (Geological Survey 1977). The site lies at approximately 140m AOD.

Archaeological background

- 1.6 This archaeological watching brief formed part of a series of ongoing works during the extension of the clay quarry at West Hoathly Brickworks by Ibstock Brick Ltd. The general background to the archaeological works at the quarry has been outlined elsewhere (eg CAT 1999a) and it is not intended to reprise that information here. A summary of the findings of the previous archaeological work on site is presented below.

Prehistoric

- 1.7 Three flint flakes and a scraper were identified during the Phase 1 works (CAT 2001b). All were unstratified and dated to the Late Neolithic to Early Bronze Age.

Medieval

- 1.8 An evaluation prior to the Phase 1 Extraction identified several undated features including a stone-filled ditch, a posthole and a pit containing burnt material (CAT 1999b). The ditch was fully exposed during a subsequent watching brief along with a number of pits and postholes to its east. Pottery dating from between the 11th to 14th centuries was recovered from these features and material recovered from one of the pits included iron slag and fired clay likely to have derived from the walls of a charcoal-fired furnace. Several of the other pits and postholes also contained iron slag and burnt sandstone but all of this material was contained within backfill deposits and no *in situ* furnace was identified (CAT 2001b).

- 1.9 Within the Phase 2 Extraction Area visible earthworks within Mare Pit Wood were archaeologically surveyed (CAT 2000; 2001a) and an archaeological evaluation was carried out within the northern part of the wood (CAT 2000). This work showed that the earthwork features are likely to have been the remains of infilled iron ore quarry pits (presumed to be medieval on the basis of evidence elsewhere within the quarry (Worssam *et al.* 1987)) and associated spoil heaps. An archaeological watching brief undertaken during the first stage of topsoil stripping in the Phase 2 area identified an undated pit containing charcoal and iron smelting slag (CA 2004a).

Post-medieval

- 1.11 Earthwork features thought to be post-medieval in date were identified within Mare Pit Wood and comprised two substantial clay extraction (marl) pits and associated trackways and drainage channels (CAT 2000). An archaeological watching brief

undertaken during the first stage of topsoil stripping in the Phase 2 area revealed further information about the post-medieval marl extraction (Ca 2004a).

Methodology

- 1.8 The fieldwork followed the methodology set out within the WSI (CA 2003). An archaeologist was present during intrusive groundworks, comprising the removal of the topsoil and subsoil using a 360° tracked machine equipped with a toothless bucket (Fig. 2). All exposed features were then recorded in accordance with CA Technical Manual 1: *Fieldwork Recording Manual* (2005). After the site had been recorded, and in consultation with Mr Mills, the top 250mm of natural clay was graded off in order to facilitate subsequent clay extraction. An archaeologist was present during this work.
- 1.9 Subject to the agreement of the legal landowner, the finds and site archive will be deposited with East Grinstead Museum.

2. RESULTS

Introduction

- 2.1 Archaeological features were identified cutting the natural clay beneath the topsoil and subsoil horizons within two distinct areas. Within the former extent of Mare Pit Wood features were exposed of which some had been identified during the previous earthwork survey and evaluation. These comprised 49 pits, likely to be the result of medieval iron ore extraction, and two larger pits resulting from post-medieval clay extraction. A number of undated postholes and short ditches were also present. These features were bounded to the north-east by a ditch, to the north of which lay the post and beam-slot foundations for a building as well as a number of pits.

Prehistoric

- 2.2 Two pieces of worked flint were recovered as unstratified finds. They include a probable fabricator and an unutilised flake. The fabricator probably dates to between the Neolithic and early Bronze Age periods

Medieval

- 2.3 Forty nine medium-sized pits were identified within the former Mare Pit Wood (Fig. 3). All were sub-circular to sub-square in plan and appeared to fall into two size categories: a smaller group of 34 measuring between 2m and 4.5m in diameter and a larger group of 15 measuring between 5m and 8.5m in diameter. All were filled by material derived from the natural clay substrate. None of these pits has yet been excavated although it is anticipated that future clay extraction will expose the full depth of a selection of them. A fragment of post-medieval bottle glass was recovered from the final fill, 334, of one of the larger pits, pit 314 (for a discussion of the dating of these pits, see sections 3.1 and 3.2 below).
- 2.4 A narrow ditch, 322, was identified joining two of the pits (pits 326 and 318) and is therefore likely to have been contemporary with them. Four undated postholes were also identified (304, 306, 339 and 364). Of these, postholes 339 and 364 appeared to have been closely associated in plan with quarry pit 337 and may have formed part of a structure associated with it.
- 2.5 Although the southern and easternmost extent of this area of quarrying lay beyond the area stripped thus far, the distribution of the pits clearly followed the east-west contour line along the high point of the site. The northernmost extent of the quarrying was therefore circumscribed by the existing slope and was bounded by ditch 432/434. A number of postholes lay adjacent to this boundary ditch, probably indicating a former fence line. The fills of these features contained moderate quantities of iron slag and are likely to have been contemporary with the slag-filled features discussed below.
- 2.6 To the north of boundary ditch 432/434 Building 1 was identified (Fig. 4). The depth of the overlying overburden was very thin here and it is possible that some features associated with the building have been lost to erosion and ploughing. Nevertheless, a coherent ground plan of Building 1 was discernible. This comprised a series of foundation trenches and postholes dug into the natural clay substrate marking the ground plan of a building measuring 6m x 4m and having an entrance on its western side. The eastern side of Building 1 was marked by a single, centrally-placed posthole and might have been open. The western side of the building continued to the south beyond foundation trench 486 and might indicate the presence of an adjoining, partially open-sided structure.

- 2.7 The postholes and foundation trenches of Building 1 had been backfilled with iron slag and none contained any deposits that could clearly be ascribed to the initial construction phase of the building.
- 2.8 A short, slightly curvilinear ditch, 560, was located to the southwest of Building 1 and followed a similar alignment. As was the case with the features comprising Building 1, ditch 560 was filled with slag.
- 2.9 A large, shallow spread of iron slag, 564, lay just outside the western entrance of Building 1. This had been cut by the westernmost of an alignment of three roughly oval pits (545, 582 and 484). A small area along the base and edges of pit 545 had been scorched pink but no other *in situ* burnt material was identified in any of the pits. They had been backfilled with material similar to that filling the structural features of Building 1 and one sherd of 12th to 13th-century pottery were recovered from the fill of pit 484.
- 2.10 Two further oval pits, 427 and 551, lay to the south and east respectively of Building 1. They were similar in form to the other pits but contained fills derived from the natural clay substrate, although the upper fill of pit 427 contained moderate quantities of iron slag.
- 2.11 The northernmost exposed feature was sub-circular, scoop-shaped pit 552 which lay c. 40m to the north of Building 1 (Fig. 3). There was no indication of *in situ* burning within this pit, but it had been backfilled with a series of burnt fills interleaved with dumps of natural clay, perhaps intended to damp down burning embers.

Post-medieval

- 2.12 Two large pits, 330 and 343, were identified within the former area of Mare Pit Wood (Fig. 3). These had been recorded previously as earthwork features and interpreted as marl pits. Each was an irregular oval shape in plan with shallow edges and a flat base. They measured c. 40m in diameter and were c. 3-4m in depth. Neither was fully infilled but instead contained basal fills of redeposited natural clay overlain by organic material from the ponds formed within the bases of the pits themselves.
- 2.13 The remaining ditches seen within the former extent of Mare Pit Wood (Fig. 3) are likely to have been post-medieval in date: ditch 368 appeared to drain into marl pit 330 and ditches 308 and 390 both cut the fills of medieval quarry pits.

