

Geophysical Survey

Broxburn to Humbie Farm Reinforcement Pipeline, (Phase I) Broxburn, West Lothian

Archaeological Works

Report No. 1562







CFA ARCHAEOLOGY LTD

February 2009

Commissioned by Land and Marine Project Engineering Ltd

This document has been prepared in accordance with CFA standard operating procedures.

Author: Date

Approved by: Date

Draft/Final Report Stage: Final

Author: Phil Moore BA and Magnus Kirby MA FSA Scot AIFA

Illustrations: Craig Evenden BSc MSc

Editor: Melanie Johnson MA PhD FSA Scot MIFA

CFA ARCHAEOLOGY LTD The Old Engine House Eskmills Business Park Musselburgh EH21 7PQ

Tel: 0131-273-4380 Fax: 0131-273-4381 email: cfa@cfa-archaeology.co.uk

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1. INTRODUCTION

1.1 General

- 1.1.1 This report presents the results of an archaeological watching brief, monitored topsoil strip and subsequent mitigation undertaken by CFA Archaeology Ltd (CFA) between August and October 2008 during topsoil stripping operations for the first phase (Phase I) of works on a gas pipeline near Broxburn, West Lothian. The work was commissioned by Land and Marine Project Engineering Ltd.
- 1.1.2 A Written Scheme of Investigation (WSI) for the archaeological works was produced by CFA on behalf of Land and Marine. The WSI was based upon information supplied by RSK Environment Ltd (RSK) as a desk-based assessment (RSK 2008), and was produced following consultation with West of Scotland Archaeology Service (WoSAS) and the City of Edinburgh Council Archaeology Service (CECAS). RSK were acting as archaeological consultants for Scotland Gas Networks Ltd.

1.2 Background

- 1.2.1 A gas pipeline is being installed to the east of Broxburn running from the north-east of Drumshoreland Muir (NGR: NT 0916 7090) to the south-west of Humbie Farm (NGR: NT 1104 7493) (Fig. 1A, Fig. 1B). The topsoil stripping operations were subject to an archaeological condition requiring a combination of watching briefs and monitored topsoil stripping.
- 1.2.2 The route of the pipeline during construction had been subdivided into a series of sections, usually defined by a boundary marker such as a road crossing or other substantial division in the landscape. Fig. 1a & 1b illustrate these sections.
- 1.2.3 The report covers the section of pipeline that runs from Drumshoreland Muir (NGR: NT 0916 7090) to Newliston Historic Garden and Designed Landscape, which includes land within Section 8 up to NGR: NT 1034 7284. This section of the pipeline for the purpose of this and subsequent reporting will henceforth be known as Phase I. Soil stripping operations for the pipeline will recommence in 2009 and the results from the later works, Phase II, will form a separate report.
- 1.2.4 A desk-based assessment (DBA) and field reconnaissance survey (RSK 2008) for the pipeline was carried out by RSK Environment Ltd in January and February 2008 on behalf of Scotland Gas Networks Ltd. Numbers in the following text prefixed with RSK refer to sites identified in the desk-based assessment.
- 1.2.5 The desk-based assessment carried out by RSK identified three significant areas of archaeological potential. These consisted of the following:

- The location of Westerton Cottages (RSK DBA Site 60), which were a series of terraced shale oil miners' cottages shown on the 2nd Edition Ordnance Survey map (1897).
- An area of gravel terraces along the River Almond where there is moderate potential for the discovery of prehistoric remains.
- An area of rig-and-furrow cultivation recorded from aerial photography (RSK DBA Site 32). This is also the site of a probable 18th century farmstead known as Hill Law, which is shown on Roy's military map (1747-55) (RSK DBA Site 68).
- 1.2.6 A monitored topsoil strip was carried out at Westerton Cottages (RSK DBA Site 60) and at the area along the River Almond during this phase of works (Phase I). The monitored topsoil strip will be undertaken at RSK DBA Site 32/RSK DBA Site 68 during the Phase II works.
- 1.2.7 Other potential sites identified along the length of the pipeline by the desk-based assessment include a well at Muirend (RSK DBA Site 62), a former mineral railway (RSK DBA Site 63) and a possible Roman road (RSK DBA Site 82), which is thought to roughly follow the line of the modern A89. The pipeline also passes through Newliston Historic Garden and Designed Landscape (RSK DBA Site 58).
- 1.2.8 The total length of the pipeline measures 6.7km and it had a working width of 20m. The total length of the pipeline completed within Phase I is *c*. 4km.
- 1.2.9 During the course of the two monitored topsoil strips undertaken during Phase I, three sites of archaeological potential were identified and subject to a further programme of archaeological excavation (Site 1 Site 3). An addendum (Addendum 1: 05 September 2008) to the WSI was produced and approved by West of Scotland Archaeology Service (WoSAS).
- 1.2.10 A number of isolated features were identified from the watching brief. These features were excavated where applicable and recorded during the watching brief. The findings are reported in section 3.4.
- 1.2.11 In addition to the above, a programme of field boundary recording was undertaken within Newliston Historic Garden and Designed Landscape (RSK DBA Site 58). This was done using standard field recording techniques, in order to record the nature and condition of any landscape boundaries, prior to their removal during construction works and to facilitate and aid reinstatement.
- 1.2.12 No previous invasive archaeological fieldwork is known to have taken place within the development area prior to this programme of archaeological works.
- 1.2.13 The pipeline development falls within two catchment areas of local authority administration, namely West Lothian and City of Edinburgh Councils. The topsoil stripping undertaken in between Phase Sections 0 and 6 falls within the

West Lothian Council area. Sections 7 and 8 fall within the City of Edinburgh Council area. The Council boundary, as shown on Figs 1A & 1B, runs along the River Almond and the Birdsmill Viaduct.

