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**Pinkie Mains,
Musselburgh, East Lothian**

Archaeological Evaluation

Data Structure Report No. 2032

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1. INTRODUCTION

1.1 General

This report presents the results of an Archaeological Evaluation undertaken by CFA Archaeology Ltd (CFA) at Pinkie Mains, Musselburgh, East Lothian (NGR: NT 357 726, Fig. 1) during March 2012. The work was commissioned by Taylor Wimpey East Scotland.

A Written Scheme of Investigation (WSI) was produced by CFA and was approved by Andrew Robertson, East Lothian Council Archaeology Service (ELCAS), prior to the fieldwork.

1.2 Background

The work was required as the land lies within the area of the Battle of Pinkie Cleugh, 1547. In addition to this, the evidence of John Thomson's map, dating to 1832 (Fig. 2), shows the western end of the Phase 2 area to lie within the site of a 'barracks' complex. The complex comprises 25 buildings arranged in a grid pattern, and the two easternmost rows of this grid are situated within the Phase 2 area. A larger 'U'-shaped building is also shown to the south of the grid pattern and is situated to the west of the 'additional area' (Fig. 1). A subsequent map by the Ordnance Survey (1854) shows that the barracks complex and the 'U'-shaped house had gone and the land was in use for farming with some minor mining activity in the form of a mine shaft to the immediate south of Pinkie Mains Farm. However, even in 1894, the Ordnance Survey Second Edition (Fig. 3) still names the field to the west of Pinkie Mains as the 'Barracks Field'.

1.3 Objectives

The project's aims and objectives were:

- To detect and recover artefacts of archaeological or historical origins, and to identify potential areas of activity associated with the Battle of Pinkie or its aftermath. This would be achieved through a two-phase programme of metal detecting. Phase 1, using a system of grids, is reported on separately (Carruthers & Anderson 2012). Phase 2, undertaken in conjunction with the evaluation, is described below.
- To establish the presence/absence, extent, condition, character, quality and date of any other archaeological features or deposits within the proposed development area;
- To establish the vulnerability of any archaeological features to the proposed development;
- To propose mitigation measures where necessary.

2. METHODS

2.1 General

CFA follows the Institute for Archaeologists' Standards and Guidance and Code of Conduct.

2.2 Evaluation

Thirty-four trenches (Trenches 1 to 34) were excavated within the Phase 1 area amounting to 3360m² (7%) and twenty trenches (Trenches 35 to 55) within the Phase 2 area, amounting to 2345m² (7%). Eighteen trenches (Trenches 56 to 74) were excavated in the Additional Area amounting to 1895m² (7%). These areas and trenches are shown on Fig. 1.

All ground-breaking work was monitored by an archaeologist. All excavation was undertaken by a tracked mechanical excavator fitted with a 1.8m wide smooth bladed ditching bucket. All excavation of archaeological features and deposits was undertaken using hand tools.

Trenches and spoil heaps were metal-detected during the evaluation in order to detect and recover artefacts of archaeological or historical origins. All metal finds, other than those clearly seen to be modern (mainly agricultural items and beverage containers) were retained. All retained finds were bagged according to which trench they came from.

All excavation and on-site recording was carried out according to standard CFA procedures, principally by drawing, by photography and by completing standard CFA record forms. The positions of trenches were recorded using industry standard GPS equipment.

All trenches were backfilled following the completion of recording.

2.3 Excavation

Two small excavations were undertaken in order to further assess features recorded during the evaluation.

An area measuring 10m by 10m was centred on the pit containing the cremated bone in Trench 17 and an area measuring 17m by 6m was excavated to further expose the possible wall in Trench 30.

3. ARCHAEOLOGICAL RESULTS

Full descriptions of the trenches are contained in Appendix 1. Numbers in bold refer to contexts, a full list of which is contained in Appendix 2. Other site records form Appendices 3-5. The metal detecting finds are quantified and allocated a spot-date in Appendix 6.

3.1 Phase 1 Trenches

Thirty four trenches (Trench 1 to Trench 34) were excavated within the Phase 1 area amounting to 3360m² (7%, Fig. 1). Dark-brown or black topsoil was 0.3-0.4m deep and a yellow-brown or orange-brown subsoil was present in a number of trenches. The natural subsoil was variable, predominantly orangey-cream sand on the level ground close to Pinkie Road with stiff clay and sandy clay with stones on the slopes to the south.

A number of field drains were identified within the Phase 1 area. Notable were those in Trenches 5 and 16, some of which were filled with lumps of vitreous industrial waste.

Probable prehistoric cremation deposit

Trench 17 located a cut feature (**1701**) with a stone-lined perimeter (**1703**, Figs. 4, 7), cut into clean natural sand. This had dimensions of 1.4m by 1.2m and it was aligned close to N-S. The interior was filled with charcoal-flecked grey sand (**1702**) containing quantities of burnt bone. No finds were recovered but many of the stones were degrading and may have been heated. Feature **1701** was fully excavated and the fill was retained as a sample. A 10m by 10m trench was excavated around this feature but no further features were present.

Pits and linear features

Trench 3 (Fig. 4) contained a sub-rectangular pit (**303**) measuring 1.75m by 1.25m and aligned east to west. No functional evidence was forthcoming. It was filled with very compact black soil and small grave (**304**) containing a clay drain pipe. Trench 3 also contained a linear ditch (**301**) measuring 3.5m in width and 0.2m in depth. Aligned south-east to north-west, this feature was filled (**302**) with a very compact deposit similar to **304**. No finds were recovered.

Trench 15 contained a shallow linear ditch (**1501**), 1m wide and 0.2m deep and aligned south-east to north-west. There were frequent chunks of mortar and sandstone mixed in the fill (**1502**). It may be the same ditch feature as recorded in Trench 3 (**301**).

Trench 18 contained a narrow ditch (**1801**) with a 'U' profile, 0.4m wide and 0.2m deep. Aligned north-east to south-west, this feature was sealed by orange-brown subsoil (**002**). The fill (**1802**) consisted of a sterile orange-brown sand.

Trench 19 contained a pit (**1901**) measuring 1.5m by 1m. This feature contained a fill of dark-brown sand (**1902**) and a modern animal burial (**1903**).

Trench 22 (Figs. 4, 8) contained what may be the terminal of a ditch (**2201**) with a width of 1.3m and depth of 0.4m. Aligned ENE-WSW, this had an irregular profile and was filled with a sterile mixture of compact brown sandy clay and gravel (**2202**).

Trench 27 (Figs. 4, 9) contained a north-south aligned linear ditch (**2701**). This was 1.6m wide and 0.65m deep, with a V-shaped profile. The fill (**2702**) consisted of a sterile brown silty sand and gravel. The section at the trench edge showed a deposit of orange-brown subsoil (**002**) over the ditch and under the topsoil which was not present elsewhere in the trench.

Mining/quarrying remains

A number of sub-surface features were identified which appear to be related to mining or quarrying activity. These were concentrated in the north-east of the Phase 1 area.

Trench 1 had two areas of disturbance (**101, 103**) characterised by deposits of mixed sand, clay, coal chips and stones (**102, 104**). A culvert drain (**105**) with a fill of quarried gravel over slabs (**106**) was also recorded.

Trench 2 had an alignment of boulders (**204**), located adjacent to a large feature (**201**) which had a fill (**202**) similar to **102** and **104**. These may have been mounded around the mine workings as a safety feature. Trench 26 was located next to Trench 2 in order to further assess this feature. The boulder alignment was present here too, two stones high (0.75m) in one place (Figs. 4, 10). Disturbed ground (**2603**) occupied the 15m to the south of these boulders, consisting of grey clay with coal flecks and occasional stones.

Trench 12 contained a possible mine-related pit (**1201**) with a width of 3.5m and a mixed fill (**1202**). It also had the terminal of a probable ditch (**1203**) with a width of 1.5m, depth of 0.4m and a fill of grey clay and coal (**1204**).

Trench 13 also contained a possible mine-related pit (**1303**) with a width of 3.5m and a mixed fill (**1304**). It also had the terminal of a narrow ditch (**1301**) with a width of 0.4m, depth of over 0.7m and a fill of grey clay and coal (**1302**).

Trench 14 contained a possible quarry or mine (**1401**) in the southernmost 16m of the trench. Surface bedrock had been quarried away and the feature was filled with a waterlogged light brown sand (**1402**). The depth of this feature is unknown but chisel marks were visible on overhanging bedrock.

Wall and cut feature

In Trench 30, a linear cut (**3002**, Fig. 4) aligned north-east to south-west ran most of the length of the initial trench. This was filled with a wet brown-grey sandy clay with orange patches (**3001**). This deposit contained horse and cattle bones, and other finds of 17th/18th-century date. An extension to the south-east revealed the opposite side of cut **3002** to be very irregular and this feature had a width of between 3m and 6m. Water ingress and collapsing trench sides prevented the base of the feature being reached.

In the south-west end of the trench, what appeared to be an earth bank (3004) with a stone revetment (3003) on its north-eastern side and a partial capping of cobbles was recorded. It was cut into a compact orange-brown sandy subsoil (002), which overlay fill 3001. In an extension (5.6m by 2m) to the north-west, revetment 3003 appeared to become a wall and a number of shallow slots (3010, 3011, 3012, 3015, Figs 11-12) projected east from this.

A second, larger extension was excavated to the south-east. This measured 17m by 6m (Fig. 13). This proved that the stone revetment (3003) and cobbles were in fact part of a culvert drain (3023), the cut for which was invisible in the initial trench. The drain was 0.5m wide and 0.5m deep (Fig. 14). A thin layer of compact clayey sand (3024) lined the base and this was overlain by very large and irregular sandstone slabs (3026=3003). The upper fill consisted of small and medium sized cobbles and occasional broken handmade bricks (3025), none of which appeared in the initial trench. The channel formed by 3026 was filled with a sterile soft coarse brown sand (3027). This feature was clearly the same as that recorded in Additional Area Trenches 66, 71 and 74 (Fig. 1).

A machine excavated slot revealed that 002 sealed a cut feature (3028) which had a length (north-east to south-west) of over 2.6m and width (north-west to south-east) of over 1.8m. The cut was steep-sided and over 0.5m deep. It was filled with a soft, wet grey-brown sand (3029). No finds were recovered.

3.2 Phase 2 Trenches

Twenty trenches (Trench 35 to Trench 55) were excavated within the Phase 2 area, amounting to 2345m² (Fig. 1). As in the Phase 1 area, the topsoil was typically 0.3-0.4m deep, overlying sandy natural subsoil. In places there was an orange-brown sandy subsoil 0.2-0.6m deep.

Probable pits

Trench 37 contained a single oval pit (3701). Only partially exposed in the trench, this was 1.6m in length, 1.2m in width and 0.15m deep. A piece of blue slate was recovered from the fill (3702), which consisted of discrete patches of brown and yellow sand.

Trench 38 contained a single possible pit or ditch terminal (3803). Partially within the trench, this measured over 3.1m by 0.95m and a sondage showed it to be 0.75m deep. Frequent modern finds were recovered from the fills (3801-2). These consisted of a firm dark-brown sand with patches of yellow sand similar to (3702) over an orange-brown sand, also with patches of yellow sand (3703).

Barrack blocks and associated remains

Trench 39 exposed the remains of one barrack block. This consisted of a heavily truncated spread of mortar (3901, Fig. 5), 2.25m wide with a small area of pebbles (3904) within it. Two fragments of animal bone were found in 3901.

What may be the truncated remains of an east-west aligned wall (**4007**, Fig. 5) with a width of 0.5m was exposed in Trench 40 beneath a thin spread of building debris consisting of red sandstone, white and brown mortar and rubble (**4004**). The wall foundation (**4006**) cut into the underlying subsoil to a depth of 0.25m. To the north of this was a deposit of concreted black/red/orange sand (**4008**) which had been affected by some overlying process. To the south, deposits were 0.9m deep, with deposit **4004** being overlain by a compact deposit of grey-brown sand with red sandstone chips (**4010**). This had a depth of 0.35m and was overlain by a similar depth of topsoil (**001**). Trench 41 (**4102-3**) saw the continuation of this truncated wall.

An L-shaped deposit of plough-scored mortar (**4201**, Fig. 5) was exposed in the NNW end of Trench 42. This measured 5.5m in length and 0.8m in width. One metre to the south of this a culvert drain (**4202**) was recorded. Aligned east-west, this had a width of 0.8m and depth (to the stone base) of 0.25m. The lintels (**4203**) were mostly in place. The fill, (**4204**), contained a sherd of 18th-century pottery. Further to the SSE of this drain the edge of another spread of mortar with a width of 2.4m was present (**4205**). Three pantile fragments were found in this layer.

A further stone and mortar spread (**4401**), 1.1m wide, of a probable wall foundation running east-west was exposed in Trench 44 (Figs. 5, 15).

Building remains were also uncovered in Trenches 47 and 48. In Trench 47, wall foundation **4701**, 0.45m wide, crosses the trench and comprised of crushed mortar and small fragments of sandstone (Figs. 5, 16).

In Trench 48, **4801** was the remains or foundations of a red sandstone and mortar wall running SW-NE; 3m in length and 0.4m wide, it ran from the SW end of the trench, stopping within the trench where the stones were probably robbed away (Figs. 5, 17).

Trench 49 contained a possible robbed wall (**4901**) with a width of 0.75m. This rested on a plaster/compact clay floor surface (**4902**) with a width of 4.5m and an area of cobbles (**4903**) 6.2m long (Figs. 5, 18). The cobbled area produced a number of ceramic finds including some manufacturing waste from the pottery industry (see Section 3.4).

A drain terminal (**5101-4**) was recorded in Trench 51 (Figs. 6, 19-20). Crossing the trench at a diagonal SW/NE alignment, it measured 0.6m in width and 0.6m in depth. The structure comprised of two lines of parallel bricks capped with sandstone slabs (**5103**) and it had a sandy fill. Fill **5102** contained 18th/19th-century finds, and a sample brick from wall **5103** is of 19th-century date.

Trench 52 contained a circular sandstone oven, with brick edging (**5201**, Figs. 6, 21), sitting on natural. The oven was 1.2m in external diameter and 0.3m deep, with a circular centre 0.6m wide. The splayed stoke-hole had a width of 0.4m and faced north-east. Finds in the dark-brown sandy silt fill (**5202**) consisted of iron, bone pottery, shell and glass which suggest a 19th/20th-century date. To the north of this was a partially exposed wall (**5205**) with a length of 2m and a spread of mortar with red sandstone chips (**5206**). This deposit was adjacent to a mortar surface (**5204**). Surface **5204** continued beyond the trench and had a maximum width of 4m.