Finds and biological evidence

- 2.14 Artefactual material is restricted to unstratified worked flint, a single sherd of medieval pottery and quantities of ironworking residues (Appendix 2). Further, substantial, quantities of metallurgical residues are present in bulk soil samples taken from the features associated with post-built structure (Building 1). A modern glass bottle from upper quarry pit fill 334 has been discarded. Metallurgical residues were recovered from a number of contexts in the vicinity of the building; the assemblage includes certain smelting-related residues in the form of tap slag flows/prills and strongly vitrified furnace wall. Quantities of shelly iron ore, some of which was burnt or roasted, were also recovered. Much of the recovered material consists of metallurgical residues and fired clay which cannot be related to specific processes.
- 2.15 The biological material comprises charcoal found in association with the slag deposits within and around Building 1.

3. DISCUSSION

Prehistoric

- 3.1 The flint recovered from site is residual and of similar date to that recovered during the Phase 1 works (CAT 2001b). The low density and date of this material fits a pattern suggested by the similar results of a field walking survey of the site (WA 1998).

Medieval

- 3.2 Previous archaeological work at the quarry in 1983 identified 14 pits, interpreted as medieval iron ore quarry pits (Worssam & Swift 1987). These were circular in plan and typically between 3m and 4m wide. Although no continuous section of any one of the pits was recovered, the excavators estimated that they reached a depth of 13.5m. The pits had been rapidly backfilled with redeposited natural clay and a tree trunk and length of worked timber recovered from two of these fills were radiocarbon dated to 1120 +/- 75 AD and 1220 +/- 80 AD respectively (ibid.).
- 3.3 Although currently unexcavated, the pits identified during the 2006 works appear very similar to those recorded in 1983, containing upper fills derived from the natural

clay substrate. The main difference between the pits identified previously and those seen during the current works was the larger size of some of the latter. The different size ranges of the pits identified during the current phase may be an arbitrary distinction, but might alternatively reflect a variation in function, date or method of construction. No medieval quarry pits were identified within the deepest parts of the later marl pits. This might imply that the quarry pits had been entirely truncated by the marl pits and were therefore only a few metres deep but is equally likely to be the result of the difficulty of identifying the clay infills of the pits within the boggy bases of the marl pits.

- 3.4 Many of the quarry pits are still visible as earthworks and the recovery of a post-medieval bottle from the latest fill of one of the pits indicates that these earthworks were undergoing a process of silting up until recently.
- 3.5 Both the pits identified in 1983 and those identified within the current works followed the 140m contour and more are likely to exist along this contour line to the east of the Phase 2 Extraction Area. The locations and density of the larger pits identified during the watching brief corresponds closely with the visible earthworks recorded during earthwork surveys of the site by CA. In contrast most of the smaller pits were not visible as earthworks. The contour line appeared to have been defined by ditches 432 and 434, with the mining pits to the south of the ditches and to the north the slag-filled features, including Building 1.
- 3.6 The function of the pits adjacent to Building 1 remains unclear. However, one of the pits contained *in situ* burning and whilst this may be incidental, for example the result of tipping hot iron processing waste into the pit, it is also possible that the pits were furnace pits. If this was the case, then the furnace bases, along with any trace of *in situ* burning must have been scoured out in order to salvage any re-usable slag. Whatever their primary function, the pits were final use was as receptacles for the waste products of iron ore processing and smelting. It is possible that some of the features within building one could be similarly interpreted and that the building should therefore be seen as a workspace. This interpretation accords with the absence of domestic refuse from the site.
- 3.7 The slag deposits recovered from the vicinity of Building 1 included smelting waste and fragments of furnace walls (Appendix 4) and are likely to derive from activities

on or near the site. Typologically the slags appear to be pre-16th century in date and are most likely to be medieval (Tim Young pers. comm.).

- 3.8 It is difficult to ascribe a certain date to the building and the adjacent pits on the basis of the limited dateable artefactual material recovered from the site. However, the lack of any later material does indicate that the medieval sherd is more likely than not to have been contemporary with the building, suggesting an 11th to 13th century-date for its use and this would accord with the putative date for the slag discussed above.

Post-medieval

- 3.9 The watching brief confirmed the presence of the two large marl extraction pits and associated drainage features identified during the survey and evaluation.

4. CA PROJECT TEAM

- 4.1 Fieldwork was undertaken by Jonathan Hart assisted by Steven Sheldon. This report was compiled by Jonathan Hart with illustrations prepared by Lorna Gray. The archive has been compiled by Jonathan Hart and prepared for deposition by Teresa Gilmore. The project was managed for CA by Mark Collard.

5. REFERENCES

- CAT (Cotswold Archaeological Trust) 1999a *West Hoathly Brickworks, Sharpthorne, West Sussex, Phase 1; Cookham's Lane: Archaeological Recording* CAT typescript report no. **991046**
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- CAT 2000 *West Hoathly Brickworks, Sharpthorne, West Sussex (Mare Pit Wood): Archaeological Earthwork Survey and Evaluation* CAT typescript report no. **001159**
- CAT 2001a *West Hoathly Brickworks, Sharpthorne, West Sussex, Mare Pit Wood; South-East: Archaeological Earthwork Survey* CAT typescript report no. **01127**
- CAT 2001b *West Hoathly Brickworks, Sharpthorne, West Sussex, Phase 1 Extraction Area: Archaeological Watching Brief* CAT typescript report no. **01110**
- CA (Cotswold Archaeology) 2003 *West Hoathly Brickworks, Sharpthorne, West Sussex: Written Scheme of Investigation for a Programme of Archaeological Recording*
- CA 2004a *West Hoathly Brickworks, Sharpthorne, West Sussex: Programme of Archaeological Recording for Phase 2 Extraction (Part 1)* CA typescript report no. **03176**
- CA 2004b *West Hoathly Brickworks, Sharpthorne, West Sussex: Programme of Archaeological Recording for Phase 2 Extraction (Part 2)* CA typescript report no. **04152**
- CA 2006 *West Hoathly Brickworks, Sharpthorne, West Sussex: Programme of Archaeological Recording for Phase 2 Extraction (Part 3)* CA typescript report no. **05192**

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OS (Ordnance Survey) 1977 *Map of Quaternary Deposits: UK South*

WA (Wessex Archaeology) 1998 *West Hoathly Brickworks, Sharpthorne, West Sussex: Archaeological Field Walking* WA typescript report no. **44145**

Worssam, B. and Swift, G. 1987 *'Minepits at West Hoathly Brickworks, Sharpthorne, Sussex'*, Wealdon Iron **7**, 3-15 (Bulletin of the Wealdon Iron Research Group)