1.3 Objectives

- 1.3.1 The aims of the initial programme of archaeological works were:
 - To determine the location, character, extent and quality of any features or objects of archaeological importance that may survive within the working width of the pipeline, and which may be damaged or destroyed by this development.
 - To determine if there were any surviving remains associated with Westerton Cottages (RSK DBA Site 60).
 - To determine if there were any prehistoric features on terraces along the River Almond (both Phase I).
 - To determine if there were any remains associated with RSK DBA Site 32/RSK DBA Site 68 (Phase II).
- 1.3.2 Following the watching brief and monitored topsoil strip, the aims of the programme of archaeological works were to conduct mitigation excavations on the features identified.

2. WORKING METHODS

- 2.1 CFA Archaeology Ltd follows the Institute for Archaeologists' Code of Conduct, Standards and Guidance for Archaeological Watching Briefs (IfA 2008a, 2008b, 2008c).
- 2.2 The removal of soil deposits was carried out using 360° excavators equipped with smooth-bladed ditching buckets under constant archaeological supervision. All further works required to fulfil the terms of the brief were carried out by hand.
- 2.3 All excavation and on-site recording was carried out according to standard CFA procedures, principally by drawing, photography and completing standard CFA record forms.

3. ARCHAEOLOGICAL RESULTS

3.1 General

- 3.1.1 The area of monitored topsoil removal during Phase I consisted of a 25m working width with a length of c. 4km.
- 3.1.2 The topsoil throughout Phase I invariably consisted of a soft clayey silt deposit, 0.30- 0.50m in depth and dark grey in colour. Stone inclusions within the topsoil were predominantly confined to occasional small and medium sandstone fragments which were often degrading. Sherds of 19th and 20th century pottery were also observed, the frequency of which increased in areas of cultural activity such as Site 1, Westerton Cottages (RSK DBA Site 60) and Muirend Farm (RSK DBA Site 84). The increase in modern pottery fragments, particularly at Westerton Cottages, was often mirrored in the increasing quantity of brick debris observed on the topsoil surface.
- 3.1.3 Numbers in bold and parentheses refer to contexts, a list of which is contained in Appendix 1.

3.2 Field Boundary Recording

- 3.2.1 A programme of field boundary recording was undertaken within Newliston House Historic Garden and Designed Landscape in order to record their character and preservation, prior to any dismantling or removal as a consequence of the construction activity. Using standard recording methods, a written and photographic appraisal of seven field boundaries was conducted, a list of which is contained in Appendix 2. All National Grid References are given at the point of 'breakthrough' as anticipated by Land and Marine Project Engineering Ltd on behalf of Scotland Gas Networks Ltd; the boundaries will be dismantled during Phase II.
- 3.2.2 The remains of a probable tree-lined avenue, approximately 15-20m wide, flanked by two parallel drystone walls (**FB01-02**) were recorded at NGR: NT 10357 72834 on a northeast–southwest alignment. Both walls were constructed of medium–large sized stones, with a rubble-filled central cavity, topped by a single course of large boulders. Both walls had a recorded height of 0.65m, and 1.10m respectively, with flared bases approximately 0.45m wide. The internal, 'avenue' facing elevations were obscured due to an accumulation of earth, which gave the central avenue a distinctly concave appearance. This central area is heavily planted with mixed, mature tree cover.
- 3.2.3 A small earthen bank 0.20-0.30m high by 1.50m wide, orientated northeast-southwest and topped by a wire fence supported by wooden uprights (**FB03**), was recorded at NGR: NT 10337 72837. The fence-line stood at a height of 1.10m and was in reasonably good repair.
- 3.2.4 A substantial drystone wall (**FB04**) orientated in a northwest-southeast direction and in good condition was recorded at NGR: NT 10386 73912. It was constructed from quarried stone, with large boulders prevalent at the base.

These in turn became increasingly smaller in size towards the top, which was capped by a single course of large boulders, some of which had been mortared in place. The wall had a flared base 0.95m wide, tapering to 0.40m at its narrowest, with a maximum recorded height of 1.20m. Both northeast and southwest elevations had a small earthen bank abutting the base. Probing around the base within the bank suggested that stonework continued beyond the ground surface.

- 3.2.5 **FB05**, which in effect forms a crude 'Ha-Ha' orientated east-west, was observed at NGR: NT 10403 73858. The 'Ha-Ha' construction comprised a water-filled ditch 1.30m wide, with a recorded water depth of 0.45m. From this ditch, the north facing elevation of a dry stone wall with an approximate height of 1.50m was recorded. In contrast, the south facing elevation rose to a maximum height of 0.60m. The wall elevations were constructed from larger boulders at the base, with smaller blocks prevailing at greater height, which in general were tightly packed. A single course of large boulders topped the structure. The feature is flanked by a line of large well established deciduous trees and is relatively overgrown by other mixed foliage. The wall in places shows signs of disrepair and repair, with substantial sections of the wall having tumbled into the ditch, and other sections 'patched up' with large regular hewn blocks, some of which are roughly mortared.
- 3.2.6 A tree-lined avenue (**FB06-07**), branching from a public highway to the east, beyond a gatehouse and towards Newliston House was recorded at NGR: NT 10102 73293. The track surface is well worn, comprising a 3 metre spread of dolomite hardcore. and is flanked by c. 7m wide earthen verges on both sides, cresting at their outer extents. The effect of this 'build up' of material gives the appearance of low lying 'banks' of earth either side of the track. To the north, this bank sits level with a low 0.40m high, retaining drystone wall **FB06**, comprising 2–3 courses of sandstone slabs and blocks, capped by larger boulders. The wall is in moderate repair with tumbled stones clearly visible on the surrounding verges. An effort has been made to minimise the breaches of the wall, by erecting a 1m high fence, in similar state of repair along its length.
- 3.2.7 There is some evidence to suggest the presence of a boundary similar to **FB06**, which would have delimited the southern extent of the avenue. This evidence for **FB07** is fragmentary, comprising a low-lying 'tumble' of stones. This boundary serves no purpose as an effective physical barrier, or as a retaining wall for the earth bank, which appears to have subsided.
- 3.2.8 Phase I construction work has removed **FB01** and **FB02** at the point of 'breakthrough. The remaining field boundaries (**FB03-07**) will be dismantled during Phase II and monitored by the attending archaeologist under watching brief conditions.