Three walls (**5301**, **5302**, **5303** (Fig. 6) were exposed in Trench 53. Wall **5301** was 0.5m in diameter and consisted of grey mortar with sandstone and brick fragments. It was aligned WSW-ENE. Wall **5302** was 'L'-shaped and 0.4m wide. It appeared to be associated with wall **5303** as they were parallel and 1.2m apart. Soil (**002**) adjacent to wall **5301** contained a nail and an animal rib.

A deposit of brick and mortar rubble spreads (**5001**) with a width of 1m and depth of 0.1m was recorded in Trench 50.

One further section of wall (**5501**) was discovered in Trench 55. Irregular in plan, this wall was 1.5m in length and up to 0.65m in width. As with the remains uncovered elsewhere in the Phase 2 area, **5501** comprised of broken fragments of sandstone and grey mortar.

Mining remains

A possible mine related feature, a circular cut (**3902**) with a diameter of 2.9m was exposed in Trench 39, with a fill (**3903**) of clean sand and topsoil.

Trench 43 contained a large mining feature (**4301-3**), 6m in diameter, with a possible trackway (**4304-5**) 4m wide, 7m to the south of this feature. It is possible that these features are related, as the whole central part of this trench was deep and very disturbed. Coal was found in both features. There were many 18th–19th-century finds within these assumedly industrial features including pottery, glass, brick and bone.

3.3 Additional Area

Eighteen trenches (Trench 56 to Trench 74) were excavated in the additional area amounting to 1895m² (7%). Topsoil (**001**) was 0.3m-0.4m deep and a brown subsoil (**002**) was present at the base of slopes. A number of stone and rubble field drains were identified within this area.

Wall features were uncovered in Trenches 56, 57 and 58. What may be a cistern was recorded in Trench 66.

The wall (**5601**) in Trench 56 (Figs. 6, 22) was 0.75m in width and was aligned ENE-WSW. Brick and mortar alignments (**5602**, **5603**) were recorded in association with the wall. A field boundary is shown in this approximate location on the OS First and Second Editions (1854, 1894). A sample of brick from **5603** and a clay pipe fragment from **5602** were of 18th/19th-century date.

In Trench 57, wall **5701** was aligned north-south and was 0.75m wide. It was associated with a cinder trackway (**5702**, Figs. 6, 23) on the west side.

In Trench 58, a wall on the same alignment (**5801**) was also associated with a cinder trackway, (**5802**, Figs. 6, 24) and appears to be a continuation of wall **5701** in Trench 57. A field boundary is shown in this approximate location on the OS First Edition (1854) and the Second Edition (1894) shows a trackway alongside it.

A second wall (**5803**) formed from red sandstone to the north-west of **5801** was aligned north-east to south-west. The red sandstone construction may associate this feature with the wall remains found in Trenches 40 and 48. Finds from soil layers (**002**) over and adjacent to wall **5803** include several iron objects, a large lump of ferrous slag and 19th-century objects.

Trench 66 contained a sandstone-capped cistern (**6601**) with a length of 2.25m and width of 0.8m. The depth was over 1.2m. To the south-west of this was a drain with a width of 0.75m containing cobbles over sandstone slabs (**6602-4**, Fig. 25). This drain ran downhill through Trenches 71 74 and 30. These features walls may lie close to the large ‘U’-shaped building seen on the 1832 map by John Thomson (Fig. 2). A 17th/18th-century clay pipe stem was found in **6601**.

3.4 The finds, by Sue Anderson

Table 1 shows the finds quantities recovered during the evaluation. A quantification and brief catalogue by trench and context is included in Appendix 6.

Find type	No.	Wt (g)
Pot	77	3389
Ceramic building materials	9	6312
Clay pipe	12	33
Other ceramic	10	714
Mortar	6	624
Stone	3	105
Glass	16	1718
Iron	205	15414
Copper alloy	14	228
Lead/lead alloy	11	317
Aluminium	5	98
Graphite	2	17
Slag	1	5351
Human bone	-	812
Animal bone	114	2552
Shell	8	286
coal	1	10

Table 1. Finds quantities by type

Pottery and evidence of pottery manufacturing

With the exception of two sherds of a Scottish post-medieval reduced ware pipkin from **3001**, all pottery in this group was of 18th–20th-century date. The group included slip-decorated and black/brown-glazed redwares, as well as creamwares and refined factory-produced whitewares. The largest group (30 sherds including a complete creamware plate) was recovered from Trench 43, with another large group being found in **4903**.

As well as the finished pottery, there were two sherds of biscuit-fired refined whiteware, saggar fragments and pieces of kiln prop from **3001**, **4903** and possibly Trench 41 and **3702**. The latter contained fragments of compressed shale vessels which may have served as saggars, although the pieces were not heavily fired.

Building materials

A small collection of ceramic building material included four handmade bricks in fine sandy fabrics, with widths between 102–108mm and thicknesses of 60–67mm, suggesting a 19th-century or later date. Two were from topsoil and the others were from contexts **5103** and **5602**. A compressed shale brick with a partial maker's mark (...STEL...) was an unstratified find. Four fragments of post-medieval pantile were also collected, one from Trench 41 and three from context **4205**.

Four small fragments of a greyish-buff mortar with a high proportion of sand aggregate were found in **4008**. A sample of mortar was also recovered from wall **5601** and was a similar type but also contained large rounded quartz pebbles; the two fragments were up to 30mm thick.

Three fragments of blue Welsh slate roof tiles were recovered from **3702** and **3801**.

Five fragments of window glass were collected, four from topsoil in Trenches 41 and 43, and one from oven fill **5202**. The latter was a small thick fragment of recent date.

Metal finds

A large quantity of iron objects was recovered through metal-detecting. Most pieces were from topsoil, the only stratified pieces being recovered from pit fill **1204**, context **3801**, oven fill **5202**, wall foundation **5301**, and wall **5803**. Identifiable objects included nails, nuts and bolts, strap/hinge fittings, rings, a chain, a woven cable, fragments of ploughshare, wire, heel irons, and fragments of sheets (some possibly from vessels). None of this material is closely dateable, but the state of preservation suggests that all finds are post-medieval or modern.

Non-ferrous metal objects were all recovered from topsoil and included a gas tap and a washer (Trench 3), a post-medieval token (Trench 4), buttons (Trench 47), a furniture fitting (Trench 20), a horse brass and bale seals (Trench 48). All non-ferrous finds were of 18th to 20th-century date.

A plano-convex lead object from Trench 45 (SF 14) may be a musket ball which had been fired against a flat surface, but the lead is in good condition in comparison with other musket balls from the site (Carruthers & Anderson 2012) and the object appears to be moulded in this shape; it is likely to be a modern object of uncertain use, or possibly a waste fragment.

A large, dense lump of ferrous slag was found in sandstone wall **5803**.

Miscellaneous

Eleven fragments of clay pipe stem were collected, six of which were from stratified contexts (fill **3001**, drain fill **5102**, brick line **5602**, wall **5803**, cistern **6601**). Fragments from **3001** and **6601** were probably 17th/18th-century, whilst the others had narrow bores and were probably later 18th or 19th-century.

Glass bottle and vessel shards were found in fill **3001**, wall **5803**, and Trenches 41 and 43. The earliest was probably a bottle fragment from **3001**, which appeared to be part of an onion-shaped bottle of 17th/18th-century date. The other bottle shards included thick bases from 18th/19th-century beer bottles, and fragments of uncoloured and light green 19th-century bottles in **5803**. An uncoloured vessel body shard, possibly part of an 18th-century wine glass, was found in Trench 41.

Two fragments of graphite rods were found. A thick piece was an unstratified find in Trench 16, and a thinner fragment was found in Trench 43. Both are of recent date.

One piece of burnt coal was collected from Trench 43.

Human remains

A cremation burial was discovered in Trench 17. Preliminary identification of the bones suggests that the burial represents the remains of an older juvenile. The weight of the bone, 812g, suggests that the burial is almost intact.

Other biological remains

Animal and bird bones were recovered from several contexts. A group of large mammal bones, mainly horse but also some cattle, was collected from **3001**. Other groups contained fragments of sheep, pig and other animals, but were largely unstratified. A group of 47 fragments of at least five birds was found in Trench 35.

Shells were collected from Trenches 41, 43 and 52 and included cockles and oysters.

4. CONCLUSIONS

An archaeological evaluation was carried out at Pinkie Mains, Musselburgh, East Lothian. Seventy-four trenches were excavated across the three areas within the overall development boundary. Thirty-four trenches (Trench 1 to Trench 34) were excavated within the Phase 1 area amounting to 3360m² (7%) and twenty trenches (Trench 35 to Trench 55) within the Phase 2 area, amounting to 2345m² (7%). Eighteen trenches (Trench 56 to Trench 74) were excavated in the additional area amounting to 1895m² (7%).

Phase 1

Phase 1 contained what appear to be post-medieval mining and/or quarrying features. Historic maps from the late 19th century show that Pinkie Brick Works (NT37SE 187) was located in the area of what is now Galt Avenue and excavations comprising of a clay pit and quarry with cranes are depicted to the north around what is now Macbeth Moir Road. These were disused by the late 1930s.

The stone-lined pit containing a juvenile human cremation deposit appears to be an isolated feature and is likely to be Bronze Age in date. Other apparently isolated cists have been found in the area, eg NT37SE 246 at Barbachlaw Farm to the south.

Other ditches and pits recorded in the Phase 1 area are in the main undated and appear not to be significant. Where located, features appearing on aerial photographs are modern and an example of this would be the sub-circular feature in the area of Trenches 5 and 16, which appears to stem from the presence of waterlogged field drains.

Phase 2

A series of walls and building foundations were identified within the western end of the Phase 2 and Additional Area, some associated with drains. An oven was also recorded. Cartographic evidence by John Thomson, 1832, shows the western end of the Phase 2 area to lie within the site of a 'Barracks' complex (NT37SE 127, MEL 2711) and the remains in the Phase 2 area appear to relate to this complex. Only the foundations of many of these walls survive and a number of them appear to have been robbed out, but several features including culvert drains and an oven were well preserved. The wall identified in Trenches 40, 48 and 58 may form the southern boundary of the barracks area as the red sandstone construction appeared to be the same as that forming the substantial bank and wall which runs south from Pinkie Mains. It is notable that the Barracks is shown as unenclosed on the 1832 map.

Circular features that were identified in the Phase 2 area appear to be associated with mining and/or quarrying works.

Additional Area

The wall in Trenches 40 and 48 continued into this area (Trench 58) and may be associated with the substantial revetting wall and bank which runs south from Pinkie Mains. The corner therefore lies between Trenches 57 and 58.

The cistern and drain identified in the east of this area (Trench 66) may have been constructed close to the large 'U'-shaped building shown on the 1832 map.

Other walls and cinder surfaces relate to field boundaries and tracks recorded on historic maps.

Any decision on further mitigation work rests with East Lothian Council Archaeology Service.

The project archive, comprising all CFA record sheets, maps and reports will be deposited with the National Monuments Record of Scotland (NMRS). A summary statement of the results of this programme of work will be submitted for publication in *Discovery and Excavation in Scotland 2012* and reported via OASIS Scotland.

5. REFERENCE

Carruthers, G & Anderson, S 2012 *Pinkie Mains, East Lothian: Archaeological Metal Detecting Survey*. CFA Archaeology Ltd, Unpublished Report No. 2024.

APPENDIX 1: Trench Register

Trench no.	Size	Depth to natural subsoil	Description
1	50m x 1.8m	0.8-1m	Large area of modern disturbance (101)14m wide at 21m from NNW end of trench. An area of natural subsoil 10m wide is followed by a second area of disturbance (103), 3m wide. Natural subsoil appears again at SSE end of trench. All modern, as fills of features overlie the quarried stone fill of possible culvert drain, photos 22-24.
2	50m x 1.8m	0.8-1m	The south 10m of this trench have another area of disturbance (201). Possibly mining related. Consists of deposits of soil, clay and stones with occasional lumps of coal (202). Over the trench, 0.3m topsoil and in the north end fine sand natural. Lens of mortar and stone fragments (203) under base of topsoil as trench 7 but less extensive here. Only at northern end again. An alignment of boulders (204) was recorded to the north of (201). Not a wall, this may be a mound of big boulders placed around mine workings.
3	50m x 1.8m	0.35m	Two possible features. A: possible rectangular/ linear feature at eastern end. Surface bone. B: wide linear feature in mid-trench. Neither look promising to be old. B: 2.5, wide and 0.1m deep at most. Filled with (301) compact topsoil-like material with inclusions of pea gravel. No finds. Almost certainly plough or modern agriculture related. No finds. 0.35m topsoil here, over coarse sand and pea gravel, very well drained. B: Bath shaped cut (303), almost all in trench, shallow. Except recovered clay-pipe and a bone in good condition. No function evidence. Fill as 302(304). Exceptionally well-drained natural here.
4	50m x 1.8m	0.35m	No archaeology, but an area of stones and stained sand 24m from SW end had to be investigated. This turned out to be natural. 0.35m of topsoil over lovely stained orange and yellow sand.
5	50m x 1.8m	0.3-0.4m	Trench rapidly flooded. Once topsoil removed water welled up from below. Several drains filled with vitrified material were seen. 0.3-0.4m topsoil over a shallow natural sand over compact natural clay. Many stones in natural. If the water-filled drains aren't the origin of the AP feature, it is not clear from this trench.
6	50m x 1.8m	0.35-1.3m	No archaeology, orange brown subsoil as in trench 9 at southeast end. 1.3m deep at SE end, 0.35m deep at NW end.
7	50m x 1.8m	0.3-0.35m	0.3-0.35m plough soil over natural sand. One area in mid trench was investigated due to the presence of greyer sand and large stones. This was all revealed to be natural. Natural sand varies in colour and therefore possibly drainage. Some is creamy white, some yellow-orange, large red/white/yellow sandstone boulders. Lens of mortar exposed (701) at north end. No structures in trench. Mortar 0.1m deep and extends for 1.5m diminishing to north.
8	50m x 1.8m	0.3-0.65m	No archaeology. Located to examine AP anomalies but no sign here. 0.3m topsoil over fine-medium iron stained sand at west end. At east end, 0.3m topsoil overlies 0.35m of yellow-brown silty sand before clean sand is reached.
9	50m x 1.8m	0.7-1.8m	No archaeology 1.8m deep at NW end, 0.7m deep at SE end, 2 x CPFD at SE end. These comprise 0.35m topsoil over a deep subsoil. This seals the beach-type cobbles at SE end with a matrix of sand and occasional sea shells. More level bedrock and sand at NW end.
10	50m x 1.8m	0.4-0.5m	No archaeology. 0.3m topsoil over 0.1-0.2m mixed deposits. Natural is varied. Stiff mottled clay is overlain at the angle of the slope to the NW by laminated sands and fine gravels. Cut by deep modern trench containing unknown probable pipe. This probably continues into trench 11.