APPENDIX 1: CONTEXT DESCRIPTIONS

Context	Description
301	Topsoil: mid brown clay silt. Frequently root-disturbed within Mare Pit Wood. 0.3m deep within Mare Pit Wood but only 0.1m deep elsewhere
302	Subsoil: mid brown-grey silty clay. Frequently root-disturbed within Mare Pit Wood. 0.1m deep and only present within Mare Pit Wood
303	Natural: light brown-yellow slightly silty clay with fragments of iron panning
304	Posthole: sub-circular in plan with concave sides and rounded base. 0.42m diam x 0.13m deep
305	Only fill of 304: mid grey brown clay silt.
306	Posthole: sub-circular in plan with concave edges and flat base. 0.4m diam x 0.03m deep
307	Only fill of 306: mid grey brown clay silt.
308	Ditch: unexcavated but visible as earthwork prior to stripping. 10.5m length exposed x 1.8m wide
309	Upper fill of 309: mid brown clay silt:
310	Quarry pit: sub-circular, unexcavated. 3.7m diam
311	Upper fill of 310: redeposited blue-grey clay with shale
312	Quarry pit: sub-circular, unexcavated. 7.8m diam
313	Fill of 312: redeposited blue-grey clay with shale
314	Quarry pit: oval, unexcavated. 6.6m diam
315	Penultimate fill of 314: redeposited blue-grey clay with shale
316	Quarry pit: sub-circular, unexcavated. 5.5m diam
317	Upper fill of 316: redeposited blue-grey clay with shale
318	Quarry pit: sub-circular, unexcavated. 6.75m diam
319	Upper fill of 318: redeposited blue-grey clay with shale
320	Quarry pit: sub-circular, unexcavated. 6.5m diam
321	Fill of 320: redeposited blue-grey clay with shale
322	Ditch: unexcavated, ran between pits 318 & 326. 4.5m long x 0.3m-0.5m wide
323	Upper fill of 322: pale grey to green-grey clay silt
324	Quarry pit: sub-circular, unexcavated. 8m diam
325	Upper fill of 324: redeposited blue-grey clay with shale
326	Quarry pit: sub-circular, unexcavated. 7.10m diam
327	Penultimate fill of 326: pale grey to green-grey clay silt
328	Quarry pit: sub-circular, unexcavated. 3.6m diam
329	Upper fill of 328: redeposited blue-grey clay with shale
330	Marl pit: earthwork prior to stripping. Irregular oval in plan, convex edges, flat base. >= 43m diam x approx. 3-4m deep
331	Fill of 312: light/mid brown clay silt
332	Upper fill of 312: pale grey to green-grey clay silt
333	Fill of 310: light/mid brown clay silt
334	Upper fill of 314: dark grey-brown clay silt
335	Fill of 320: pale grey to green-grey clay silt
336	Fill of 326: pale grey to green-grey clay silt
337	Quarry pit: sub-circular, unexcavated. 2.65m diam
338	Upper fill of 337: pale grey to green-grey clay silt with yellow clay
339	Posthole: oval in plan, unexcavated. 0.42m diam x 0.13m deep
340	Upper fill of 339: mid grey brown clay silt.
341	Quarry pit: sub-circular, unexcavated. 4.4m diam
342	Upper fill of 341: pale grey to green-grey clay silt
343	Marl pit: earthwork prior to stripping. Irregular oval in plan, convex edges, flat base. >= 40m diam x approx. 3-4m deep
344	Quarry pit: sub-circular, unexcavated. 3.7m diam
345	Fill of 344: light/mid brown clay silt
346	Upper fill of 344: redeposited blue-grey clay with shale
347	Quarry pit: sub-circular, unexcavated. 5.6m diam
348	Fill of 347: light/mid brown clay silt
349	Upper fill of 347: redeposited blue-grey clay with shale
350	Upper fill of 312: dark grey-brown clay silt
351	Quarry pit: sub-circular, unexcavated. 2.5m diam
352	Upper fill of 351: pale grey to green-grey clay silt
353	Quarry pit: sub-square, unexcavated. 2.7m x 2.65m

354	Upper fill of 353: redeposited blue-grey clay with shale
355	Quarry pit: sub-square, unexcavated. 3.5m x 3.2m
356	Fill of 355: light/mid brown clay silt
357	Fill of 355: redeposited blue-grey clay with shale
358	Fill of 355: pale grey to green-grey clay silt
359	Quarry pit: sub-circular, unexcavated. 2.65m diam
360	Upper fill of 359: pale grey to green-grey clay silt
361	Fill of 318: redeposited blue-grey clay with shale
362	Quarry pit: sub-square, unexcavated. 6m x 4.75m
363	Upper fill of 362: pale grey to green-grey clay silt
364	Posthole: oval, unexcavated. 0.2m diam
365	Quarry pit: sub-square, unexcavated. 6.1m x 5.65m
366	Fill of 365: light/mid brown clay silt
367	Fill of 365: pale grey to green-grey clay silt
368	Ditch, E-W aligned, unexcavated. 18.5m long x 2.3m wide
369	Upper fill of 368: mid brown clay silt
370	Quarry pit: sub-circular, unexcavated. 3.5m diam
371	Upper fill of 370: pale grey to green-grey clay silt
372	Quarry pit: sub-circular, unexcavated. 2.55m diam
373	Upper fill of 372: redeposited blue-grey clay with shale
374	Quarry pit: sub-circular, unexcavated. 2.6m diam
375	Upper fill of 374: redeposited blue-grey clay with shale
376	Quarry pit: sub-circular, unexcavated. 6.6m diam
377	Upper fill of 376: pale grey to green-grey clay silt
378	Quarry pit or tree-throw pit: sub-circular, unexcavated. 2.7m diam
379	Fill of 378: redeposited blue-grey clay with shale
380	Upper fill of 378: redeposited green-yellow clay
381	Quarry pit: sub-circular, unexcavated. 4.6m diam
382	Upper fill of 381: redeposited blue-grey clay with shale
383	Quarry pit: sub-pentagonal, unexcavated. 5.3m x 4.8m
384	Upper fill of 383: pale grey to green-grey clay silt
385	Quarry pit: sub-circular, unexcavated. 7m diam
386	Upper fill of 385: pale grey to green-grey clay silt
387	Upper fill of 365: redeposited blue-grey clay with shale
388	Quarry pit: sub-circular, unexcavated. 5.15m diam
389	Upper fill of 388: pale grey to green-grey clay silt
390	Ditch: E-W aligned, unexcavated. 10m long x 1.7m wide
391	Upper fill of 390: mid brown clay silt
392	Quarry pit: sub-circular, unexcavated. 4.3m diam
393	Upper fill of 392: pale grey to green-grey clay silt
394	Only fill of 393: mid grey brown clay silt.
395	Quarry pit: sub-circular, unexcavated. 3.9m diam
396	Upper fill of 395: pale grey to green-grey clay silt
397	Quarry pit: sub-circular, unexcavated. 2m diam
398	Upper fill of 397: pale grey to green-grey clay silt
399	Quarry pit: sub-square, unexcavated. 4.9m x 3.8m
400	Upper fill of 399: pale grey to green-grey clay silt
401	Quarry pit: sub-circular, unexcavated. 2.8m diam
402	Upper fill of 401: pale grey to green-grey clay silt
403	Quarry pit: sub-circular, unexcavated. 4.15m diam
404	Upper fill of 403: pale grey to green-grey clay silt
405	Quarry pit: sub-circular, unexcavated. 3.3m diam (mainly present as earthwork beyond stripped area)
406	Upper fill of 405: pale grey to green-grey clay silt
407	Quarry pit: sub-circular, unexcavated. 3.1m diam
408	Upper fill of 407: pale grey to green-grey clay silt
409	Quarry pit: sub-circular, unexcavated. 3.5m diam
410	Fill of 409: light/mid brown clay silt
411	Upper fill of 409: pale grey to green-grey clay silt
412	Quarry pit: sub-circular, unexcavated. 4.3m diam
413	Upper fill of 412: pale grey to green-grey clay silt
414	Quarry pit: sub-circular, unexcavated. 3.7m diam
415	Upper fill of 414: pale grey to green-grey clay silt