3.3 Watching Brief

3.3.1 All the archaeological features recorded during the watching brief as part of Phase I occurred in isolation, with the exception of two pits located in Section 0 (Fig. 2-4), and several recorded features with a close relationship to Site 1 (Westerton Cottages RSK DBA Site 60). Contexts identified and recorded during the watching brief operation are pre-fixed WB and are listed separately in Appendix 1b.

Section 0

- 3.3.2 Two pits were identified within Section 0 (**WB015**, **020**), both of which were interpreted as the location of *in situ* burning (Fig. 2-4). Pit **WB015** had a long axis northeast to southwest, steep sloping sides and a concave base. The primary fill **WB018**, comprising a heat-affected thin clay deposit, has been interpreted as a possible clay lining. This was overlain by **WB017**, a silty mid grey deposit with common charcoal and heat-cracked stone inclusions. The clarity of horizon suggested this is probably a secondary backfill of **015** after the primary burning event. The upper deposit **016** appears within **015** as a dark black, silty, charcoal-rich deposit, within which **019** were also recorded as a concentration of large, heat-affected stones. Both **016** and **019** are interpreted as continued activity of the site, and were probably deposited after **015** had been partially emptied.
- 3.3.3 In contrast, **WB020** is interpreted as having one episode of deposition. This commences with **022**, a series of large heat-affected stones noted predominantly in the base. These stones were surrounded by **021**, a dark black, silty, charcoal-rich deposit. Pit **020** was observed as being partially covered by a north—south orientated hedge-bank, with visible root action having disturbed **021** post-deposition. The similarities between upper deposits in pits **(020)** and **(015)**, possibly suggest these are contemporaneous, and may infer **015** is the earlier of the features. However, no firm dating evidence was recovered from either feature and the only dating that can be offered is a *terminus ante quem* of post-medieval origin, given the stratigraphic relationship of the overlying field boundary. Soil samples from **016** and **021** were retained for further analysis.
- 3.3.4 A linear gully (WB023) (Fig. 5), with steep sloping sides tapering to a flat base was recorded southeast of the pits (015, 020). It measured >3.8m in length from NGR: NT 09393 70736, orientated east—west and continued under the same north—south orientated hedge-bank which had partially obscured 020. Excavation revealed a width of 0.8m and a maximum recorded depth of 0.22m. The gully contained a single fill (WB024), comprising a sterile, mid orangey-brown mix of compacted silt, stone and gravel. No dating evidence was recovered and the precise function remains unclear. The preferred interpretation is a field boundary, of post-medieval date or earlier, based entirely on the stratigraphic relationship of the hedge bank.

3.3.5 A single linear feature was recorded (**WB009**) which comprised a surface of small, rounded to sub-rounded pebbles, forming a 'meandering' northeast—southwest orientated feature (Fig. 19). The feature had an unequal width of approximately 0.95m and a truncated length of twenty metres from the northeast extent located at NGR: NT 09530 70726, rising on a gentle slope before complete truncation eradicated any further remains. It is possible **WB009** represents the remains of an eroded trackway.

Section 2

- 3.3.6 Five features were identified in Section 2, all of which are interpreted as being of post-medieval origin. Three of the features occurred in close proximity to Muirend Farm (RSK DBA Site 84). The first of these was a possible cobbled surface (WB013), centred on NGR: NT 09835 70754, measuring approximately 3m by 1.5m, with a north-south long axis. The surface comprised small to medium sized cobbles embedded into natural subsoil, which was heavily damaged by later ploughing activity. Southwest of 013, the truncated remains of a ditch (WB027) (Fig. 6) were partially excavated. When seen in plan, this feature appeared as an irregular feature 1.20m wide, by >6.30m in length from NGR: NT 09790 70723. It was orientated northwestsoutheast, with the northwest extent visibly truncated by field drainage. Excavation revealed a steep sided cut, 0.42m in depth, with two fills (WB028 and WB029). Both fills comprised sterile, re-deposited natural material of mixed colour, with 028 predominated by a poorly sorted tip of mixed angular stones, which was in turn overlain by a friable sandy deposit (029). In close proximity to the above features, the well-preserved skeletal remains of a probable calf burial of modern origin were located at NGR: NT 09837 70744 (WB012).
- 3.3.7 The remains discussed above are all interpreted as evidence of post-medieval activity associated with the previous agricultural practices of Muirend Farm (RSK DBA Site 84), which appears on Pont's mapping of the late 16th century, published in the early 17th century (Pont 1630). Surface WB013 may represent the remains of a haystand while WB027 has been interpreted as the probable remains of a field boundary from this period.
- 3.3.8 At the eastern end of Section 2, and close to the track that connects Muirend to the Union Canal Bridge at Lin's Mill (RSK DBA Site 3), two further features were identified. The first of these, centred on NGR: NT 10058 70843 was interpreted as a modern rubbish pit (WB025; Fig. 21). The overall dimensions were 0.87m northwest–southeast, 0.50m wide, with a maximum excavated depth of 0.17m. This was filled by WB026, comprising firm silty clay, surrounding large boulders, with modern glass and pottery noted throughout. A deposit of cobbles (WB011) was uncovered during hedge-bank breakthrough approximately twenty metres northeast of WB025. The deposit, which was surrounded by a modern subsoil deposit, followed the length of the hedge-bank for 7.5m, with a maximum spread width of 1.5m and has been interpreted as post-medieval field clearance activity.