Trench no.	Size	Depth to natural subsoil	Description
11	50m x 1.8m	0.3-0.8m	No archaeology. 0.3m topsoil over natural clay and sand, as trench 10. Subsoil up to 0.8m deep at NE end. Also modern trench, as trench 10.
12	50m x 1.8m	0.9-1.5m	Lots of probably mining-related disturbance. One circular feature (1201-2) and one possible pit (1203-4). Soils as Trench 13, 0.3-0.4m topsoil over 0.6-1.1m of mixed soils with large rocks, clay and coal chunks. Circular feature 3.5m diameter. Pit is >2m long, 1.3m wide and 0.45m deep. Filled with grey sticky clay and coal (1204).
13	50m x 1.8m	0.9-1.5m	Lots of recent? Disturbance. One circular possible mine feature (1303-4) and one short ditch? (1301-2). Soils as trench 12, 0.3-0.4m topsoil over 0.6-1.1m of mixed soils with large rocks, clay and coal chunks. Mine feature c.5m diameter circle. Ditch? >0.75m deep and 0.5m wide extends to W of trench. Filled with grey sticky clay and coal.
14	53m x 1.8m	0.3m	50m x 1.8m with extension 3m long. Deep possible quarry/ mine 16m from south end of trench (1401-2). Unknown depth of this feature but good chisel marks on overhanging rock (1403). 0.3m topsoil seals all this. Natural at north end is a varied sand with surface bedrock.
15	50m x 1.8m	0.6m	One possible shallow ditch. This could be a robbed out wall as it has many chunks of mortar and sandstone mixed in the fill (1502). Cut [1501] is 1m wide and 0.2m deep. Possibly same as 302 in trench 3. Topsoil 0.35m over 0.25m subsoil and mixed deposits. Coarse sand/ fine gravel natural subsoil.
16	50m x 1.8m	0.35-0.5m	Ran through wet area located drains at 5m NE-SW, 9m N-S, 12m NE-SW, 20m NE-SW, 49m NE-SW. 0.35m topsoil at western end, 0.35m at eastern end.
17	35m x 1.8m with an extension of 10m x 10m at N end	0.35m	The initial trench located a poorly preserved cut feature (1701) with a stone-lined perimeter (1703). This had dimensions of 1.4m x 1.2m and it was aligned close to N-S. The interior was filled with sand (1702) containing quantities of burnt bone. No finds were recovered but many of the stones were degrading and may have been heated. Flecks and small pieces of charcoal were recorded. Feature 1701 was fully excavated. Samples were taken. The trench was expanded around this feature but no further features were present. Topsoil with a depth of 0.35m overlay clean natural sand in this trench. Plough scores were recorded.
18	50m x 1.8m	0.3-0.6m	One narrow ditch (1801-2), 0.4m wide and 0.2m deep. It's 20m from NW end of trench. Filled (1802) with orange-brown sand. At NW end 0.3m topsoil over orange sand. At ditch [1801], 0.35m topsoil over 0.3m subsoil over same natural. At SE end 0.4m topsoil over 0.6m orange-brown subsoil over dirtier sand. Beach cobbles as trench 9 appear 5m from SE end of trench.
19	40m x 1.8m	0.35m	One oval/ sub-rectangular feature (1901-3) 15m from N end. It is a modern animal burial, 1.7m x 1.3m. 0.35m topsoil over yellow/ orange sand with coal lenses. Large stones in natural at south end.
20	50m x 1.8m	0.35m	No archaeology. One natural feature, irregular edges and shape, filled with mottled and iron stained grey sand, compact and turning loose wet with pebbles with depth. 0.35m topsoil over orange and grey sand with coal lenses/ flecks.
21	50m x 1.8m	0.3-1m	No archaeology. 0.3m topsoil over orange natural sand at NW end. Subsoil appears 10m from NW end and by SE end, at base of steep slope, 0.4m topsoil overlies 0.6m of orange-brown silty sand subsoil. Natural becomes more stony at SE end.
22	50m x 1.8m	0.3-1.2m	This trench ran obliquely across the steep slope in the E of the site. What may be the terminal of a ditch or part of a pit was recorded at the NNW end. This feature (2201) had a length of over 1.6m, width

Trench no.	Size	Depth to natural subsoil	Description
			of 1.2m and depth of 0.4m. It contained a single fill (2202) consisting of brown stony clay-silt. No finds were recovered and there was no environmental content. At this end of the trench, topsoil and subsoil had a depth of 1.2m whereas at the SSE end of the trench, topsoil with a depth of 0.3m overlay natural clay subsoil.
23	50m x 1.8m	0.3-1.05m	No archaeology. 0.35m topsoil over 0.7m subsoil over clay and stones with coal flecks at NNE end. 0.3m topsoil over stiff clay at SSW end on top of hill.
24	50m x 1.8m	0.3-0.4m	0.3-0.4m topsoil over lovely sand natural, orange, at NE end. Creamy at SW. Looks like the ditch in trench 27 might just have been slipped in the NE corner of the trench.
25	30m x 1.8m	0.35-0.8m	No archaeology. At SE end, 0.4m topsoil over 0.4m orange-brown clayey subsoil. This merges into natural orange sand. At the NW end 0.35m topsoil overlies natural creamy sand.
26	25m x 1.8m	0.35-0.65m	Located next to trench 2 to further assess the boulder alignment in that trench. It is clearly here too, (2601) with 2 stones high in one place. Informal though, 1m wide in places with some stones maybe moved after abandonment. Large boulders to south too and other s to north, sealed by natural sand. Disturbed (mined?) ground cut [2602] lies to south of these boulders. More stones with grey clay and coal flecks/lumps. Natural is sand in north end of trench. 0.35m topsoil seals all of this with an orange-brown silty sand 0.3m deep at north end. More mixed sand to south where mining? is.
27	50m x 1.8m	0.35m	One linear ditch [2701] with a 'V' profile. No finds though but certainly 'Roman' in profile. Ditch width 1.6m. Depth 0.65m, slightly darker at top. Section cleaning shows a deposit of orange-brown subsoil over the ditch and under the topsoil which is not present elsewhere in the trench. This could be the remnant spread of a bank but no hint of any vestiges of soil below it. This subsoil occurs on west side of the N-S aligned ditch only. 0.35m topsoil over lovely coarse/ medium creamy sand. Clear AP anomaly.
28	50m x 1.8m	0.6-0.8m	Wet. Alongside path to Pinkie Braes. 0.4m topsoil over 0.2m wet mixed subsoil over wet natural sand. Rubble filled field drain at SE end where subsoil is deeper. 0.8m deep at SE end.
29	50m x 1.8m	0.3m	No archaeology. 0.3m topsoil over lovely orange and yellow sand at NE end. At SW end topsoil overlies a deposit of grey mottled sand which is similar to that containing the bone/ pot/ metal/ glass etc. in trench 30 to the SE. Very wet here, trench flooded rapidly.
30	42m x 1.8m	0.55m	42m x 1.8m with 3x extensions. 5m x 1.8m & 17m x 6m to south – east and 3m x 7m to north-west. FCFD at east end aligned NNE-SSW. Over most of trench 0.35m topsoil over c.0.2m subsoil. A linear cut (3002) aligned NE-SW for most of trench would appear to be filled with brown sand including a number of horse bones. The cut is irregular in width but averages c.2m. What appeared to be a stone revetment (3003) was recorded in the initial trench and extensions to the NW & SE were excavated to assess it. The NW extension suggested this revetment continued as a low wall but that to the SE showed conclusively that the stones were an element of a culvert drain which cut the subsoil and continued through Trenches 74 and 71 up to Trench 66.
31	50m x 1.8m	0.6-0.75m	No archaeology. At NE end 0.3m topsoil over 0.3m subsoil over wet sand. At SW end 0.3m topsoil over 0.15m re-deposited orange sand over 0.3m subsoil over wet sand. Apart from the re-deposited orange sand, which is roughly where the 1st Ed. FB is located. No sign of this FB in the trench.
32	50m x 1.8m	0.55m	No archaeology. At SW end 0.35m topsoil over 0.2m orange-brown subsoil over lovely creamy sand. At NE end 0.45m topsoil over

Trench no.	Size	Depth to natural subsoil	Description
			0.1m grey coal-flecked subsoil over wet coarse sand.
33	40m x 1.8m	0.65m	Deeper than trench 34 to the NNW. 0.35m topsoil over 0.3m orange-brown sand which merges into natural wet sand. Trench floods rapidly, especially at ends. Narrow cut drain? (modern) at WSW end but too wet to investigate.
34	25m x 1.8m	0.3m	No archaeology. 0.3m topsoil over golden sand.
35	50m x 1.8m	0.4-1m	Trench 1m deep at SW, 0.4m at NE. Totally flooded at SW end. No archaeology except a deposit of bricks (EDINBURGH stamp and concrete. 0.4m topsoil over bricks and orange-brown subsoil at SW end. Golden sand exposed at NE end.
36	40m x 1.8m	0.3-0.5m	No archaeology. At WNW end 0.35m topsoil over 0.2m orange-brown subsoil over creamy wet sand. At NE end 0.45m topsoil over 0.1m grey coal-flecked subsoil over wet coarse sand
37	40m x 1.8m	0.3-0.5m	One pit 3701 in SW end, 8m from SW end. 1.6m NE-SW, 0.15m deep, oval in plan assuming it is a pit. 0.3m topsoil over fine golden sand at SW end. 0.3m topsoil over 0.2m orange-brown sandy subsoil at NE end. 0.1m of water after one hour in final 2m of trench.
38	40m x 1.8m	0.5m	One possible pit 3801-3. 1m N-S x 0.95m E-W exposed in trench. 0.75m deep. Modern finds. 20.7m from N end to feature. 0.3m topsoil over 0.2m orange-brown sand subsoil over varied sand natural.
39	50m x 1.8m	0.3m	Remains of one barrack block 12-14m from NNW end of the trench. Just a heavily truncated spread of mortar 3901 with a small area of small pebbles 3904. Plough scores. 30m from NNW end is a possible mine-related feature, circular cut 3902 with diameter of 2.9m and fill 3903 of clean sand and topsoil. 0.3m topsoil in this trench. Subsoil 002 underlies Barrack hut base on NNW side, SSE side appears to overlie natural.
40	50m x 1.8m	0.6-1.5m	Dark brown/ black topsoil 0.4-0.7m deep, with lots of roots and modern rubbish and some building demolition. Under this is a subsoil of medium brown sand with patches of natural orange sand in it. Natural here is pale yellow/ orange sand with flecks of iron in it. NNW end of the trench has two depressions in it- one 1.3m deep and one over 1.5m deep. Nature of these is unknown, could be natural. Both filled with water and caused dangerous trench collapses. Mid trench is a small 0.4m wide ditch- orientation E-W, excavated. Shallow, and below the water level, no finds. SSW end, large patch of building demolition was found- red sandstone, white and tan mortar and rubble- when excavated it was found to have a wall foundation cut into the subsoil below it. Directly next to this was a patch of hard compact black/red sand/rock which may be related to still existing wall seen to the east.
41	50m x 1.8m	0.7-1.2m	0.4-0.7m of topsoil overlies medium brown sand mixed with some natural. Natural is pale yellow/ orange sand with some flecks of natural iron. Mid trench- deep depression, over 1.5m flooded and collapsed. SSE end, large patch of building rubble. This is in line with a rubble patch found in trench 40- related to a wall - possibly from the barracks. NNW end of the trench is much shallower.
42	50m x 1.8m		L' shaped deposit of plough-scored mortar (4201) in NNW end of trench. 1m to S of this a fine culvert/drain (4202) was found. Lintels of drain (4203) were mostly in place and a section was made where no lintels were present. To the SSE of this the edge of another spread of mortar was present (4205)
43	50m x 1.8m	1m	Deep trench in places, slow to excavate. At N end 1m of deposits 0.4m topsoil over 0.6m subsoil over sand. Large mining feature 6m

Trench no.	Size	Depth to natural subsoil	Description
			in diameter (4301-03) in mid trench with a possible trackway 4m in diameter (4304-05) located 7m to the S of it. Trench at these features is 1m deep. It is quite possible that these features are related as the whole central part of the trench is deep and disturbed, and both features had coal within them. The trench collapsed at the area around these features. Many modern 18th and 19th century finds in mine working area: ceramics, glass, pantile, brick, and bone. This, contrasts the sterile fills of other features.
44	50m x 1.8m	0.4m	0.4m deep topsoil over natural yellow/brown fine sand. At approx 13m from the N end of the trench a stone/mortar spread probably a wall foundation runs E/W across the trench (4401)
45	50m x 1.8m	0.4m	0.4m deep topsoil over natural yellow/brown fine sand. Musketball (add SF2) was found on the base of the trench at the W end of the trench.
46	20m x 1.8m	0.5m	No archaeology, 0.5m deep topsoil over natural bands of yellow, and yellow/brown fine sand.
47	50m x 1.8m	0.3m	0.3m of topsoil over a compact yellow/brown fine sand. Wall foundation (4701) crosses the trench at approx 13m from the NW end. (4701) is 0.45m wide and comprises of crushed mortar and small fragments of sandstone.
48	20m x 1.8m	0.4-0.5m	0.4-0.5m deep topsoil over compact yellow/brown sand. (4801) the remains/foundations of a sandstone/mortar wall which runs SW/NE from the SW end of the trench then stops midway (possibly robbed away) 0.4m wide and 3m in length.
49	50m x 1.8m	0.3m	Topsoil 0.3m deep over brown sand natural. N end of trench has a possible robbed wall and a plaster/compact clay floor surface (4902). There is also a further area of cobbles to the S of these remains. A fine layer of red/brown ash/cinder is found running along the base of the trench from the cobbles to the 25m mark (deposit is 0.05m deep). lots of broken ceramics and glass were found in the trench. (4901)-stones (4902)-floor (4903)- cobbles (4904)- ash/cinder layer.
50	25m x 1.8m	0.4m	0.4m topsoil over brown sand. 2 patches of brick and mortar rubbles spreads in the base of the trench (photo of section taken).
51	40m x 1.8m	0.3m	0.3m of topsoil over a yellow/brown sand. Feature (5101) is a 0.4m wide brick and sandstone wall/drain. It crosses the trench at a diagonal SW/NE from the W side of the trench but does not go all the way to the E side of the trench. Two lines of parallel bricks with sandstone fill and capping.
52	40m x 1.8m	0.4m	0.4m of topsoil over mottled brown/ yellow sand. Oven feature [5201] sits on the natural. Oven is circular 1.6m wide and 0.5 deep. Circular centre with the flue facing NE.
53	40m x 1.8m	0.4-1.2m	Topsoil of 0.4 - 0.5m sits on a subsoil which undulates with the contours of the natural sand, the subsoil is 1m deep in places. Walls [5301] and [5302] are in the subsoil, not the natural.
54	50m x 1.8m	0.3m	No archaeology, 0.3m of topsoil onto a yellow fine sand.
55	40m x 1.8m	0.3m	Topsoil was 0.3m deep onto a yellow fine sand. A section of wall similar to others found in this field (sandstone fragments/mortar) was uncovered (5501). Very shallow, found under 5 -10cm of topsoil and sitting on the natural.
56	50m x 1.8m	0.8-1.4m	The first 10m of the trench from the S end are 0.8m deep, this is followed by a natural depression 1.4m deep. This depression was filled with subsoil. At 25m from the S end the depression leveled out to 0.5m deep. Wall feature [5601] found in this trench.
57	50m x	0.6m	Topsoil is 0.6m onto yellow/brown sand. At the S end of the trench