416	Quarry pit: pentagonal, unexcavated. 3.85m diam
417	Fill of 416: light/mid brown clay silt
418	Upper fill of 416: pale grey to green-grey clay silt
419	Quarry pit: pentagonal, unexcavated. >/= 3.65m diam
420	Fill of 419: light/mid brown clay silt
421	Upper fill of 419: pale grey to green-grey clay silt
422	Probable quarry pit (mainly beyond stripped area): unexcavated.
423	Fill of 422: pale grey to green-grey clay silt
424	Quarry pit: sub-circular, unexcavated. 3.1m diam
425	Fill of 424: light/mid brown clay silt
426	Upper fill of 424: pale grey to green-grey clay silt
427	Pit: sub-square with shallow edges and deeper, rounded central base. 1.1m diam x 0.28m deep
428	Lower fill of 427: yellow-brown silty clay
429	Upper fill of 427: mid brown clay silt with moderate quantities of iron slag lumps
430	Ditch terminus: NE-SW aligned with shallow, 45° edges and flat base
431	Only fill of 430: mid brown clay silt with moderate quantities of iron slag lumps
432	Ditch: NW-SE aligned with 45° edges and u to v-shaped base. 0.86m wide x 0.34m deep
433	Only fill of 432: mid brown clay silt with moderate quantities of iron slag lumps
434	Ditch: NNW-SSE aligned: shallow edges and U-shaped base. 0.8m wide x 0.06m deep
435	Only fill of 433: mid brown clay silt with moderate quantities of iron slag lumps
436	Posthole: sub-circular, shallow. 0.2m diam, 0.02m deep
437	Only fill of 436: mid brown clay silt with moderate quantities of iron slag lumps
438	Pit: sub-circular, unexcavated. 3.0m diam
439	Only fill of 438: redeposited clay
440	Pit: sub-circular, unexcavated. 3.0m diam
441	Fill of 440: redeposited clay
442	Fill of 440: redeposited clay
443	Pit: sub-circular, unexcavated. 3.3m diam
444	Only fill of 443: redeposited clay
445	Pit: sub-circular, unexcavated. 1.9m diam
446	Only fill of 440: redeposited clay
447	Pit: sub-pentagonal, unexcavated. 3.6m diam
448	Only fill of 447: redeposited clay
449	Pit: sub-pentagonal, unexcavated. 4.2m diam
450	Fill of 449: redeposited clay
451	Fill of 449: redeposited clay
452	Posthole: sub-rectangular, unexcavated. 0.6m x 0.3m
453	Only fill of 452: redeposited clay
454	Posthole: oval, unexcavated. 0.2m diam
455	Only fill of 454: redeposited clay
456	Posthole: oval, unexcavated. 0.3m diam
457	Only fill of 456: redeposited clay
458	Posthole: sub-rectangular, unexcavated. 0.5m x 0.3m
459	Only fill of 458: redeposited clay
460	Posthole/pit: oval, very shallow sides, flat base. 0.4m diam x 0.03m deep
461	Only fill of 460: mid brown clay silt with moderate quantities of iron slag lumps
462	Posthole/pit: oval, very shallow sides, flat base. 0.65m diam x 0.04m deep
463	Only fill of 462: mid brown clay silt with moderate quantities of iron slag lumps
464	Posthole: sub-circular, rounded sides and base. 0.2m diam x 0.05m deep
465	Only fill of 464: dark grey black clay silt with moderate quantities of charcoal and slag.
466	Posthole: sub-rectangular, vertical sides, flat base. 0.3m diam x 0.32m deep
467	Only fill of 466: dark grey black clay silt with moderate quantities of charcoal and slag.
468	Posthole: sub-circular, rounded sides and base. 0.2m diam x 0.05m deep
469	Only fill of 468: dark grey black clay silt with moderate quantities of charcoal and slag.
470	Posthole: sub-circular, rounded sides and base. 0.19m diam x 0.1m deep
471	Only fill of 470: dark grey black clay silt with moderate quantities of charcoal and slag.
472	Posthole: oval, rounded sides and base. 0.24m diam x 0.17m deep
473	Only fill of 472: dark grey black clay silt with moderate quantities of charcoal and slag.
474	Posthole: sub-circular, vertical sides, flat base. 0.25m diam x 0.1m deep
475	Only fill of 474: dark grey black clay silt with moderate quantities of charcoal and slag.
476	Posthole: sub-circular, vertical sides, flat base. 0.25m diam x 0.05m deep
477	Only fill of 465: dark grey black clay silt with moderate quantities of charcoal and slag.