3.3.9 A single feature (**WB010**) was recorded in Section 3. Centred on NGR: NT 10435 71585, it comprised a linear spread of medium sized stone cobbles, 3.5m wide by 15m in length, orientated east—west (Fig. 18). Following machine excavation, the deposit was found to be 0.20m deep, with fragments of handmade brick and tile interspersed amongst its length. The feature is not interpreted as structural, but as a crude track or road. The material itself may have been reused following the demolition of 'Hiddlefaulds' farmstead, first depicted on Roy's map in the mid 18th century (Roy 1745-55). Alternatively, the 'track' may have been an attempt to provide farm access toward the location of Birdsmill, of similar historical origin.

Agricultural Remains: Rig-and-furrow

- 3.3.10 Throughout the watching brief, a series of agricultural and cultivation remains were observed. Within all sections of Phase I, evidence of extensive field drainage was found, with both variations of ceramic and rubble drains representing post-medieval attempts at land improvement.
- 3.3.11 Evidence of rig-and-furrow cultivation could be seen in Sections 0, 1, 2, 3, 5, and 6. Predominantly this comprised very truncated, shallow furrows, with a tendency towards north south orientation; average spacing centre to centre 6-7m. The only exception to this was in Section 6, where the spacing had increased to 9m, across the whole working length and width. This indicates the presence of broad rig continuing under and beyond the remains of the Kilpunt Mineral Railway (RSK DBA Site 63) into Section 5.

3.5 Archaeological Sites

Site 1 (Westerton Cottages)

- 3.5.1 Monitored topsoil removal was carried out at the site of Westerton Cottages (Section 4) (RSK DBA Site **60**). As a consequence, a number of features were exposed which required further archaeological mitigation. The site was renumbered Site **1**.
- 3.5.2 Site 1 (Fig. 7) consisted of a layer of demolition debris containing stone, brick and ash. The location of the debris corresponded with the position of Westerton Cottages as illustrated on the 2nd Edition Ordnance Survey map (Ordnance Survey 1897). A few small areas of brickwork may still have been *in situ;* however, this did not clearly indicate the foundations of any structure. A series of five trial trenches were excavated through the demolition debris, but there were no structural remains or floor deposits identified. This would indicate that the foundations had been 'grubbed-out' when the cottages were demolished. A number of shallow pits had been excavated in order to dispose of the demolition debris and some of the demolition debris had been used to level out the southwestern corner of the field.

- 3.5.3 Five features were identified of which four (WB003, 004, 007 and 008) were the remains of masonry structures. The remains of two red brick walls located within shallow trenches were broadly interpreted as the truncated foundations of garden walls, fronting onto the road directly to the southeast. Forming a discontinuous right angle, due to truncation, the southeast elevation would have been kerbed by a series of whinstone slabs (WB004), > 6.50m long with an intervening gap of 0.90m, and within which no evidence of a path could be found (Fig. 20). Within the area interpreted as gardens, a shallow, oval pit (WB005) filled with an organic silty deposit (WB006) was partially excavated. The deposit contained a large degree of modern pottery, glass and the remains of a small mammal; species unknown.
- 3.5.4 To the northeast of the demolition debris, three parallel northeast to southwest orientated lines of sandstone pads (43A 43H) were identified. The rows were situated 5m and 8m apart and the stones within each row were situated c.10m apart. Each stone pad measured c.0.6m by c.0.6m and contained the remains of a cut off iron post, which had been inserted into a hole in the centre. Immediately to the north-east of the pads there were the remains of a 10.3m length of brick wall **WB007**, with a length of foundation footings comprising two header courses, with a course of stretchers in between, amounting to a total width of 0.60m and set within a shallow bedding trench. The location of the stone pads corresponded with the position of a large enclosed area at the north-eastern end of the rows of cottages, which is depicted on the 2nd Edition Ordnance Survey map (Ordnance Survey 1897; Fig. 7). A feature at this end of the row of cottages is annotated 'Hall', although the map does not make it clear exactly what this refers to.

Site 1: Discussion

Although very little in the form of structural remains were encountered from 3.5.5 the accumulation of evidence from Site 1 (Westerton Cottages RSK DBA Site 60) during the watching brief, from the subsequent excavation and from documentary analysis, it is possible to construct a broad picture of the cottages and their primary day to day functions. The monitored topsoil removal uncovered a large spread of demolition material, which, when surveyed and compared with the 2nd Edition Ordnance Survey map (1897), correlates to a row of cottages on a northeast-southwest orientation (Fig. 7). Of the three rows of cottages depicted, the centrally positioned row is the only one represented. From the survey, areas which lack demolition material appear to correlate with areas devoid of dwellings. This is most evident in the appearance of a central 'alleyway' separating the southwest and central rows of cottages. Along this 'alleyway', there was a linear arrangement of services, largely comprising salt glazed drainpipe, which at regular intervals presumably branched towards individual cottages. This may be in the location of the square protuberances which probably refer to 'outhouses' located at the rear of the cottages. Evidence from the 2nd Edition Ordnance Survey map (1897) and watching brief results strongly suggested that masonry features WB003 and 004 probably define the position of gardens. This confirms the cottages were single rows built in terraced style.