Trench no.	Size	Depth to natural subsoil	Description
	1.8m		a sandstone wall and floor surface were found. Two rubble field drains were also found in the trench.
58	50m x 1.8m	0.6m	At the S end the topsoil is 0.6m with a 1m deep subsoil over a fine yellow sand. S end is at the base of a slope so it is deep. Wall and cinder trackway [5801] (a continuation of a feature in TR 57) is found. Also a wall [5803]
59	60m x 1.8m	1.6m	No archaeology. 0.6m of topsoil on top of 1m of subsoil over yellow sand and sandy clay. Trench walls collapsed under their weight, material was powdery and dry.
60	55m x 1.8m	0.5-1.2m	No archaeology. E end topsoil is 1.2m deep and W end 0.5m deep. Natural at the E end was coarse brown sand, while at the W end it was wet clay.
61	50m x 1.8m	1.1-1.4m	No archaeology. Topsoil is 0.5m deep and subsoil from 0.6-0.9m deep natural at the N end is brown clay S end it is brown sand.
62	45m	1.1m	No archaeology. 0.5m topsoil and 0.6m subsoil on to brown stiff clay.
63	50m x 1.8m	0.4-1.2m	No archaeology. Slopes from the S end to the N end. At the S end the topsoil is 0.4m this slopes to 1.2m by the N end of the slope.
64	50m x 1.8m	0.4-1.2m	No archaeology. Slopes from S end to the N end . 0.4m topsoil at S sloping to 1.2m at N end. Natural is stiff brown clay sand as in Tr 63
65	50m x 1.8m	0.3m	No archaeology. 0.3m of topsoil over brown/ yellow stiff clay. Last 10m of E end of trench natural becomes coarse brown/ yellow sand.
66	50m x 1.8m	0.3m	(Trench was extended with a 5m x 4m extension) 0.3m of topsoil over yellow/brown stiff clay. Trench contains 2 features, [6601] a sandstone capped cistern (depth at least 1.2m - full extent unknown) and a sandstone drain [6602-04].
67	50m x 1.8m	0.5m	No archaeology. 0.3m topsoil on a stiff yellow/brown clay.
68	50m x 1.8m	0.3m	No archaeology. 0.3m of topsoil on a stiff yellow/brown clay.
69	50m x 1.8m	0.6-0.9m	No archaeology. Sloping ground from S to N. 0.3m topsoil over 0.3m subsoil rising to 0.6m at N end. Natural is stiff brown/yellow clay which in the N end of the trench becomes sand.
70	50m x 1.8m	0.6-0.9m	No archaeology. Sloping ground from the S to the N. 0.3m of topsoil over 0.3m subsoil rising to 0.6m at the N end. Natural is brown yellow stiff clay which becomes sand at the N end.
71	50m x 1.8m	0.6-1.2m	No archaeology. Sloping ground from the S to the N 0.3m of topsoil over 0.3m subsoil rising to 0.9m at the N end. Natural has bands of sand and clay brown and yellow. Two modern rubble field drains one 13m from the S end of trench the other 27m from the N end of the trench.
72	50m x 1.8m	0.6m	No archaeology. Sloping ground from S to the N. 0.3m to topsoil over 0.3m of subsoil over natural of stiff brown/ yellow clay and sand.
73	50m x 1.8m	0.6m	No archaeology. Sloping ground from the S to the N 0.3m of topsoil over 0.3m subsoil over natural of brown/yellow clay at the S end which becomes brown yellow sand.
74	50m x 1.8m	0.6m	No archaeology. 0.3m topsoil, 0.3m subsoil over natural of brown yellow sand. 2 Rubble field drains first is 10m from E end (orientation S-N) second is 10m from W end (orientation S-N).

APPENDIX 2: Context Register

Context no.	Trench/Area	Fill of	Description
101	1		Cut for mine/ quarry related works
102	1	101	Mixed fills, clay stones and gravel
103	1		Cut for mine/ quarry related works
104	1	103	Mixed fills, clay and stones.
105	1		Linear cut for culvert drain
106	1	105	Quarried stone chips over slabs
201	2		Cut for mine/ quarry related works
202	2	201	Soil, clay and coal and stones, as 102
203	2		Lens of mortar and broken stones adhering mortar
204	2		Boulder alignment
301	3		Shallow and wide linear feature
302	3	301	Very compact soil and pea gravel
303	3		Sub-rectangular/ bath-shaped cut
304	3	303	Very compact soil and pea gravel, modern finds
701	7		Lens of mortar and broken stones adhering mortar
1201	12		Circular cut, mine working
1202	12	1201	Coal, soil, clay and stones
1203	12		Cut for bath/ lozenge-shaped pit
1204	12	1203	Grey clay and coal chunks
1301	13		Cut for narrow and deep ditch?
1302	13	1301	Grey clay and coal
1303	13		Circular cut. Mine working
1304	13	1303	Coal, soil, clay and stones
1401	14		Cut for quarry related working
1402	14	1401	Cream and brown wet sand
1403	14		Chisel marks on bedrock
1501	15		Cut for linear shallow ditch
1502	15	1501	Compact deposit of soil and mortar and stones with mortar
1701	17		Cut for possible burial
1702	17	1701	Dark material containing large amounts of burnt bone and charcoal
1703	17	1701	Burnt stones lining cut 1701, surrounding 1702
1801	18		Cut for narrow ditch sealed by 002
1802	18	1801	Brownish orange sand
1901	19		Cut for modern? animal burial
1902	19	1901	Brown silty sand
1903	19	1901	Animal burial. Dog?
2201	22		Cut for ditch? terminal
2202	22	2201	Compact grey clay, stones and coal fragments
2601	26		Boulder alignment = 204
2602	26		Cut for mine working = 201
2603	26	2602	Fill, as 202
2701	27		Cut for 'V' profile linear ditch
2702	27	2701	Brown silty sand and gravel
3001	30	3002	Brown/ grey sandy clay with orange patches
3002	30		Cut through natural
3003	30		Stone facing of earth bank 3004
3004	30		Redeposited mixed natural soil bank with lots of rocks within it
3005	30		Yellow/ orange clay
3006	30		Grey/ brown sand with patches of orange natural sand
3007	30		Blue shale
3008	30		Rounded cut next to wall 3003
3009	30		Cut for wall 3003

Context no.	Trench/Area	Fill of	Description
3010	30		Cut projecting from 3009
3011	30		Cut projecting from 3009
3012	30		Cut projecting from 3009
3013	30	3008-3012	Dark brown sandy clay
3014	30		Cobbles to west of wall 3003
3015	30		Cut projecting from cut 3009 to the east
3016	30		Cut for circular feature, possibly mining related
3017	30	3016	Yellow and grey wet sand
3018	30		Cut for circular feature, possibly mining related
3019	30	3018	Yellow and grey wet sand
3020	30		Cut for circular feature, possibly mining related
3021	30	3020	Yellow and grey wet sand
3022	30	3023	Dark brown silty sand around cobbles 3025
3023	30		Linear cut for drain
3024	30	3023	Brownish-yellow silty sand at upper edges and base of drain
3025	30	3023	Upper cobbles and occasional broken bricks
3026	30	3023	Large but irregular sandstone slabs forming main drain structure
3027	30	3023	Loose coarse brown sand with silt fill between stones 3026
3028	30		Irregular large cut sealed by 3030
3029	30	3028	Soft wet brown-grey clayey sand
3030	30		Firm yellow brown silty sand (same as 002)
3701	37		Cut for pit, modern
3702	37	3701	Brown sandy soil and small gravel
3801	38		Cut for pit, modern
3802	38	3801	Brown sandy soil with gravel. Frequent modern finds
3803	38	3801	Basal fill. Cleaner brown-yellow sand
3901	39		Spread of mortar and soil with shell and stone fragments
3902	39		Circular cut. Vertical sides. Possibly industrial
3903	39	3902	Clean sand and topsoil
3904	39		Small patch of pebbles
4001	40		Cut of linear ditch, orientation east-west
4002	40	4001	Dark brown clay-sand
4003	40		Irregular shaped cut of a pit
4004	40	4003	Medium brown sand- patches of yellow and black sand- fill of pit- some sandstone flecks
4005	40		Grey / brown loose sand- full of building demolition debris- mortar, plaster, and red sandstone
4006	40		Cut for wall foundations- filled by 4007 and subsoil
4007	40	4006	Patch of concentrated red sandstone within 4005
4008	40		Dense linear deposit of black/ red/orange compact sand/ rock
4009	40		Medium brown sand- similar to 002- but used to pack cut 4006
4010	40		Dark grey-brown compact silty sand with red sandstone chips over 4004
4101	41		Orange-brown silty sand to N of 4103
4102	41		Grey-brown loose sand with intermittent building demolition debris- mortar, plaster, and red sandstone
4103	41		Dark grey-brown loose sand with occasional building demolition debris- mortar, plaster, and red sandstone
4201	42		Spread of mortar as 3901, 'L' shape
4202	42		Cut for culvert drain
4203	42	4202	Structure of drain, mortared red stone
4204	42	4202	Grey mottled sand

Context no.	Trench/Area	Fill of	Description
4301	43		Cut for mine working
4302	43	4301	Brown sand
4303	43	4301	Coal fragments ash and sand. Many finds
4304	43		Cobbled surface of possible road
4305	43		Coal spread over cobbles
4401	44		Mortar and broken sandstone wall foundation, linear, sits on natural
4701	47		Same type of spread as 4401, sits on natural, slot dug in it
4801	48		Same as above but with a 'T'-shaped junction
4901	49		Cobbled surface at north end of trench, abutts 4902
4902	49		Plaster/ mortar compact floor surface, sits under subsoil, and on natural, cut by modern pipe
4903	49		Cobbled/ ander floor/path surface, sits higher than 4902
4904	49		Reel ander/ gravel band, 5cm thick that runs for 15m at the base of the trench, sits on natural
5001	50		Demolition rubble under topsoil, above natural, brick/ sandstone
5101	51		Terminal of a brick lined, sandstone capped drain feature. 2m visible and 9.1m wide, 0.2m and 2 courses of brick deep
5102	51	5101	Sandy silt fill of 5101, surrounds the brick wall of the drain cut
5103	51		Red brick walls and grey sandstone capping of drain feature 5101, 2 courses of brick high, sandstone base of drain
5104	51	5101	Dark brown sandy silt fill of drain feature 5101
5201	52		Stone walls for oven feature
5202	52		Fill of centre of oven feature, dark brown sandy silt
5203	52		Stone base of oven feature 5201
5204	52		Compact mortar/ plaster floor of barrack building
5205	52		Mortar and sandstone wall, 0.15m deep, sitting on natural and abutting 5204
5206	52		Creamy mortar and red sandstone chunks
5301	53		Grey mortar and sandstone and brick fragments spread of wall foundation, linear across trench, sits on natural
5302	53		L' shaped wall foundation material, same as above, sits on the subsoil. No visible cut
5303	53		Linear and terminal of mortar, ,same as above, sits on the subsoil. No visible cut.
5501	55		T' shaped mortar and sandstone rubble foundation of wall, sits on natural
5601	56		Compact plaster/ mortar floor level, with 2 layers of bricks inserted into it. Sits on natural
5602	56		Line of bricks next to 5601
5603	56		Mortar and sandstone wall foundation, possibly robbed away and the south end tapers
5701	57		Remains of a linear sandstone wall which abutts 5702
5702	57		Red cinder and ash/ gravel road surface, abutts wall remains 5701, part of a linear road line
5801	58		Same as and continuation of 5701
5802	58		Same as and continuation of 5702
5803	58		Remains of a red sandstone wall line that crosses the trench
5804	58		Grey mortar spread along edge of south face of wall 5803
6601	66		Four large stone slabs (1m x 0.5m) each, in a line as a capping four a deep, 1.2m at least void. One stone is rectangular with iron rinds inserts, no cut visible
6602	66		Cut for linear stone lined box drain, 0.15m wide and 5m

Context no.	Trench/Area	Fill of	Description
			exposed in trench
6603	66	6602	Brown sand silt, fill of drain 6602
6604	66		Stone that forms the 'box' for the drain, mostly collapsed and not in the best condition

APPENDIX 3: Photograph Register

Photo No.	Summary description of subject	Taken from	Conditions
1	Trench 5 General view of excavation	SE	Sun/Shade
2	Trench 5 General view of excavation	NW	Sun/Shade
3	General views of field to East of path	NW	Sun
4	General views of field to East of path	NW	Sun
5	Trench 5 General view of excavation	SE	Sun/Shade
6	Trench 3 Possible feature at East end, pre-excavation	E	Sun/Shade
7	Trench 3 Possible feature at East end, pre-excavation	N	Sun/Shade
8	Trench 3 Linear feature pre-excavation	W	O/C
9	Trench 3 Linear feature pre-excavation	WSW	O/C
10	Trench 8 General views	W	Sun/Shade
11	Trench 8 General views	W	Sun/Shade
12	Trench 7 General views	S	Sun/Shade
13	Trench 7 General views	S	Sun/Shade
14	Trench 3 Non-feature at East end, agriculture related	ESE	O/C
15	Trench 3 Non-feature at East end, agriculture related	ESE	O/C
16	Trench 3 Linear feature section, also agriculture related	S	O/C
17	Trench 3 Linear feature section, also agriculture related	S	O/C
18	Trench 7 Mortar lens at North end	W	O/C
19	Trench 1 Excavation	NNW	Sun/Shade
20	Trench 1 Excavation	NNW	Sun/Shade
21	Trench 1 Culvert fill	SSW	O/C
22	Trench 1 Culvert fill	SSW	O/C
23	Trench 1 Culvert fill	SSW	O/C
24	Trench 4 Natural stones in a line	NW	Sun/Shade
25	Trench 4 General view	SW	Sun/Shade
26	Trench 9 General view	NW	O/C
27	Trench 9 General view	NW	O/C
28	Trench 9 General view	SE	O/C
29	Trench 6 General view	SE	O/C
30	Trench 6 General view	SE	O/C
31	Trench 10 Excavation	NE/SW	Sun/Shade
32	Trench 10 Excavation	NE/SW	Sun/Shade
33	Trench 11 Excavation	SW	O/C
34	Trench 11 Excavation	SW	O/C
35	Trench 11 Excavation	NE	O/C
36	Trench 12 Excavation Shaft 1201-1202	NW	O/C
37	Trench 12 Excavation Shaft 1201-1202	NW	O/C
38	Trench 12 Excavation Shaft 1201-1202	NW	O/C
39	Trench 12 Pit 1203-1204 pre-excavation	E	
40	Trench 12 Excavation	SE	
41	Trench 12 Pit 1203-1204 pre-excavation	E	O/C
42	Trench 12 Pit 1203-1204 pre-excavation	E	O/C
43	Trench 14 Views of trench excavation showing quarried face with chisel marks	various	O/C
44	Trench 14 Views of trench excavation showing quarried face with chisel marks	various	O/C