478	Posthole: sub-circular, vertical sides, flat base. 0.24m diam x 0.1m deep
479	Only fill of 478: dark grey black clay silt with moderate quantities of charcoal and slag.
480	Posthole: sub-circular, vertical sides, flat base. 0.3m diam x 0.26m deep
481	Only fill of 480: dark grey black clay silt with moderate quantities of charcoal and slag.
482	Pit: sub-oval, shallow sides, concave base. 1.3m long x 0.18m deep
483	Only fill of 482: dark purple black silty clay, with moderate quantities of slag.
484	Pit: irregular in shape, moderate sloping sides with concave base. 1.35m long x 1.25m wide x 0.18m deep
485	Only fill of 484: mid/light grey silty clay
486	Foundation trench and associated postholes: building 1
487	Foundation trench and associated postholes: building 1
488	Foundation trench: circilinear terminus, shallow sides, flat base.
489	Only fill of 488: dark grey black clay silt with moderate quantities of charcoal and slag.
490	Foundation trench: linear, shallow sides, flat base. 0.26m wide x 0.05m deep
491	Only fill of 490: dark grey black clay silt with moderate quantities of charcoal and slag.
492	Foundation trench: linear, shallow sides, flat base. 0.2m wide x 0.06m deep
493	Only fill of 492: dark grey black clay silt with moderate quantities of charcoal and slag.
494	Posthole: sub-circular, rounded sides and base. 0.22m diam x 0.08m deep
495	Only fill of 494: dark grey black clay silt with moderate quantities of charcoal and slag.
496	Posthole: sub-circular, vertical sides, flat base. 0.29m diam x 0.05m deep
497	Only fill of 496: dark grey black clay silt with moderate quantities of charcoal and slag.
498	Foundation trench: linear, moderate sloping sides, flat/concave base. 0.12m wide x 0.03m deep
499	Only fill of 498: dark grey black clay silt with moderate quantities of charcoal and slag.
500	Posthole: sub-circular, vertical sides, flat base. 0.25m diam x 0.14m deep
501	Only fill of 500: dark grey black clay silt with moderate quantities of charcoal and slag.
502	Posthole: oval, vertical sides, rounded base. 0.23m diam x 0.06m deep
503	Only fill of 502: dark grey black clay silt with moderate quantities of charcoal and slag.
504	Foundation trench: linear, moderate sloping sides, flat/concave base.
505	Only fill of 504: dark grey black clay silt with moderate quantities of charcoal and slag.
506	Posthole: oval. 0.06m diam x 0.04. deep
507	Only fill of 506: dark grey black clay silt with moderate quantities of charcoal and slag.
508	Posthole: sub-circular, rounded sides and base. 0.25m diam x 0.1m deep
509	Only fill of 508: dark grey black clay silt with moderate quantities of charcoal and slag.
510	Posthole: sub-circular, rounded sides and base. 0.1m diam x 0.07m deep
511	Only fill of 510: dark grey black clay silt with moderate quantities of charcoal and slag.
512	Posthole: sub-circular, rounded sides and base. 0.11m diam x 0.06m deep
513	Only fill of 512: dark grey black clay silt with moderate quantities of charcoal and slag.
514	Posthole/beam slot: oval, moderate sloping sides, concave base. 0.35m diam x 0.06m deep
515	Only fill of 514: dark grey black clay silt with moderate quantities of charcoal and slag.
516	Posthole: oval, vertical sides, flat base. 0.2m diam x 0.3m deep
517	Only fill of 516: dark grey black clay silt with moderate quantities of charcoal and slag.
518	Foundation trench and associated postholes: building 1
519	Foundation trench: linear, shallow sides, flat base. 0.21m wide x 0.03m deep
520	Only fill of 519: dark grey black clay silt with moderate quantities of charcoal and slag.
521	Posthole: sub-circular, rounded sides and base. 0.24m diam x 0.06m deep
522	Only fill of 521: dark grey black clay silt with moderate quantities of charcoal and slag.
523	Posthole: sub-circular, vertical sides, flat base. 0.23m diam x 0.05m deep
524	Only fill of 523: dark grey black clay silt with moderate quantities of charcoal and slag.
525	Pit: irregular in shape, shallow sides, concave base. 0.65m diam x 0.14m deep
526	Only fill of 525: mid/light grey silty clay
527	Upper fill of 544: black silty sand, with common mears of charcoal
528	Lower fill of 544: dark purple black silty clay with moderate quantities of slag
529	Posthole: sub-circular, vertical sides, flat base. 0.34m diam x 0.2m deep
530	Only fill of 529: dark grey black clay silt with moderate quantities of charcoal and slag.
531	Posthole: square, vertical sides, flat base. 0.23m diam x 0.33m deep
532	Only fill of 531: dark grey black clay silt with moderate quantities of charcoal and slag.
533	Posthole: oval, shallow sides, concave base. 0.2m diam x 0.06m deep
534	Only fill of 533: dark grey black clay silt with moderate quantities of charcoal and slag.
535	Posthole: sub-circular, rounded sides and base. 0.13m diam x 0.03m deep
536	Only fill of 535: dark grey black clay silt with moderate quantities of charcoal and slag.
537	Posthole: oval, rounded sides and base. 0.17m diam x 0.07m deep
538	Only fill of 537: dark grey black clay silt with moderate quantities of charcoal and slag.

539	Posthole: sub-circular, rounded sides and base. 0.11m diam x 0.05m deep
540	Only fill of 539: dark grey black clay silt with moderate quantities of charcoal and slag.
541	Posthole: sub-circular, rounded sides and base. 0.1m diam
542	Only fill of 541: dark grey black clay silt with moderate quantities of charcoal and slag.
543	Middle fill of 545: mid orangey brown sandy clay with no inclusions.
544	Pit: sub-circular, steep sides, irregular base. 0.9m diam x 0.34m deep
545	Pit: sub-ovoid, moderate/steep sides, concave base. 2.36m wide x 0.38m deep
546	Lower fill of 545: dark brownish black, silty clay with common smears of charcoal.
547	Upper fill of 545: mid blackish brown sandy clay with moderate quantities of slag.
548	Pit: sub-oval, shallow sides, concave base. 0.6m wide x 0.13m deep
549	Only fill of 548: : dark purple black silty clay, with moderate quantities of slag.
550	Pit: irregular shape, shallow sides, irregular base. 1.5m wide x 0.1m deep
551	Only fill of 550: light grey silty clay with rare flecks of charcoal.
552	Pit: sub-circular, moderate sloping sides, rounded base. 2.15m diam x 0.34m deep
553	Lower fill of 552: charcoal flecks
554	Fill of 552: redeposited clay
555	Fill of 552: mid grey clay silt with occasional flecks of charcoal and scorched clay lenses
556	Fill of 552: redeposited clay
557	Upper fill of 552: light greyish brown clay silt with occasional flecks of manganese
558	Fill of 552: mid grey clay silt with occasional flecks of charcoal and scorched clay lenses
559	Only fill of 560: mid greyish brown silty clay with a small amount of slag and flecks of charcoal
560	Gully: linear, rounded sides, irregular base. 1.65m long x 0.25m wide x 0.04m deep
561	Pit: sub-circular, moderate sloping sides, not fully excavated. 1.1m diam
562	Fill of 561: slag in a grey/brown clay silt matrix
563	Spread: slag in a grey/brown clay silt matrix. 3.0m long x 2.7m wide x 0.15m deep
564	Spread: slag in a grey/brown clay silt matrix. 4.3m long x 4.0. wide x 0.15m deep
565	Ditch, E-W aligned, unexcavated.
566	Upper fill of 565: mid brown clay silt

APPENDIX 2: THE FINDS BY ED MCSLOY

Worked Flint

Worked flint consisting of a probable fabricator in pale grey-coloured flint and an unutilised flake in grey flint were recovered as unstratified finds. The fabricator probably dates to between the Neolithic and early Bronze Age periods.

Medieval pottery

A single sherd of medieval pottery in a coarseware fabric was recovered from pit fill 526. The sherd derives from the base-angle of a hand-built cooking pot (jar) with markedly sagging base. As such it dateable broadly to between the 11th and 13th centuries. The fabric, characterised by abundant coarse quartz and rare flint inclusions, is unlike the small group of medieval pottery from previous investigations at the site (Brown 2001). The fabric is not unlike material known from the kilns at Orchard Street, Chichester, (Barton 1979), though a more local source would in this instance seem more likely.

Brown, D.H. 2001 'Appendix 2: Pottery Report', in CA 2001, 18

CA (Cotswold Archaeology) 2001 'West Hoathly Brickworks, Sharpethorne, West Sussex, Phase 1 Extraction Area', CA Report 01110

Barton, K.J. 1979 *Medieval Sussex Pottery* Phillimore

Context	Description	Count	Weight	Date
Us.	Worked flint: Fabricator; (blade-like) flake	2	40	-
334	*Vessel glass: modern	1	264	C19–C20
428	Metallurgical residues	-	1312	-
431	Metallurgical residues	-	1340	-
433	Metallurgical residues	-	2764	-
435	Metallurgical residues	-	2120	-
526	Medieval pottery: handmade, coarse quartz/flint inclusions	1	24	C11–C13
529	Metallurgical residues	-	1798	-
543	Metallurgical residues	-	972	-

* discarded

APPENDIX 3: THE BIOLOGICAL EVIDENCE BY SYLVIA WARMAN

The samples taken are predominantly slag but many also contain charcoal. Sample <26> from pit fill 528 is particularly rich in charcoal as well as slag. The charcoal once identified may be suitable for radiocarbon dating. A charcoal specialist will be identify the charcoal as part of the the post-excavation assessment process for the whole project, as per the agreed Written Scheme of Investigation.

APPENDIX 4: THE METALLURGICAL RESIDUES BY T.P. YOUNG

Quantities of metallurgical residues from 11 separate contexts were scanned. All material derived from the vicinity of Building 1. The scanned assemblage includes hand collected material and sub-samples extracted from selected bulk soil samples.