- 3.5.6 The stone pads **43A-H** (Fig. 7) may be the remains of a building, and if so, it is presumed by the nature and arrangement of the masonry that the building was relatively open plan in design, given the lack of supporting masonry and demolition debris. This lack of supporting evidence may suggest this structure could have been pre-fabricated in design, with **43A-H** supporting an ironwork frame, which was clad and roofed. However, the Scottish Mining website describes a contemporary account of the cottages, and notes the presence of a drying green; the stone pads in the northeast area of Site **1**, therefore, may be the location of a drying green, with the pads supporting iron washing line posts (Scottish Mining Website 2005-2008). The hall marked on the map is probably the converted wing of a cottage used as a billiard room and library, as mentioned by the Scottish Mining website (2005-2008).
- 3.5.7 The above contemporary account of 'Westerton Rows' also describes forty-one houses, with a population of 257, belonging to Messrs Young's Mineral Oil Company. Each cottage was of equal size, with two rooms measuring 12ft x 12ft one of which functioned as a kitchen. All the dwellings had a small garden with outside dry closets and coal cellars, although it may be speculated that those cottages to the southeast appear to have larger gardens than those set back from the road (ibid). The demolition process in the mid-20th century appeared to be thorough, and evidence of the character described above was not evident following monitored topsoil removal. The cottages were noted on Ordnance Survey maps from the Second Edition of 1897 until 1957.

Site 2

3.5.8 Site 2 (Fig. 8) consisted of seventeen possible pit features (003, 005, 007, 009, 011, 013, 015, 017, 019, 021, 023, 025, 027, 029, 031, 033 and 035). The pits measured up to 1.3m by 1.25m by 0.3m deep and contained a single fill of the same colour and consistency as the topsoil. Modern pottery was identified in pits 007, 013, 017, 023, 025 and 027. The pits were situated within an area with a high quantity of rounded stones set within the subsoil and it is thought that they represent naturally in-filled cavities left by stones that had been removed by the plough. Three soil samples were retained for analysis.

Site 3

- 3.5.9 Site 3 (Fig. 9-11) consisted of a large sub-oval pit measuring 2.4m north-east to south-west by 1.6m north-west to south-east by 0.6m deep. The pit had been cut by a 19th century field drain (**041**), which had bisected it, from north-east to south-west. The field drain cut through the base of the pit into the subsoil below, resulting in the contents of the pit being heavily disturbed.
- 3.5.10 The primary fill (042) of the pit consisted of a thin lens of dark charcoal-rich material with a depth of c.0.05m, which merged into the main fill (039/040) of grey brown sandy silt. A number of sherds of prehistoric pottery were recovered from fill 039/040 at the interface with fill 042, along with some lithics and fragments of calcified bone. The pottery is of a type known as 'Beaker pottery', which dates to the Early Bronze Age. This type of pottery can be found in a funerary context, and, along with the fragments of bone

recovered from contexts **039/040**, may suggest that this feature was a burial pit. A single sherd of re-deposited Beaker pottery was also recovered from the fill **(038)** of the field drain. Samples from all the pit fills were retained for analysis.

3.6 Finds (Melanie Johnson)

3.6.1 Table 1 shows a summary of the finds quantification. A full list of artefacts by context is included in Appendix 5.

Find type	No	Wt
Lithics	3	118
Burnt bone	16	7
Pot	25	348

Table 1. Finds quantification.

- 3.6.2 *Pottery*: Twenty-five sherds of Beaker pottery were recovered from contexts (038), (039), and (040). It was decorated with comb-impressed geometric motifs and more than one vessel was represented. Rim sherds, a base sherd and body sherds were recovered and the pottery was very abraded. Beaker pottery generally dates to the period 2500-1800 BC.
- 3.6.3 *Lithics*: One possible flint core and one flint flake from a pebble (**040**), and one quartz flake (**039**) were found in association with the Beaker pottery.
- 3.6.4 *Bone:* Fragments of calcined bone were found in (039) and (040) in association with the Beaker pottery.

4. CONCLUSIONS

- 4.1 An archaeological watching brief and monitored topsoil strip carried out by CFA Archaeology Ltd during soil stripping for Phase I of a gas pipeline identified three sites (Site 1 Site 3). These sites were subject to a programme of archaeological excavation.
- 4.2 Site 1, consisted of the demolished remains of Westerton Cottages. No further work is recommended in relation to these features.
- 4.3 Site 2, consisted of a number of potential pits. These pits are considered likely to have been stone-holes created by plough action. However, given the archaeological potential of this area, it is recommended that a programme of post-excavation analysis is undertaken on the samples recovered.
- 4.4 Site **3**, consisted of a large pit containing sherds of beaker pottery. A programme of post-excavation analysis is recommended for the artefacts and samples recovered.
- 4.5 The project archive, comprising all CFA record sheets, maps and reports, will be deposited with the National Monuments Record of Scotland (NMRS) and copies of reports will be lodged with the West of Scotland Archaeology Service Sites and Monuments Record and the City of Edinburgh Council Sites and Monuments Record.
- 4.6 A summary statement of the results of this watching brief will be submitted for publication in *Discovery and Excavation in Scotland* (Appendix 5) following the completion of the Phase II works.

5. REFERENCES

Institute for Archaeologists 2008a Standard and Guidance for an Archaeological Watching Brief.

Institute for Archaeologists 2008b Code of Conduct. By-laws of the Institute for Archaeologists.

Institute for Archaeologists 2008c Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology. By-laws of the Institute for Archaeologists.

Ordnance Survey 1897 Linlithgowshire, 1:2,500.

Ordnance Survey 1915 Linlithgowshire, 1:2,500.

Ordnance Survey 1957 Scale 1:10,560.

Pont, T 1630 A new description of the Shyres Lothian and Linlitquo/ T: Pont: Jodocus Hondius caelavit sumptibus Andrae Hart.

Roy, W 1745-55 Military Survey of Scotland.