Photo No.	Summary description of subject	Taken from	Conditions
45	Trench 14 Views of trench excavation showing quarried face with chisel marks	various	O/C
46	Trench 14 Views of trench excavation showing quarried face with chisel marks	various	O/C
47	Trench 14 Views of trench excavation showing quarried face with chisel marks	various	O/C
48	Trench 14 Views of trench excavation showing quarried face with chisel marks	various	O/C
49	Trench 14 Views of trench excavation showing quarried face with chisel marks	various	O/C
50	Trench 14 Views of trench excavation showing quarried face with chisel marks	various	O/C
51	Trench 12 Pit 1203-1204 section	NW + N	O/C
52	Trench 12 Pit 1203-1204 section	NW + N	O/C
53	Trench 14 General view	S	O/C
54	Trench 14 General view	S	O/C
55	Trench 13 General view	NW	O/C
56	Trench 13 General view	NW	O/C
57	Trench 13 Shaft? 1303-1304	NW	O/C
58	Trench 13 Ditch 1301-1302 general view	N	O/C
59	Trench 13 Ditch 1301-1302 section	W	O/C
60	Trench 13 General view	SE	O/C
61	Trench 17 General view	S	O/C
62	Trench 16 General view	E	Dull
63	Trench 16 Drains	E	O/C
64	Trench 16 Drains	E	O/C
65	Trench 16 Drains	E	O/C
66	Trench 18 Ditch 1801	NW	O/C
67	Trench 18 Ditch 1801	NW	O/C
68	Trench 18 Ditch 1801 section	NE	O/C
69	Trench 18 General view	NW	O/C
70	Trench 15 general view	ENE	O/C
71	Trench 15 Ditch 1501-1502 section	NNW	O/C
72	Trench 15 Ditch 1501-1502 section	NNW	O/C
73	Trench 17 Pit? 1701 pre-excavation	N	O/C
74	Trench 17 Pit? 1701 pre-excavation	N	O/C
75	Trench 19 Pit 1901 pre-excavation	S	O/C
76	Trench 19 Pit 1901 pre-excavation	S	O/C
77	Trench 19 Mid 1/4 section buried within	SSW	O/C
78	Trench 19 Mid 1/4 section buried within	SSW	O/C
79	Trench 19 Mid 1/4 section buried within	SSW	O/C
80	Trench 19 General view excavation	N	Bright
81	Trench 20 General view excavation	NE	Bright
82	Trench 20 Possible feature pre-excavation	NE	Bright
83	Trench 20 Natural feature section	S	Sun/Shade
84	Trench 20 Natural feature section	S	Sun/Shade
85	Trench 20 Natural feature section	SW	Sun/Shade
86	Trench 21 General view	NW	Sun/Shade
87	Trench 17 Stone-lined feature 1701 section	SSW	Sun/Shade
88	Trench 17 Stone-lined feature 1701 section	SSW	Sun/Shade
89	Trench 17 Stone-lined feature 1701 section	SSW	Sun/Shade
90	Trench 17 East facing section at 1701	E	Sun/Shade
91	Trench 17 East facing section at 1701	E	Sun/Shade
92	Trench 22 general view of excavation trench	N	Sun/Shade
93	Trench 22 Ditch? Terminal 2201-2201	NE	Dull
94	Trench 22 Ditch? Terminal 2201-2201	NE	Dull

Photo No.	Summary description of subject	Taken from	Conditions
95	Trench 22 general view of excavation trench	N	Sun/Shade
96	Trench 26 Boulder alignment 2601	N	O/C
97	Trench 26 Boulder alignment 2601	W	O/C
98	Trench 26 Boulder alignment 2601	W	O/C
99	Trench 26 General view	N	O/C
100	Trench 26 General view	N	O/C
101	Trench 26 General view	S	O/C
102	Trench 26 Boulder alignment and other natural boulders	S	O/C
103	Trench 23 General view	NNE	O/C
104	Trench 23 General view	NNE	O/C
105	Trench 23 General view and panorama of site	SSW	O/C
106	Trench 23 General view and panorama of site	SSW	O/C
107	Trench 23 General view and panorama of site	SSW	O/C
108	Trench 23 General view and panorama of site	SSW	O/C
109	Trench 24 General view	NE	O/C
110	Trench 24 General view	SW	O/C
111	Trench 27 Ditch 2701 section	S +SW	O/C
112	Trench 27 Ditch 2701 section	S +SW	O/C
113	Trench 27 Ditch 2701 section	S +SW	O/C
114	Trench 27 General view	NE	O/C
115	Trench 27 Close-up of section	S + SW	O/C
116	Trench 27 Close-up of section	S + SW	O/C
117	Trench 17 Pit 1701 fill 1702 removed	SE/E	O/C
118	Trench 17 Pit 1701 fill 1702 removed	SE/E	O/C
119	Trench 25 General view	NW	O/C
120	Trench 27 general view	SW	O/C
121	Trench 27 Southeast facing section ditch 2701	SE	O/C
122	Trench 27 Southeast facing section ditch 2701	SE	O/C
123	Trench 26 Close-up of 2601 at trench edge. Lower stone appears to be in natural, with upper stone placed.	NW	O/C
124	Trench 26 Close-up of 2601 at trench edge. Lower stone appears to be in natural, with upper stone placed.	NW	O/C
125	Trench 26 Close-up of 2601 at trench edge. Lower stone appears to be in natural, with upper stone placed.	NW	O/C
126	Trench 28 General view	NW	O/C
127	Trench 29 General view	NE	O/C
128	Trench 29 General view	SW	O/C
129	General view of trench 28 to 30	S	O/C
130	General view of trench 28 to 30	S	O/C
131	Trench 29 Section	NW	O/C
132	Trench 31 General view	NE	O/C
133	Trench 32 General view	NE	O/C
134	Trench 31 Section at Southwest end	NW	O/C
135	Trench 32 General view	SW	O/C
136	Trench 34 General view	WSW	O/C
137	Trench 33 General view	WSW	Bright
138	Trench 30 Extension to South showing bone at 1.5 meters down	W	O/C
139	Trench 30 Extension to South showing bone at 1.5 meters down	W	O/C
140	Trench 36 General view	SE	O/C
141	Trench 35 General view	W	O/C
142	Trench 37pit 3701 pre-ex	SW	O/C
143	Trench 37pit 3701 pre-ex	SW	O/C
144	Trench 30 General view	S	O/C
145	Trench 30 general view	WSW	O/C

Photo No.	Summary description of subject	Taken from	Conditions
146	Trench 30 General view	W	O/C
147	Trench 30 Extension to North	SSE	O/C
148	Trench 30 Slabs 3003	NE	O/C
149	Trench 30 Slabs 3003	E	O/C
150	Trench 30 Extension to North	N	O/C
151	Trench 30 Extension to North	N	O/C
152	Trench 30 Extension to North	N	O/C
153	Trench 30 Extension to North	N	O/C
154	Trench 30 Extension to North	N	O/C
155	Trench 30 Extension to North	N	O/C
156	Trench 37 Pit 3701 section	SE	O/C
157	Trench 37 Pit 3701 section	NW	O/C
158	Trench 37 General view	SW	O/C
159	Trench 37 General view	NE	O/C
160	Trench 30 Backfilling		Sun/Shade
161	Trench 30 Backfilling		Sun/Shade
162	Trench 38 Pit 3801-3803 section	W	O/C
163	Trench 38 Pit 3801-3803 section	W	O/C
164	Trench 38 General view	N	O/C
165	Trench 30 Extension to S general view topsoil removed	N	O/C
166	Trench 30 Extension to S, mine? feature 3016	NNE	O/C
167	Trench 30 Extension to S, mine? feature 3018	W	O/C
168	Trench 30 Extension to S general view at level of features	S	O/C
169	Trench 30 Extension to S mine? features	S	O/C
170	Trench 39 General view	NNW	
171	Trench 39 Barrack base 3901	NNW	O/C
172	Trench 39 Barrack base 3901	NW	
173	Trench 39 Mine-related pit 3902-2902	NW	O/C
174	Trench 39 Mine-related section sondage	WNW	O/C
175	Trench 39 Pebbles 3901 at edge of trench	ENE	O/C
176	Trench 42 4201 pre-excavation cleaned	NNW+NW	O/C
177	Trench 42 4201 pre-excavation cleaned	NNW+NW	O/C
178	Trench 42 4201 pre-excavation cleaned	NNW+NW	O/C
180	Trench 42, 4201 and culvert 4202-4204	NW	O/C
181	Trench 42, Deposit 4205 in base of trench	WNW	O/C
182	Trench 42, Culvert 4202 section	NW	O/C
183	Trench 42, Culvert 4202 section	NW	O/C
184	Trench 42, Culvert 4202 section	S	O/C
185	Trench 41 Excavation	N	O/C
186	Trench 41 Excavation	N	O/C
187	Trench 41 Deposits 4101-4102 near South end	NNE	O/C
188	Trench 40 Deposits relating to South Barrack camp wall 4005, 4007-4009 and cut 4006	NNW	O/C
189	Trench 40 Deposits relating to South Barrack camp wall 4005, 4007-4009 and cut 4006	NNW	O/C
190	Trench 40 West facing section through these deposits	W	O/C
191	Trench 40 West facing section through these deposits	W	O/C
192	Trench 40 West facing section through these deposits	W	O/C
193	Trench 40 West facing section through these deposits	W	O/C
194	Trench 40 West facing section through these deposits	W	O/C
195	Trench 40 West facing section through these deposits	W	O/C
196	Trench 40 West facing section through these deposits	W	O/C
197	Trench 40 West facing section through these deposits	W	O/C
198	Trench 40 General view	N	O/C
199	Trench 43 Mine working 4301-4303	NNW	O/C

Photo No.	Summary description of subject	Taken from	Conditions
200	Trench 43 Finds in 4301	-	O/C
2201	Trench 43 Finds in 4301	-	O/C
202	Trench 43 Cobbled track? Surface 4304-4305	NNW	O/C
203	Trench 43 Cobbled track? Surface 4304-4305	SSE	O/C
204	Trench 43 Cobbled track? Surface 4304-4305	W	O/C
205	Trench 43 Cobbled track? Surface 4304-4305	W	O/C
206	Trench 44 Wall Foundation 4401	N	O/C
207	Trench 44 Post-excavation looking South	W	O/C
208	Trench 45 Post-excavation	N/W	O/C
209	Trench 47 Wall foundation (4701)	S	O/C
210	Trench 46 Post-excavation	W	O/C
211	Trench47 Section through 4701 West facing	W	O/C
212	Trench 48 Post-excavation of trench	NW	O/C
213	Trench 48 Wall foundation 4801	W	O/C
214	Trench 49 Post-excavation from the North	N	O/C
215	Trench 50 Post-excavation from the East	E	O/C
216	Trench 50 Detail of rubble in the section	N	O/C
217	Trench 51 Post-excavation from the North	N	O/C
218	Trench 51 Brick and sandstone wall /drain feature (5101)	NE	O/C
219	Trench 52 Oven like feature	NE	O/C
220	Trench 52 Oven like feature	N	O/C
221	Trench 52 Post-excavation	S	O/C
222	Trench 51 Feature 5101 with slot showing stone base	S/W	O/C
223	Trench 51 Feature 5101 with slot detail	S/E	O/C
224	Trench 53 Wall 5301	E	O/C
225	Trench 53 Post-excavation	S	O/C
226	Trench 53 South facing section of 5302/5303 showing it in subsoil not natural	S	O/C
227	Trench 53 General shot of 5302/5303	W	O/C
228	Trench 52 Shot of possible surface 5204	S	O/C
229	Trench 52 Shot of surface 5204 and wall 5205	S	O/C
230	Trench 52 Shot of surface 5204 and wall 5205	W	O/C
231	Trench 52 Post-excavation of 5201	N	O/C
232	Trench 52 Post excavation of 5201 showing stone in place	W	O/C
233	Trench 54 Post-excavation	S	O/C
234	Trench 55 Post-excavation	N	O/C
235	Trench 55 Wall feature 5501	S	O/C
236	Trench 56 Post-excavation showing collapse of section	S	O/C
237	Trench 56 5601-5603 shot of floor surface, brick alignment and mortar wall	N	O/C
238	Trench 57 Post-excavation and wall and cinder path 5701	S	O/C
239	Trench 59 Post-excavation	S	Sunny
240	Trench 60 Post-excavation	E	Sunny
241	Trench 61 Post-excavation	S	Sunny
242	Trench 62 Post-excavation	S	Sunny
243	Trench 63 Post-excavation	S	Sunny
244	Trench 64 Post-excavation	S	Sunny
245	Trench 58 Wall and cinder path 5801	S	Sunny
246	Trench 58 Wall 5803	S	Sunny
247	Trench 65 Post-excavation	E	O/C
248	Trench 66 Post-excavation	E	O/C
249	Trench 66 General shot of extension area shows drain and cistern	SW	O/C