The assemblage includes certain smelting-related residues in the form of tap slag flows/prills and strongly vitrified furnace wall. Quantities of shelly iron ore, some of which was burnt or roasted, were also recovered. Much of the recovered material consists of metallurgical residues and fired clay which cannot be related to specific processes. Charcoal pieces, potentially suitable for radiocarbon dating, were noted within the material examined.

Summary Catalogue

Pit fill 428

Several small pieces of indeterminate slag. Also one larger piece of strongly vitrified furnace wall with vitrified layer up to 30mm thick. Two dense slag pieces of uncertain nature – one has good lower charcoal contact – but not clear if it is a smelting or smithing slag.

Pit fill 429

3 pieces of elongate prills, 2 pieces of probable tap slag flows, 2 more equant pieces of slag of uncertain nature. All very weathered.

Ditch fill 431

Weathered slag assemblage with highly unusual lilac weathering. Three pieces are elongated prills. More equant pieces are of uncertain nature, and two of the three might possibly be smithing slags (but this is not a certain identification)

Posthole fill 467 (Soil sample 2)

Ashy concretionary slag collection. Some fired clay, some possible ore. Slag not strictly determinable.

Posthole fill 477 (Soil sample 7)

4 pieces of dense crystalline tap slag. 3 pieces of weathered indeterminate iron slags.

Posthole fill 481 (Soil sample 9)

Ashy concretionary material bearing slag debris. Slag not strictly determinable, but one piece probably a smelting slag.

Posthole fill 481 (Soil sample 11)

8 pieces of shelly iron ore

Pit fill 483 (Soil sample 10)

Approximately 9 pieces of dense crystalline slag, possibly thin tap slag lobes in part at least. Approximately 7 pieces of black glassy slag, mostly rather sheet like, but one piece has a corroded mass of charcoal rich material attached. Largest piece shows charcoal impressions on one side and possible sediment/ore clasts on the other. 3 pieces of fired clay and one piece of deeply vitrified material from lining.

Pit fill 527 (Soil sample 25)

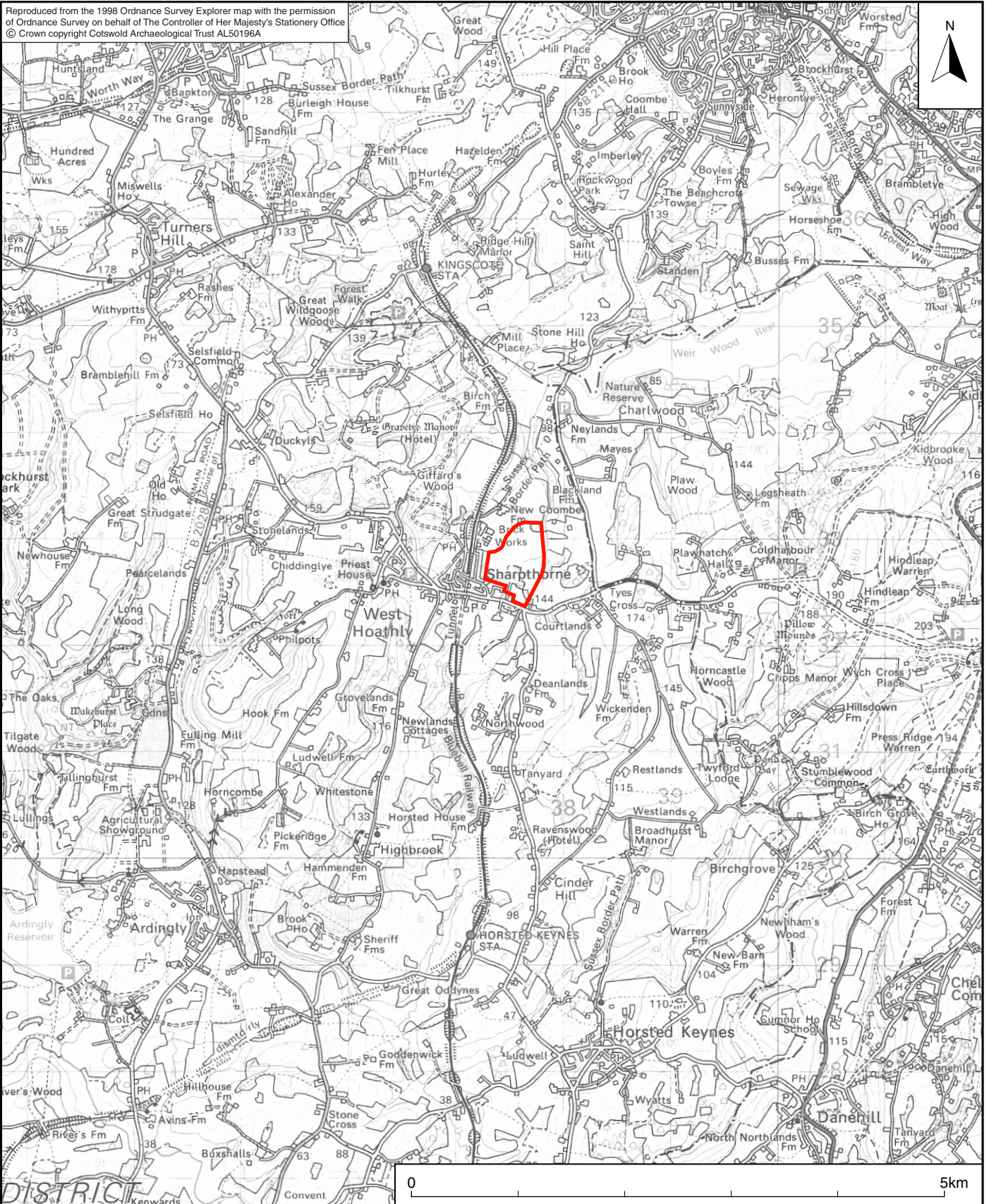
1 large piece of weathered brown slag, well flowed, probably a tap slag. 5 pieces of burnt/roasted iron ore. Dark ashy debris. 2 pieces of pale clay or ash.

Pit fill 528 (Soil sample 26)

Ashy material with charcoal, lining slag (2 pieces), tap slag (1 piece), 5 pieces of shelly iron ore.

Pit fill 543

Red, probably burnt, clay, with small amount of dark ash



COTSWOLD ARCHAEOLOGY

PROJECT TITLE
**West Hoathly Brickworks, Phase 2
 (Part 4), Sharpthorne, West Sussex**