RSK Environment Ltd 2008 Broxburn to Humbie Farm Reinforcement Pipeline: Archaeological Desk-Based Assessment. Unpublished Desk-based Assessment report.

Scottish Mining website (2005-2008) [online]. *Housing in Shale Mining Areas*. http://www.scottishmining.co.uk/130.html (Last accessed 4th December 2008).

APPENDIX 1a: Context Register

Context no.	Site	Description
000	All	Natural
001	All	Topsoil
002	All	Subsoil
003	2	Cut of pit
004	2	Fill of pit 003
005	2	Cut of pit
006	2	Fill of pit 005
007	2	Cut of pit
008	2	Fill of pit 007
009	2	Cut of pit
010	2	Fill of pit 009
011	2	Cut of pit
012	2	Fill of pit 011
013	2	Cut of pit
014	2	Fill of pit 013
015	2	Cut of pit
016	2	Fill of pit 015
017	2	Cut of pit
018	2	Fill of pit 017
019	2	Cut of Pit
020	2	Fill of pit 019
021	2	Cut of pit
022	2	Fill of pit 021
023	2	Cut of pit
024	2	Fill of pit 023
025	2	Cut of pit
026	2	Fill of pit 025
027	2	Cut of pit
028	2	Fill of pit 027
029	2	Cut of pit
030	2	Fill of pit 029
031	2	Cut of pit
032	2	Fill of cut 031
033	2	Cut of pit
034	2	Fill of pit 033
035	2	Cut of pit
036	2	Fill of pit 035
037	3	Cut of pit containing Beaker pottery
038	3	Fill of field drain 041
039	3	Fill of pit 037 (Same as 040 but divided from it by field drain 041)
040	3	Fill of pit 037 (Same as 039 but divided from it by field drain 041)
041	3	Cut of field drain bisecting pit 037
042	3	Primary fill of pit 037
43A – 43H	1	Stone pad containing the base of a metal post (same as WB008)
44	1	Cut of trench containing line of bricks
45	1	Line of bricks

APPENDIX 1b: Watching Brief Context Register

Context no.	Section	Description	
000	All	Natural	
001	All	Topsoil	
002	All	Subsoil	
003	4	Masonry: brick garden wall of Westerton Cottages (RSK DBA Site 60)	
004	4	Masonry: Stone Kerb, associated with Westerton Cottages (RSK DBA Site 60)	
005	4	Cut of pit: Westerton Cottages (RSK DBA Site 60)	
006	4	Fill of pit 005	
007	4	Brick work foundations within Westerton cottages (RSKSite 60)	
008	4	Masonry: Sandstone pads same as 43A-43H (Appendix 1a)	
009	1	Surface of track or pathway	
010	3	Surface/ deposit of stone cobbles near Hiddlefaulds (RSK DBA Site 17)	
011	2	Deposit of stone cobbles	
012	2	Skeletal remains of animal burial	
013	2	Remains of a cobbled surface, possibly a haystand	
014	-	Void	
015	0	Cut of pit	
016	0	Upper fill of pit 015	
017	0	Secondary fill of pit 015	
018	0	Primary fill of pit 015	
019	0	Deposit of heat affected stones in pit 015	
020	0	Cut of pit 019	
021	0	Fill of pit 020	
022	0	Deposit of heat affected stones in pit 015	
023	0	Cut of linear gully	
024	0	Fill of 023	
025	2	Cut of pit	
026	2	Fill of pit 025	
027	2	Cut of ditch	
028	2	Primary fill of ditch 027	
029	2	Upper fill of ditch 027	

APPENDIX 2: Field Boundary Register

Context no.	Section	Description	
FB01	-	Dry-stone wall, the remains of a tree-lined avenue and parallel to FB02	
FB02	-	Dry-stone wall, the remains of a tree-lined avenue and parallel to FB01	
FB03	-	Low earthwork with accompanying fence line	
FB04	-	Substantial dry-stone wall in good repair	
FB05	-	'Ha-ha' comprising water-filled ditch, dry-stone wall and tree cover	
FB06	-	North boundary of tree-lined avenue: dry-stone wall and earth bank	
FB07	-	South boundary, parallel to above; evidence of stone wall and earth bank	

APPENDIX 3a: Mitigation Excavation Photographic Register

Colour Slide: Film 1

Shot	Description	From	Conditions
1-2	Site 1 (RSK 60) Trench 1, General	South	Sun
3-4	Site 1 (RSK 60) Trench 2, General	South	Sun
5-6	Site 1 (RSK 60) Trench 3, General	East	Overcast
7-8	Site 1 (RSK 60) Trench 4, General	East	Sun
9-10	Site 1 (RSK 60) Trench 5, General	South	Sun
11-14	Site 1 (RSK 60) General site shots	South	Sun
15-16	Site 3 Pit 037, Section 1, NE-facing	NE	Overcast
17-18	Site 3 Pit 037, Section 2, NE-facing	NE	Overcast
19-20	Site 3 Pit 037 fully excavated	SE	Overcast
21-22	Site 3 Pit 037 fully excavated	NE	Overcast
23-24	Site 3 Pit 037 fully excavated	NW	Overcast
25-26	Site 3 Pit 037 fully excavated	SW	Overcast
27-30	Site 3 Pit 037 fully excavated, general shots taken from	SE	Overcast
	spoil heap		
31-32	Site 3 Pit 037 fully excavated	NE	Sun
33-34	Site 3 Pit 037 fully excavated	SW	Sun
35-36	Site 3 Pit 037 fully excavated	SE	Sun
37	Site 3 Pit 037 fully excavated	NW	Sun