Photo No.	Summary description of subject	Taken from	Conditions
250	Trench 66 Detail of stone caps on cistern 6601	N	O/C
251	Trench 66 Detail of stone caps on cistern 6601	E	O/C
252	Trench 66 Detail of capstone with iron ring fittings	E	O/C
253	Trench 66 Stone cundy drain	S	O/C
254	Trench 66 Detail of part of stone cundy drain	S	O/C
255	Trench 67 Post-excavation	E	O/C
256	Trench 68 Post-excavation	E	O/C
257	Trench 69 Post-excavation	S	O/C
258	Trench 70 Post-excavation	S	O/C
259	Trench 71 Post-excavation	S	O/C
260	Trench 72 Post-excavation	S	O/C
261	Trench 73 Post-excavation	S	O/C
262	Trench 74 Post-excavation	E	O/C
263	Trench 17, 10m square extension, west side	S	sunny
264	Trench 17, 10m square extension, east side	S	sunny
265	Trench 17, 10m square extension, stones and remains of Tr. 17	S	sunny
266	Trench 17, 10m square extension, close up of stones	S	sunny
267	Trench 17, 10m square extension, stones removed showing cut and half section	S	sunny
268	Trench 17, 10m square extension, section	E	sunny
269	Trench 17, 10m square extension, stones in pile on spoil heap	S	sunny
270	Trench 17, 10m square extension, totally excavated feature	S	sunny
271-294	Watching brief photos		
295-297	Trench 30, second ext to SE, cleaned	NW	Sunny
298-302	Trench 30, second ext to SE, cleaned, SE to NW	NE	Sunny
303-304	Trench 30, second ext to SE, Close-up of cobbles & bricks 3025	NW	Sunny
305-306	Trench 30, second ext to SE, cleaned	SE	Sunny
307-308	Trench 30, second ext to SE, Slot 1 cleaned	NW	
309-310	Trench 30, second ext to SE, cleaned better light	NW	O/C
311	Trench 30, second ext to SE, Slot 1 plan view	NW	O/C
312	Trench 30, second ext to SE, Slot 1 general view	NE	O/C
313	Trench 30, second ext to SE, Slot 1 general view	SW	O/C
314-315	Trench 30, second ext to SE, Slot 1, NW facing section	NW	Bright
316-317	Trench 30, second ext to SE, Slot 2 upper stones 3025 removed	NW	Bright
318-319	Trench 30, second ext to SE, Slot 2 upper stones 3025 removed	SE	Bright
320-326	Trench 30, second ext to SE, Slot 2 SE facing section	SE	Bright/Sunny
327-329	Trench 30, second ext to SE, general views from	SE	Sunny

APPENDIX 4: Drawings Register

Dwg No.	Sheet No.	Scale	Plan / Section	Description/contexts
1	A	1:50	plan	Plan of Tr 66
2	B	1:50	plan	Plan of Tr 51
3	B	1:50	plan	Plan of Tr 53
4	B	1:10	section	SE facing section of [5302/5304]
5	B	1:50	plan	Plan of Tr 58
6	B	1:10	section	Profile of [5202]
7	B	1:50	plan	Plan of Tr 57
8	C	1:50	plan	Plan of Tr 40
9	C	1:20	section	West facing section of Tr 40
10	C	1:50	plan	Plan of Tr 49
11	D	1:50	plan	Plan of Tr 44
12	D	1:10	section	West facing section of (4701)
13	D	1:50	plan	Plan of Tr 47
14	D	1:50	plan	Plan of Tr 52
15	D	1:50	plan	Plan of Tr 48
16	D	1:20	plan	plan showing stones on the base of [5201]
17	D	1:50	plan	Plan of Tr 56
18	D	1:50	plan	Plan of Tr 52
19	D	1:50	plan	Plan of Tr 55
20	E	1:10	plan	Plan of cremation in Tr 17
21	E	1:10	section	East Facing section of cremation in Tr 17
22	F and G	1:40	plan	Plan of Tr 39
23	F		section	Section of culvert feature in Tr 42
24	F and G	1:40	plan	Plan of Tr 42
25	F and G	1:50	plan	Plan of Tr 43
26	H1 and H2	1:50	plan	Plan of Tr 3
27	H1 and H2	1:50	plan	Plan of Tr 12
28	H1	1:10	section	Section of feature [1203]
29	H1	1:10	section	Section of feature [1203]
30	H1	1:10	section	Section of feature [1301]
31	H2	1:50	plan	Plan of Tr 13
32	H1	1:10	section	Trench 15, ditch 1501
33	H2	1:20	section	NE facing section of trench 18 at ditch [1801]
34	H2	1:20	section	NE facing section ditch [1801]
35	H1 and H2	1:50	plan	Plan of Tr 18
36	H1		plan	Trench 15, plan
37	I	1:50	plan	Plan of Tr 19
38	I	1:40	plan	Plan of Tr 22
39	I		section	East facing section of [2201]
40	I	1:40	plan	Plan of Tr 26
41	I	1:20	section	SWW facing section of Tr 26
42	J	1:50	plan	Plan of Tr 30
43	J	1:20	section	NE facing section of Tr 30
44	L	1:40	plan	Trench 30 extension
45	L	1:20	plan	Plan of wall [3003]
46	K1	1:20	plan	Pre excavation plan of [1701]
47	K1 and K2	1:50	plan	Plan of Tr 27
48	K1	1:20	section	East facing section of ditch [2701]
49	K1	1:20	plan	Post excavation plan of [1701]
50	K1 and K2	1:20	section	West facing section of Tr 38
51	K2	1:10	section	Section of [1701]
52	M	1:40	plan	Trench 30. Second extension, plan
53	M	1:20	section	Trench 30. Second extension, Slot 2 SE facing section

54	M	1:20	plan	Trench 30. Second extension, Slot 2 plan
55	M	1:10	section	Trench 30. Second extension, Slot 1, NW facing section
56	N	1:20	section	Trench 30. Second extension, Slot 1, plan of slabs 3003/3026 after cobbles 3025 removed
57	N	-	section	Trench 30. Second extension, Slot 1, sketch section

APPENDIX 5: Samples Register

Sample No.	Trench	Context	Sample type	Volume
1	17	1702	Bulk sample of grey sand & burnt bone, charcoal	36L

APPENDIX 6: Finds Quantification

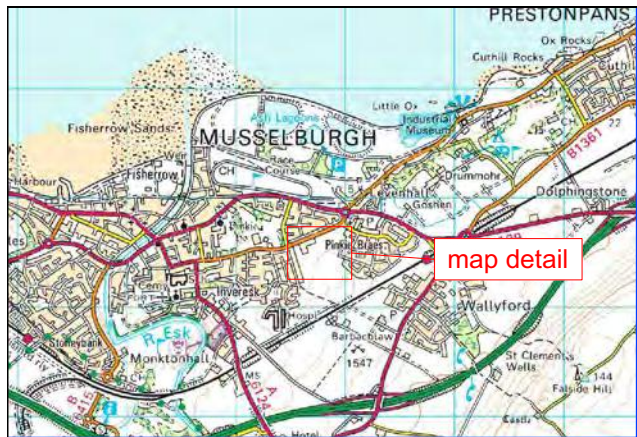
Trench	Context	Find type	No.	Wt (g)	Notes	Spotdate
1	001	Fe	2	248	ring, strap	modern
2	001	Fe	5	355	2 sheet, fitting, staple, shoe iron	modern
3	001	Fe	5	190	nails, nut, unident	modern
3	001	Ae	1	76	?gas tap	modern
3	001	Pb	1	9	washer	modern
4	001	Fe	1	5	nail	modern
4	001	Ae	1	2	tokenAND MELROSE & Co.	pmed
7	001	Fe	3	18	nail & wire	modern
8	001	Fe	1	11	disc	modern
12	001	Fe	2	63	wire, unident	modern
12	1204	Fe	2	151	tapered rod & wire	modern
13	001	Fe	1	20	heel iron?	modern
13	001	Ae	1	3	disc - coin?	pmed/mod
14	001	Fe	12	395	nuts, staple, wire etc.	modern
14	001	Ae	1	29	circular fitting	modern
15	001	Fe	7	245	nails, sheet frag	modern
16	001	Fe	2	68	loop-headed nail, sheet	modern
16	001	graphite	1	14	thick rod frag	modern
17	001	Fe	1	151	bolt	modern
17	001	Pb	1	163	waste - failed casting?	pmed/mod
17	1702	HSR	-	812	cremated bone of older juvenile	preh?
18	001	Fe	9	910	?tool, nuts, bolts, nails	modern
18	001	Pb	1	46	sheet frag	modern
19	1902	Bone	6	18	bird?	
20	001	Fe	11	863	tool, nails, bolt, fitting	modern
20	001	Ae	1	37	furniture fitting	modern
21	001	Fe	2	82	triangular-section rod, sheet frag	modern
22	001	Fe	2	153	?fitting, nail	modern
23	001	Fe	2	15	nail	modern
24	001	Fe	4	566	?tool, nail, square sheet, unident	modern
25	001	Fe	2	81	sheet, unident	modern
26	001	Fe	2	751	?ploughshare frag, nail	modern
27	001	Fe	1	9	nail	modern
29	001	Fe	12	978	nails, large unident frag	modern
29	001	clay pipe	1	3	stem, buff	17th/18th c.
30	001	Fe	9	821	large lumps, disc	modern

Trench	Context	Find type	No.	Wt (g)	Notes	Spotdate
30	3001	Pot	2	41	SPMR jar/pipkin	17th c.?
30	3001	Ceramic	1	2	kiln ring prop	L.18th c.+
30	3001	Bone	24	2041	mainly horse, some cow	
30	3001	Glass	1	147	green bottle	pmed
30	3001	clay pipe	1	5	stem	17th/18th c.
31	001	Fe	15	809	ring, square plate, large lumps, nails, nut/bolt, strap	modern
31	001	Bone	1	62	chopped cow metapodial distal	
33	001	Al	3	59	drink cans (DISCARDED)	20th c.
34	001	Fe	6	298	nails, sheet, bolt, cable?	modern
34	001	Al	1	28	drink can (DISCARDED)	20th c.
35	001	Fe	25	521	mainly small nails, hinge fitting, sheet	modern
35	001	Bone	47	117	bones of at least 5 birds	
37	001	Fe	2	38	staple, nail	modern
37	3702	CBM	1	231	comp. shale ?vessel - poss saggar, not overfired	19th c.+
37	3702	Pot	2	127	REFW jars	19th/20th c.
37	3702	Stone	1	81	blue slate tile	19th c.+
38	3801	Fe	2	6	frags	modern
38	3801	Pot	2	35	REFW, BRSW jar	19th/20th c.
38	3801	Stone	2	24	blue slate tile	19th c.+
39	3901	Bone	2	17	rib, vertebra	
40	001	Fe	16	458	hinge straps, nails, bolt, wires etc	modern
40	001	Ae/Pb	1	2	small domed stud	modern
40	001	clay pipe	1	3	stem, abr.	19th c.
40	4008	Mortar	4	41	sandy, buff	19th c.+
41	001	Fe	18	1430	plough share, tube, nails, fitting etc	modern
41	001	CBM	1	318	comp. shale ?vessel - poss saggar, not overfired	19th c.+
41	001	CBM	1	194	pantile	pmed
41	001	CBM	1	557	fine sandy brick, 108 x 62mm	19th c.+
41	001	Pot	14	634	CRW, LGRE	L.18th c.
41	001	Bone	3	34	sheep femur, unident frags	
41	001	Shell	1	6	cockle	
41	001	Glass	2	642	green bottle bases	18th/19th c.
41	001	Glass	1	13	uncol. vessel wall frag	pmed
41	001	Glass	2	6	window, thin uncol.	pmed
41	001	clay pipe	1	1	stem	18th/19th c.
42	4204	Pot	1	15	CRW	L.18th c.
42	4205	CBM	3	258	pantile	pmed
43	001	Fe	6	64	unident	modern
43	001	Ae	1	1	fitting - short strip with loops at each end	modern
43	001	Pb?	1	1	disc	modern
43	001	Al	1	11	drinks can base?	modern
43	001	CBM	1	1096	fine sandy brick, 102 x 62mm	19th c.+
43	001	Pot	30	2076	CRW, LGRE, LBW bowls & plates	L.18th c.+
43	001	Bone	26	236	sheep and large mammal	
43	001	Shell	6	277	oyster	
43	001	Glass	3	777	green bottles	18th/19th c.
43	001	Glass	2	7	uncol window, v thin	modern
43	001	graphite	1	3	small rod	modern
43	001	coal	1	10	burnt	
43	001	clay pipe	2	4	stems	18th/19th c.