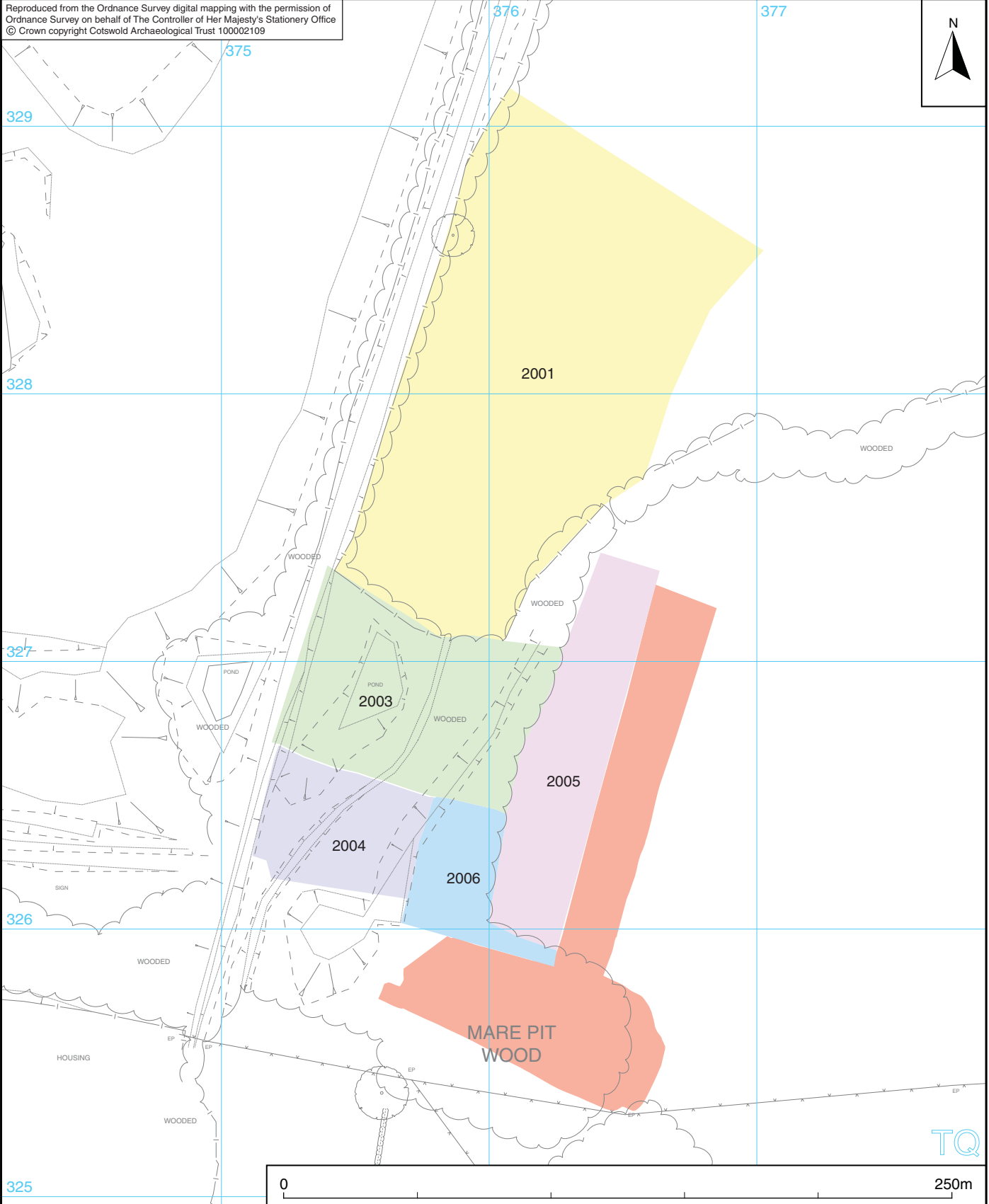
FIGURE TITLE
Site location plan

SCALE
1:50,000@A4

PROJECT NO.
2151

FIGURE NO.
1

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area of supervised strip: April 2006



COTSWOLD ARCHAEOLOGY

PROJECT TITLE
West Hoathly Brickworks, Phase 2 (Part 4), Sharpthorne, West Sussex

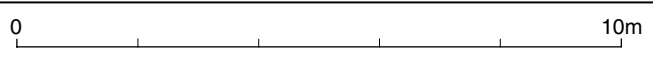
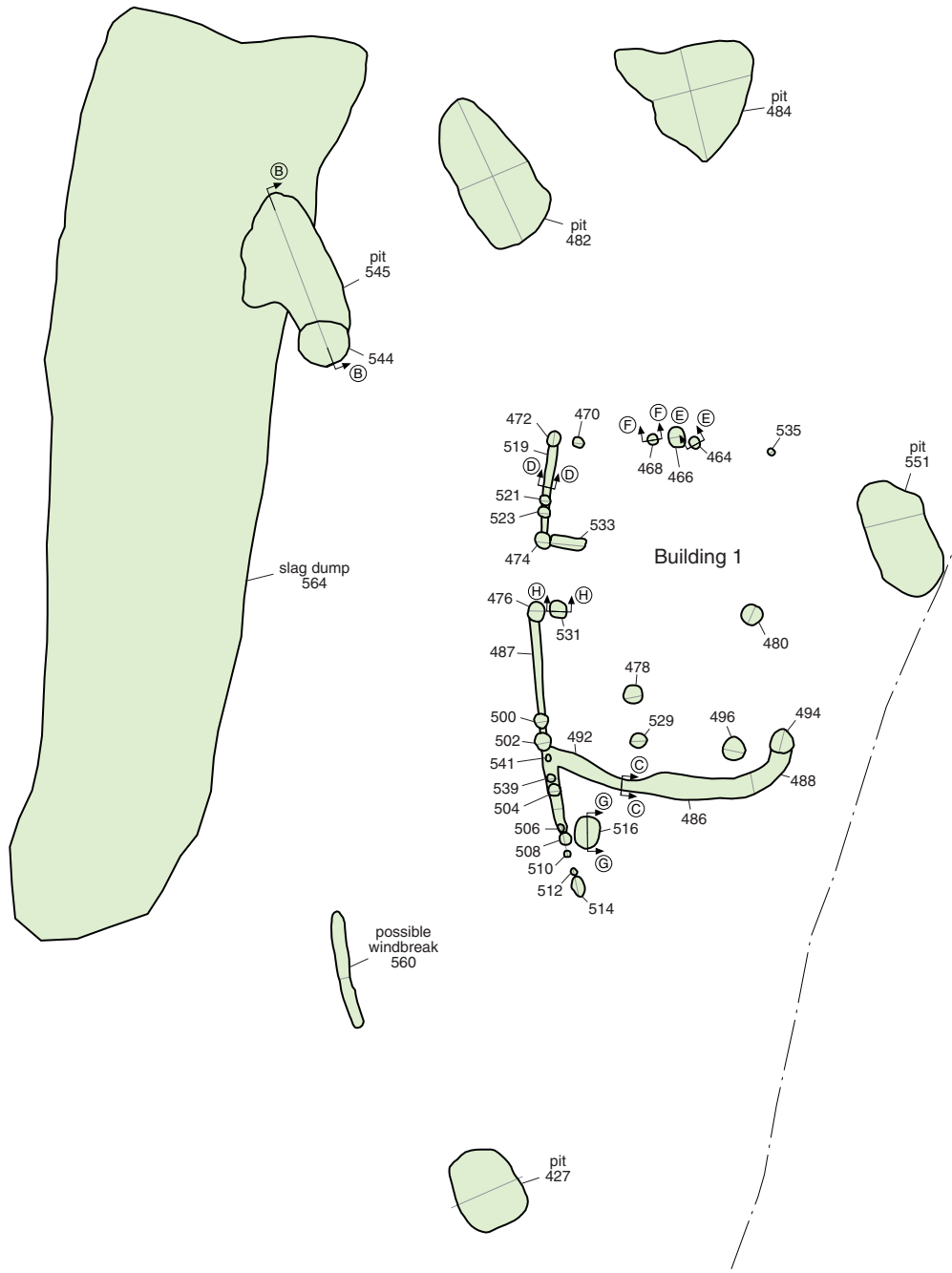
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Location of groundworks