Colour Slide: Film 2

Shot	Description	From	Conditions
1-2	Site 2, Pit 003, west facing section	West	Sun
3-4	Site 2, Pit 005, east facing section	East	Sun
5-6	Site 2, Pit 007, south facing section	South	Sun
7-8	Site 2, Pit 009, west facing section	West	Sun
9-10	Site 2, Pit 011, west facing section	West	Sun
11-12	Site 2, Pit 013, NE facing section	NE	Sun
13-14	Site 2, Pit 015, west facing section	West	Sun
15-16	Pit 017 , east facing section	East	Sun
17-18	Site 2, Pit 019, south facing section	South	Sun
19-20	Site 2, Pit 021, south facing section	South	Sun
21-22	Site 2, Pit 023, NE facing section	NE	Sun
23-24	Site 2, Pit 025, NE facing section	NE	Sun

Digital

Shot	Description	From	Conditions
1-2	Site 1 (RSK 60) Trench 1, General	South	Sun
3-4	Site 1 (RSK 60) Trench 2, General	South	Sun
5-6	Site 1 (RSK 60) Trench 3, General	East	Overcast
7-8	Site 1 (RSK 60) Trench 4, General	East	Sun
9-10	Site 1 (RSK 60) Trench 5, General	South	Sun
11-14	Site 1 (RSK 60) General site shots	South	Sun
15-16	Site 3, Pit 037, Section 1, NE-facing	NE	Overcast
17-18	Site 3, Pit 037 , Section 2, NE-facing	NE	Overcast
19-20	Site 3, Pit 037 fully excavated	SE	Overcast
21-22	Site 3, Pit 037 fully excavated	NE	Overcast
23-24	Site 3, Pit 037 fully excavated	NW	Overcast
25-26	Site 3, Pit 037 fully excavated	SW	Overcast
27-30	Site 3, Pit 037 fully excavated, general shots taken from	SE	Overcast

	spoil heap		
31-32	Site 3 , Pit 037 fully excavated	NE	Sun
33-34	Site 3 , Pit 037 fully excavated	SW	Sun
35-36	Site 3 , Pit 037 fully excavated	SE	Sun
37-38	Site 3, Pit 037 fully excavated	NW	Sun
39-40	Site 2, Pit 003, west facing section	West	Sun
41-42	Site 2 , Pit 005 , east facing section	East	Sun
43-44	Site 2, Pit 007 , south facing section	South	Sun
45-46	Site 2, Pit 009 , west facing section	West	Sun
47-48	Site 2, Pit 011, west facing section	West	Sun
49-50	Site 2, Pit 013, NE facing section	NE	Sun
51-52	Site 2 , Pit 015 , west facing section	West	Sun
53-54	Site 2 , Pit 017 , east facing section	East	Sun
55-56	Site 2 , Pit 019 , south facing section	South	Sun
57-58	Site 2, Pit 021, south facing section	South	Sun
59-60	Site 2, Pit 023, NE facing section	NE	Sun
61-62	Site 2, Pit 025, NE facing section	NE	Sun

APPENDIX 3b: Watching Brief Photographic Register

Colour Slide: Film 1

Shot	Description	From	Conditions
1	Dry-stone wall FB01 , General	S	Overcast
2	Dry-stone wall FB01 , partially removed	S	Overcast
3	Dry-stone wall FB02 , General	N	Overcast
4	Dry-stone wall FB04 , General	W	Overcast
5-6	'Ha-ha' FB05 Dry-stone wall and water course, General	N	Sun
7	Dry-stone wall FB04 , profile	N	Sun
8	void	-	-
9	Dry-stone wall FB06 , General	N	Sun
10	Shot of tree lined avenue Newliston (FB06,07), General	Е	Sun
11	Westerton Cottages (RSK 60), WB003 garden wall	SE	Overcast
12	Westerton Cottages (RSK 60), WB007 wall foundation	SE	Overcast
13	void	-	-
14	Westerton Cottages (RSK 60), WB008 stone pads	-	Overcast
15	Section 5, Ridge and furrow, General	SE	Overcast
16	Section 3 , (RSK 63), Remains of mineral railway	NE	Overcast
17	Section 3, Deposit of stone cobbles WB010	NE	Overcast
18-19	Section 0 , Pits WB015 & 020 , Pre-excavation	W	Overcast
20-21	Section 0 , Pit WB015 , south facing section	S	Overcast
22-23	Section 0 , Pit WB020 , southeast facing section	SE	Overcast
24-25	Section 0, Gully WB023, east facing section	Е	Overcast
27-28	Section 0 , Pit WB020 , post excavation	SE	Overcast
29-30	Section 0 , Pit WB015 , post excavation	S	Overcast
31	Section 2, general shot of WB012, animal burial	SW	Overcast
32	Section 2, general shot of WB012, animal burial	SW	Overcast
33-34	Section 2, Stone surface WB013, General	NW	Overcast
35-36	Section 2, Pit WB025, pre-excavation	NW	Overcast

Colour Slide: Film 2

Shot	Description	From	Conditions
1-2	Section 2, Ditch WB027, northeast facing section	NE	Overcast
3-4	Section 2, Pit, WB025, northeast facing section	SW	Overcast

Digital

Shot	Description	From	Conditions
1	Dry-stone wall FB01 , General	N	Overcast
2	Dry-stone walls FB01 , FB02 , General	N	Overcast
3	Dry-stone walls FB02 , General	S	Overcast
4	Earthen bank and fence line FB03 , General	N	Overcast
5	Dry-stone wall FB04 , General	W	Sun
6	Dry-stone wall FB04 , General	N	Sun
7	'Ha-ha' FB05 Dry-stone wall and water course, General	N	Sun
8	'Ha-ha' FB05 Dry-stone wall and water course, General	W	Sun
9	'Ha-ha' FB05 Dry-stone wall, ditch and tree cover	E	Sun
10	'Ha-ha' FB05 Dry-stone wall, north facing elevation	N	Sun
11	'Ha-ha' FB05 Dry-stone wall and water course, General	E	Sun
12	'Ha-ha' FB05 Dry-stone wall and water course, General	E	Sun
13	'Ha-ha' FB05 , Viewed from a distance of c.10m	N	Sun
14	Dry-stone wall FB04 , Profile	N	Overcast
15	Dry-stone wall FB06 , North facing elevation	N	Sun