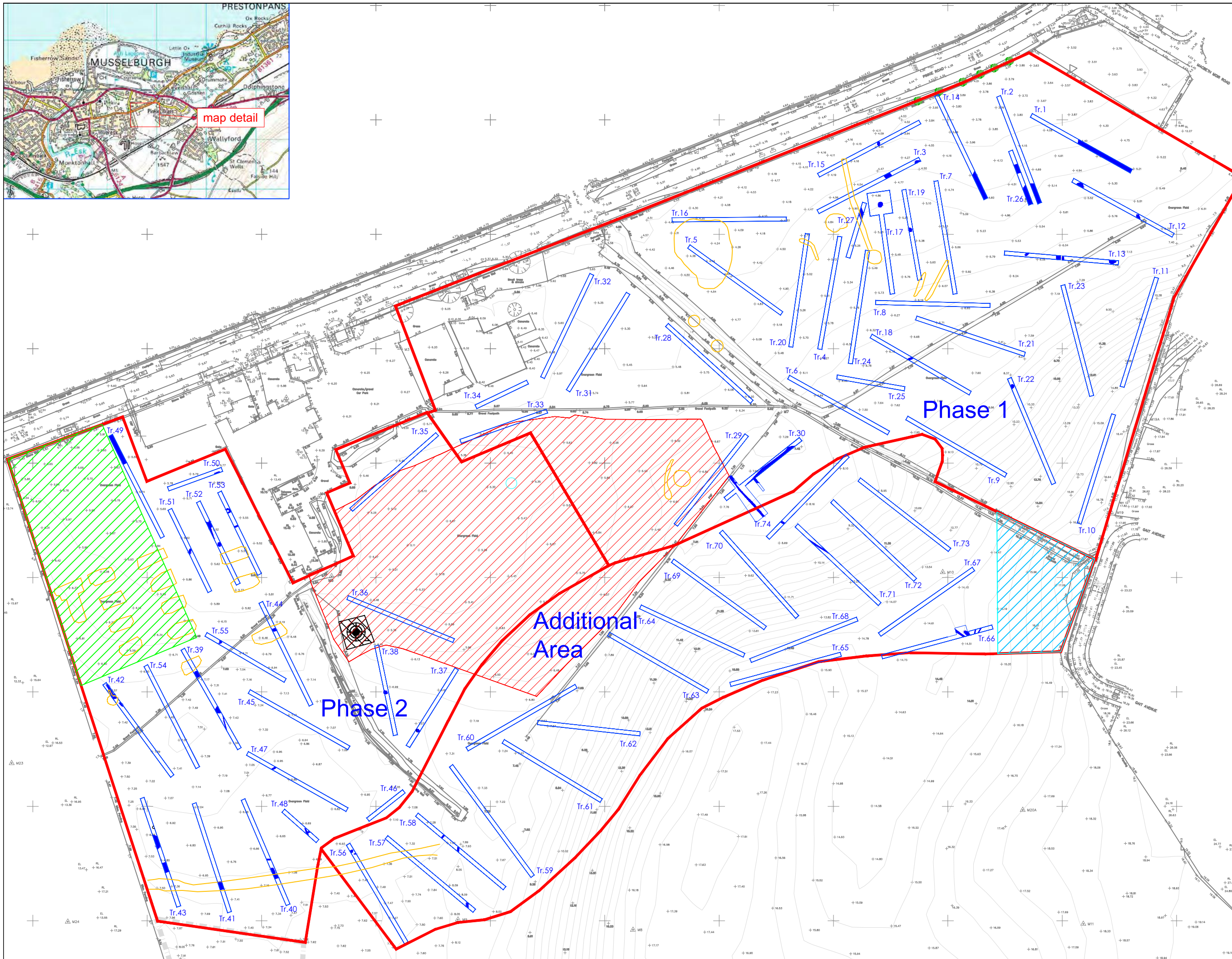
Trench	Context	Find type	No.	Wt (g)	Notes	Spotdate
45	SF2	Pb	1	32	plano-convex ?weight	pmed?
47	001	Fe	2	230	strip fitting	modern
47	001	Ae	3	15	cap, spherical button, stud through leather	modern
47	001	pewter	4	10	buttons	pmed/mod
48	001	Ae	4	63	horse brass, 2 studs, unident sheet	pmed/mod
48	001	Pb	2	56	bale seal, horse fitting	pmed/mod
49	4903	CBM	1	86	comp. shale ?vessel - poss saggar, not overfired	19th c.+
49	4903	Pot	17	445	LSRW, LGRE, REFW	L.18th c.+
49	4903	Ceramic	6	77	kiln props, ?saggar, 2 biscuit-fired REFW sherds	L.18th c.+
51	5102	Pot	1	2	REFW plate rim, transfer-printed	L.18th c.+
51	5102	Bone	1	22	sawn frag	
51	5102	clay pipe	2	8	stems	18th/19th c.
51	5103	CBM	1	1342	fine sandy brick, 105 x 67mm, purple, with mortar	19th c.+
52	5202	Fe	1	1	wire	modern
52	5202	Pot	8	14	REFW, CRW, LGRE, BRSW	19th/20th c.
52	5202	Bone	2	4	1 bird?, 1 unident	
52	5202	Shell	1	3	oyster	
52	5202	Glass	1	2	thick uncol window	modern
53	002	Fe	1	2	nail	modern
53	002	Bone	2	1	rib	
56	5601	Mortar	2	583	sample of floor, up to 30mm thick, sandy with small quartz pebbles	19th c.+?
56	5602	clay pipe	1	3	stem	18th/19th c.
56	5603	CBM	1	1669	fine sandy brick, 105 x 60mm, with mortar	18th/19th c.
58	5803	Fe	11	4408	?plough, chain links, rod	modern
58	5803	Slag	1	5351	large, dense lump	modern
58	5803	Glass	4	124	uncol/light green bottle	19th/20th c.
58	5803	clay pipe	2	5	stems	18th/19th c.
66	6601	clay pipe	1	1	stem, glazed end	17th/18th c.
?	?	CBM	1	1196	comp. shale brick, stamped ...STEL.	19th c.+

APPENDIX 7: Discovery and Excavation in Scotland Entry

LOCAL AUTHORITY:	East Lothian
PROJECT TITLE/SITE NAME:	Pinkie Mains, Musselburgh, East Lothian, Archaeological Evaluation
PROJECT CODE:	PINK
PARISH:	Inveresk
NAME OF CONTRIBUTOR:	Graeme Carruthers, Sue Anderson and Ian Suddaby
NAME OF ORGANISATION:	CFA Archaeology Ltd
TYPE(S) OF PROJECT:	Metal Detector Survey, Evaluation
NMRS NO(S):	N/A
SITE/MONUMENT TYPE(S):	Battle Site and Military Camp, Industrial and military features, pit with cremation deposit
SIGNIFICANT FINDS:	Lead 'musketball' assemblage
NGR (2 letters, 6 figures)	NT 357 723
START DATE (this season)	February 2012
END DATE (this season)	March 2012
PREVIOUS WORK (incl. DES ref.)	
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	<p>Taylor Wimpey are developing land to the east, south and west of Pinkie Mains Farm, Musselburgh (NT 356 725). The area lies within the site of the Battle of Pinkie Cleugh, 1547, and its western edge was within a Military Barracks complex which went out of use sometime before 1854. A metal detector survey and trial trenching evaluation took place in February and March 2012.</p> <p>A group of lead musket balls and various military buttons were recovered. Although the musket balls can range in date from the post medieval to the early modern they were mostly grouped in the area previously occupied by the Barracks and were most likely from that period rather than the earlier Battle. It is likely that many other finds are related to the military use of the site, including those relating to dress fittings such as the regimental buttons, machinery or pieces which have been preliminarily identified as fittings, whilst others may relate to later use of the site as farmland.</p> <p>A trial trenching evaluation covering 7% of the development area was carried out, amounting to 7600m². Surfaces, walls and drains were exposed within trenches to the west of Pinkie Mains Farm and these appear to relate to a 19th century military barracks complex visible on the 1832 map. Mining and quarrying activity was also recorded in a number of locations within the site. A pit containing cremated human bone was recorded.</p>
PROPOSED FUTURE WORK:	N/A
CAPTION(S) FOR ILLUSTRS:	N/A
SPONSOR OR FUNDING BODY:	Taylor Wimpey East Scotland
ADDRESS OF MAIN CONTRIBUTOR:	CFA Archaeology Ltd, Old Engine House, Eskmills Park, Musselburgh, EH21 7PQ.
EMAIL ADDRESS:	info@cfa-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited in NMRS, Reports lodged with SMR and NMRS.



- Key:
- Development boundaries
 - Evaluation trenches
 - Area of high underbrush and standing water
 - Area not in current development
 - Buffer for service
 - Features identified from Ariel Photography



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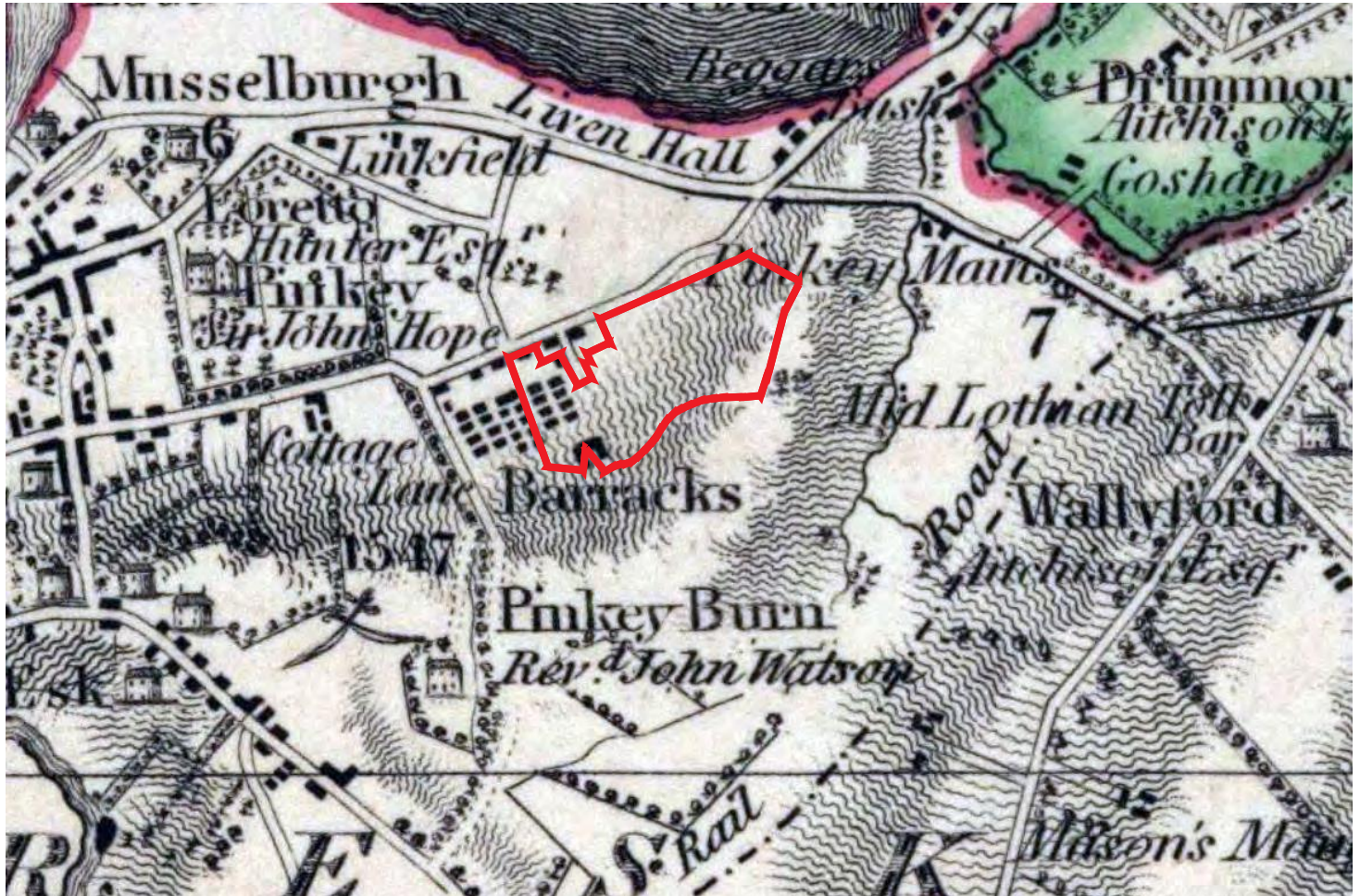
Fig. No: 1 Revision: A

Title:
 Site location and location of
 evaluation trenches

Project:
 Pinkie Mains

Client:
 Taylor Wimpey

Scale at A3:
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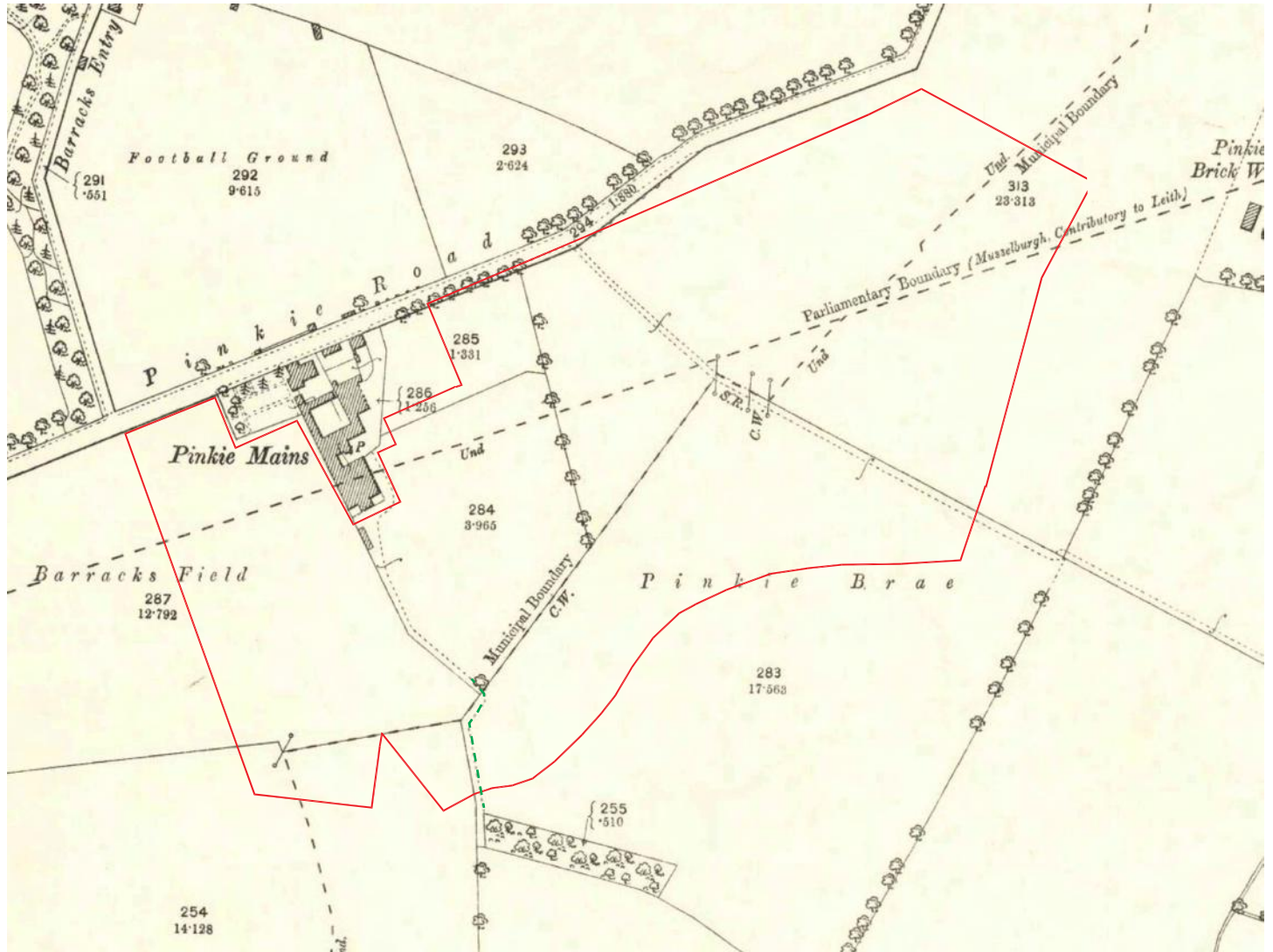
Key:
 approximate location of development

Fig. No:	2	Revision:	A	Client:	Taylor Wimpey
Title:	Extract of map by John Thomson, 1832, showing Barracks				
Project:	Pinkie Mains Farm, archaeological evaluation				



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Drawn by: GC Checked: LW Report No: 2032



Key:

approximate location of development

line of trackway

Scale@A4 :

Fig. No:	3	Revision:	A	Client:	Taylor Wimpey
Title:	Extract of map by Ordnance Survey, 1894, showing trackway uncovered in Tr.57 & Tr.58				
Project:	Pinkie Mains Farm, archaeological evaluation				