SCALE
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PROJECT NO.
 2151

FIGURE NO.
2





COTSWOLD ARCHAEOLOGY

PROJECT TITLE
West Hoathly Brickworks, Phase 2
(Part 4), Sharpthorne, West Sussex

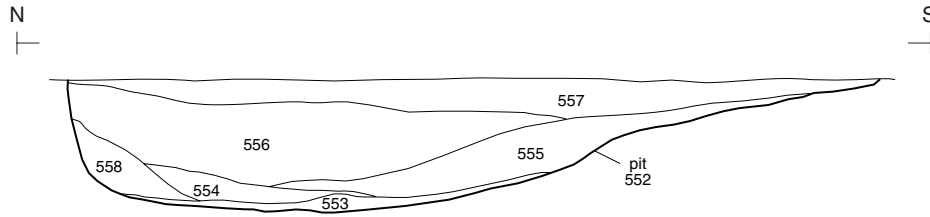
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Building 1

SCALE
1:125@A4

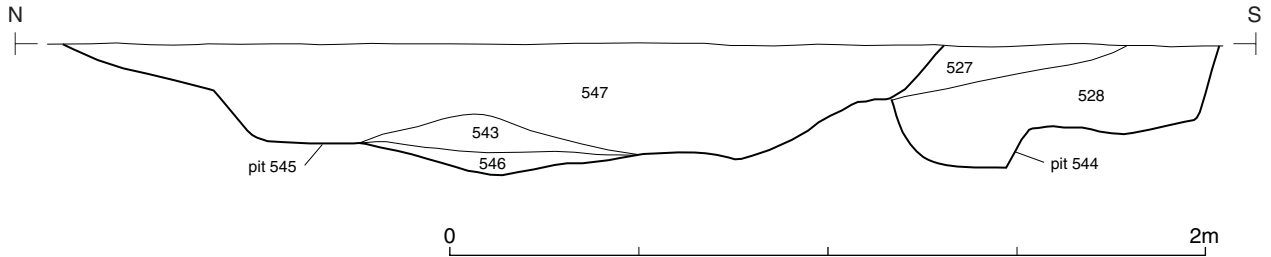
PROJECT NO.
2151

FIGURE NO.
4

Section AA

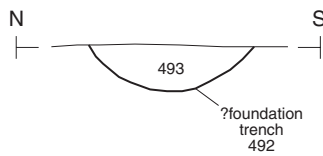


Section BB

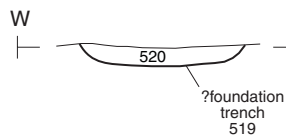


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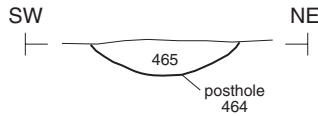
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Section DD



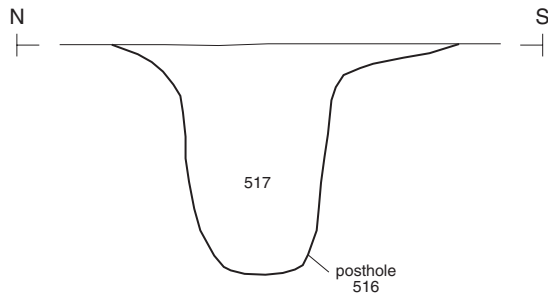
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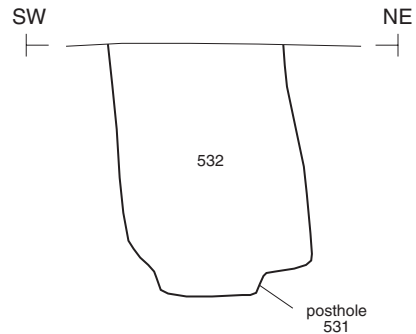
Section FF



Section GG



Section HH



COTSWOLD ARCHAEOLOGY

PROJECT TITLE

West Hoathly Brickworks, Phase 2 (Part 4), Sharpthorne, West Sussex

FIGURE TITLE

Sections

SCALE

1:20 & 1:10@A4

PROJECT NO.

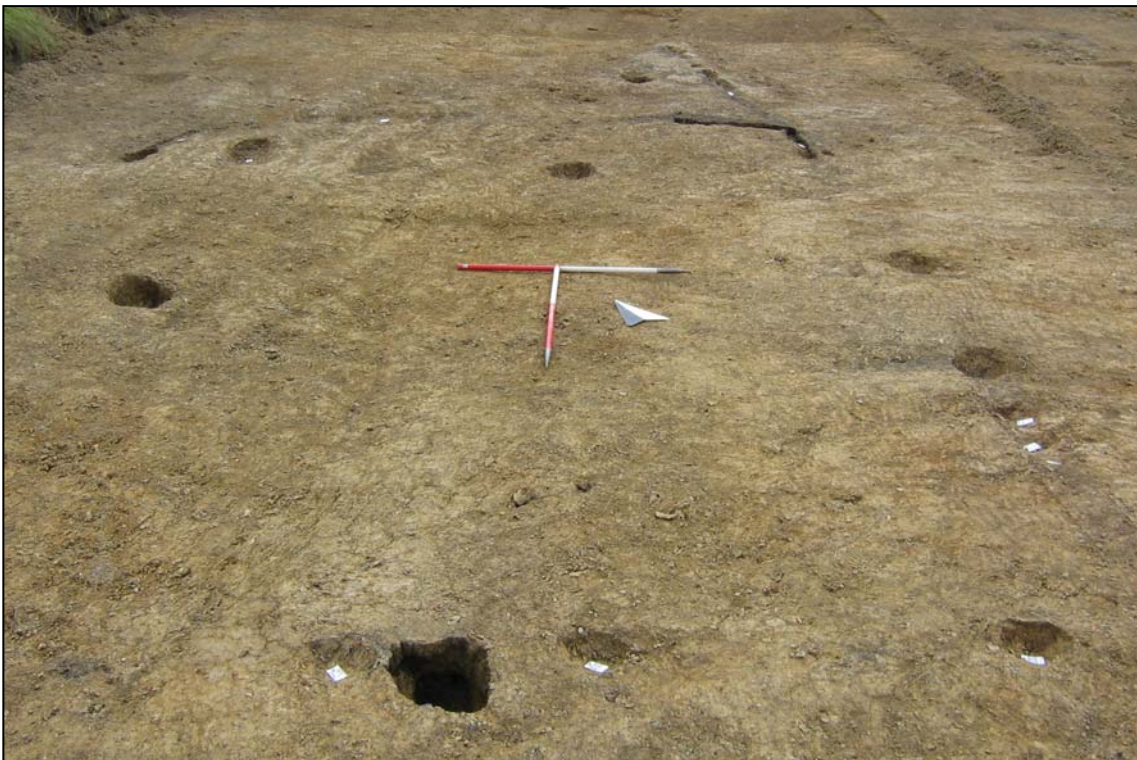
2151

FIGURE NO.


5



6



7

<p>6 Quarry pit 310; looking north-east</p> <p>7 Building 1; looking south</p>	 COTSWOLD ARCHAEOLOGY		
	<small>PROJECT TITLE</small> West Hoathly Brickworks, Phase 2 (Part 4), Sharpthorne, West Sussex		
	<small>FIGURE TITLE</small> Photographs		
	<small>SCALE</small> n/a	<small>PROJECT NO.</small> 2151	<small>FIGURE NO.</small> 6 & 7