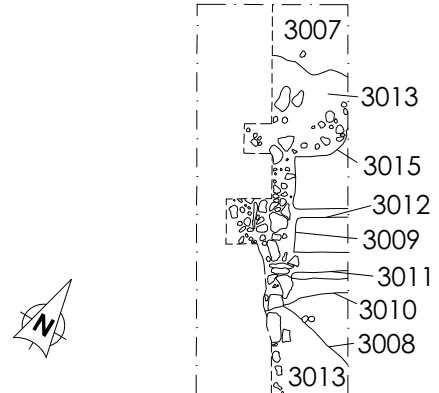
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Drawn by:	GC	Checked:	LW	Report No:	2032
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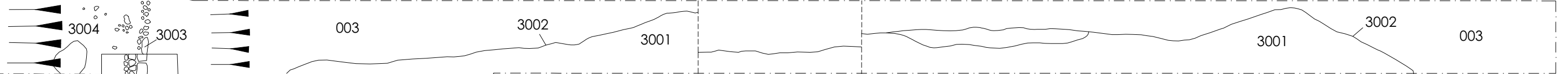
Tr. 30



Tr. 3



Tr. 12



3023

3025

3022

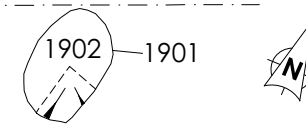
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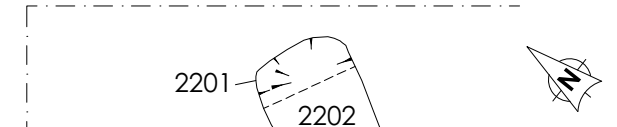
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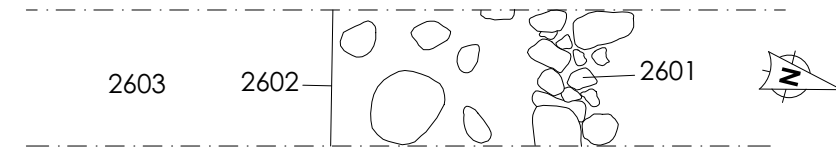
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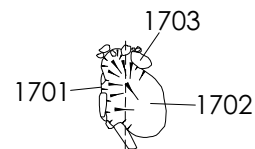
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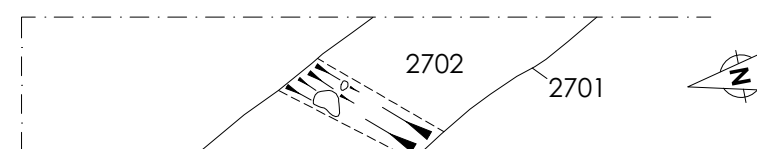
Tr. 26



Tr. 17



Tr. 27



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Fig. No: 4 Revision: A

Title:
Archaeological features in evaluation trenches

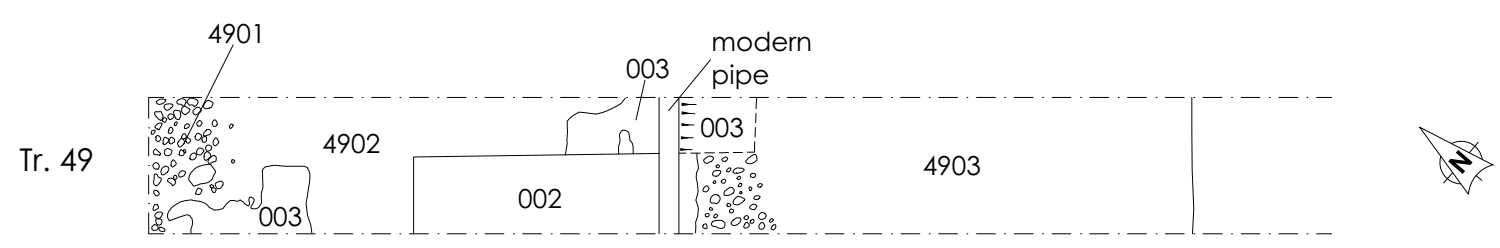
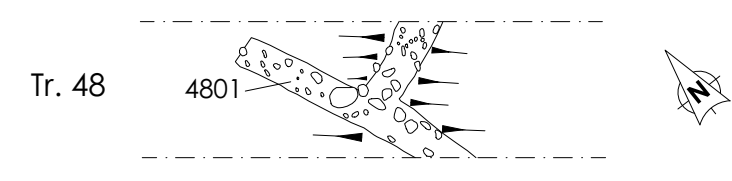
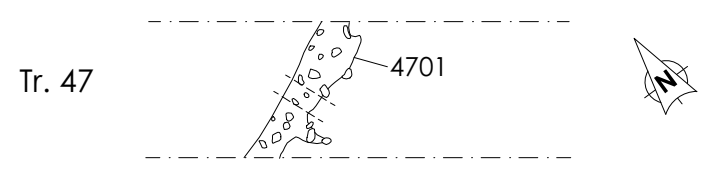
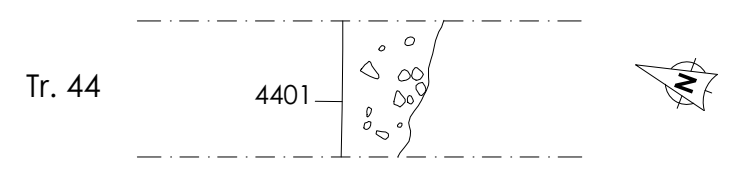
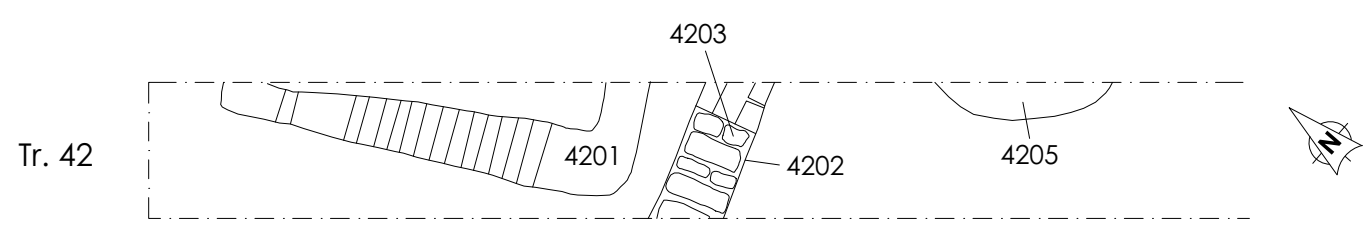
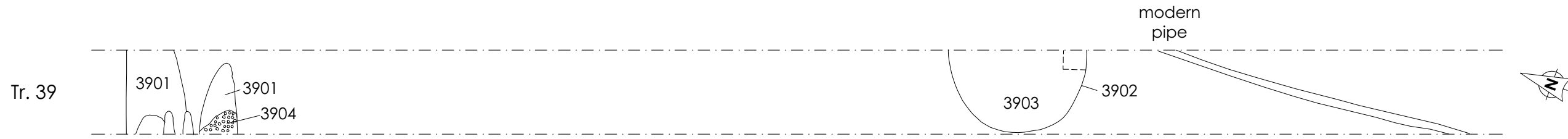
Project:
Pinkie Mains

Client:
Taylor Wimpey

Scale at A3:
1:100

Drawn by: GC Checked: LW Report No: 2032

Key:



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Fig. No: 5 Revision: A

Title:
**Archaeological features in
 evaluation trenches**

Project:
Pinkie Mains

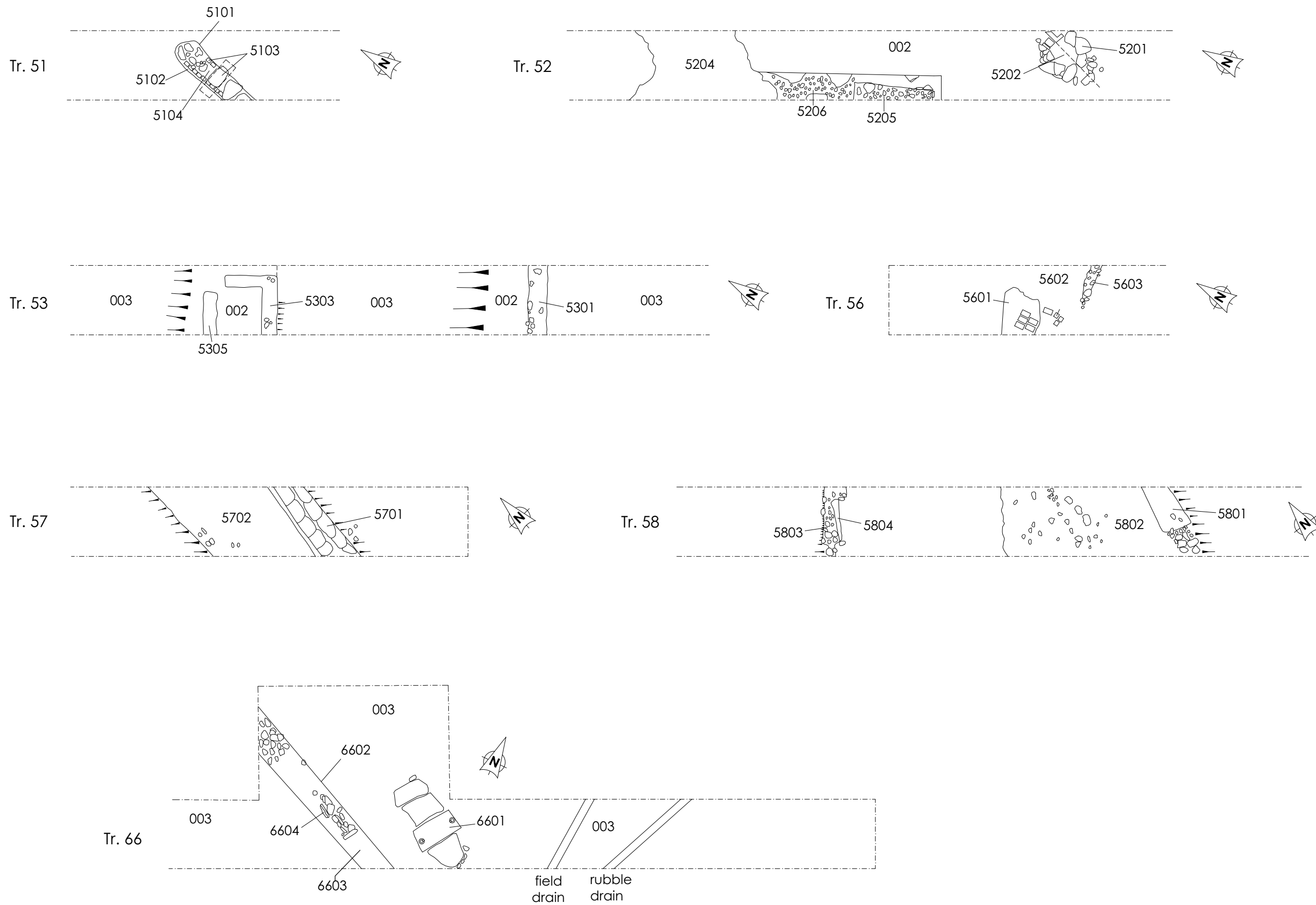
Client:
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Scale at A3:
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Fig. No: **6** Revision: **A**

Title:
Archaeological features in evaluation trenches

Project:
Pinkie Mains

Client:
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Scale at A3:
1:150



Key:



Fig. 7 - Pre-excitation photo of cremation burial [1701]



Fig. 8 - Trench 22 from the north showing terminus of feature [2201]



Fig. 9 - Trench 27, south-facing section of linear feature [2701]

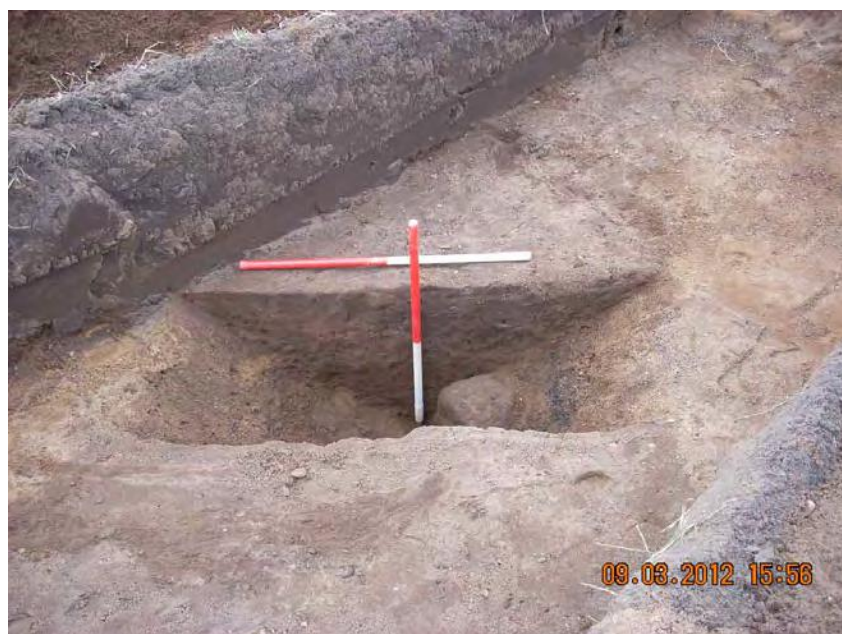


Fig. 10 - Trench 26, stone feature [2601] from the south



Fig. 11 - Trench 30, wall feature [3003] with stone facing from the north



Fig. 12 - Trench 30, stone feature [3003] continuing into the northern extension of the trench. This was later found to be a drain.

Key:



Fig. 13 - Trench 30, feature 3003/3023 continuing with increasing clarity into the south-eastern extension of the trench



Fig. 14 - Trench 30, slot 2 through feature 3003/3023 showing the structure of the drain



Fig. 15 - Trench 44, wall foundations [4401] from the north



Fig. 16 - Trench 47, sections through wall foundations [4701] showing the remains lie directly on the natural sand



Fig. 17 - Trench 48, wall foundations [4801] from the west



Fig. 18 - Trench 49, cobbled surface [4901] and floor surface [4902] from the north

Key:



Fig. 19 - Trench 51, pre-excitation photo of drain feature [5101] from the north-east



Fig. 20 - Trench 51, slot through drain feature [5101] showing flat stone base



Fig. 21 - Trench 52, stone oven feature [5201] showing flue with brick edging, from the north.



Fig. 22 - Trench 56, remains of floor [5601] and adjacent brick [5602] and wall foundations [5603] from the north



Fig. 23 - Trench 57, remains of wall [5701] and abutting cinder trackway [5702] from the south



Fig. 24 - Trench 58, remains of wall [5801] and abutting cinder trackway [5802] from the south. This wall and trackway are a continuation of similar features in trench 57.



Key:

Fig. No: **25-26** Revision: **A** Client: **Taylor Wimpey**

Title:

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Archaeological Evaluation**



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