Shot	Description	From	Conditions
16	Dry-stone wall FB06 , South facing elevation	S	Sun
17	Tree lined avenue central to FB06, FB07, General	Е	Overcast
18	Section 6, General shot of monitored subsoil removal	SE	Sun
19	Remnants of dry-stone wall, bank & tree line FB07	S	Overcast
20	Section 6, Site 2, General shot of possible pit cluster	Е	Overcast
21	Field boundary FB07 , Profile	W	Overcast
22	Section 4, Site 1 (RSK DBA Site 60), Foundations of garden wall WB003	NE	Overcast
23	Section 4, Site 1 (RSK DBA Site 60), Foundations of garden wall WB003	SE	Overcast
24	Section 4, Site 1 (RSK DBA Site 60), Pit WB005, part excavated	SE	Overcast
25	Section 4, Site 1 (RSK DBA Site 60), Foundations of garden wall WB003	SW	Overcast
26	Section 4, Site 1 (RSK DBA Site 60), Sandstone pads and brick foundations WB007, WB008, General	SE	Sun
27	Section 4, Site 1 (RSK DBA Site 60), Sandstone pad c/w metal fitting WB008	-	Sun
28	Section 4, Site 1 (RSK DBA Site 60), General shot of site	Е	Sun
29	Section 6, General shot of site after subsoil removal	S	Sun
30	Section 4, Site 1 (RSK DBA Site 60), General shot of site	NE	Sun
31	Section 4, Site 1 (RSK DBA Site 60), General shot of site	SW	Sun
32	Section 4, Site 1 (RSK DBA Site 60), General shot of site	NE	Sun
33	Section 4, Site 1 (RSK DBA Site 60), Probable alleyway	NE	Sun
34	Section 4, Site 1 (RSK DBA Site 60), Building footprint	N	Sun
35	Section 6 , General shot after monitored subsoil removal	NE	Sun
36	Section 7, General shot of topsoil removal	_	Overcast
37	Section 5, General shot of rig-and-furrow	_	Overcast
38	Section 7, General shot of topsoil removal	_	Overcast
39	Section 7, General shot of topsoil removal	_	Overcast
40	Section 6, General shot of topsoil removal	-	Overcast
41	Section 6, Test pit	-	-
42	Section 6, Site 2, General shot of possible pit cluster	-	Sun
43	Section 6 , Site 2, General shot of possible pit cluster	-	Sun
44	Section 6 , General shot of monitored subsoil removal	SW	Sun
45	Section 3, Deposit of cobbles WB010 , Southwest facing section	SW	Sun
46	Section 1, Linear stone surface WB009	NE	Overcast
47	Section 2, General shot of waterlogged conditions	W	Overcast
48	CX1+ General shot of section after benching in HDD	-	Overcast
49	Section 0 , Pit WB015, South facing section	S	Sun
50	Section 0 , Pit WB020, Southeast facing section	SE	Sun
51	Section 2, General shot of area inc. evidence of rig-and-furrow	S	Sun
52	Section 2, General shot of area inc. evidence of rig-and-furrow	NW	Sun
53	Section 2, Clearance deposit of stone cobbles WB011	SW	Sun
54	Section 0, Gully WB023, General	E	Sun
55	Section 0 , Gully WB023 , East facing section	Е	Sun
56	Section 0, Pit WB020, Fully excavated	NW	Sun
57	Section 0, Pit WB020, Fully excavated	N	Sun
58	Section 2, Animal burial WB012, Fully excavated	SE	Sun
59	Section 2, Stone surface WB013, General	NW	Sun
60	Section 2, Pit WB025, Pre-excavation	NW	Sun
61	Section 2, Ditch WB027 in plan, post excavation	SW	Overcast
62	Section 2, Ditch WB027, Southwest facing section	SW	Overcast
63	Section 2, Pit WB025, Northeast facing section	NE	Overcast

Shot	Description	From	Conditions
64	Field Boundary WB007 , Remains of dry-stone wall	N	Overcast
65	Section 4, Site 1 (RSK DBA Site 60), Whinstone Kerb	NE	Sun
	WB004 in plan		
66	Section 4, Site 1 (RSK DBA Site 60), Drain channel in	NE	Sun
	probable alleyway		
67	Section 4, Site 1 (RSK DBA Site 60), Topsoil removal	NW	Sun
68	Section 7, General shot after topsoil removal	NW	Sun
69	Section 7, General shot after topsoil removal	NW	Sun
70	Section 7, General shot during topsoil removal	SE	Sun
71	Section 7, General shot during topsoil removal	SE	Sun
72	Section 7, General shot during topsoil removal	SE	Sun
73	Section 7, General shot during topsoil removal	-	Sun
74	Section 7, Field drain intersection	-	Sun
75	Section 7, General shot of groundwork's for site access	-	Overcast
76	Section 7, General shot of groundwork's for site access	-	Overcast
77	Section 7, Test pit	-	-
78	Section 7, Widening of working width	SE	Overcast
79	Section 7, Widening of access area	NW	Overcast

APPENDIX 4a: Drawings Register

Sheet No	Drawing No	Scale	Section/Plan	Contexts
1	1A	1:50	Plan	Site 1 (RSK DBA Site 60): Plan of stone
				pads 43A – 43E
2	1B	1:50	Plan	Site 1 (RSK DBA Site 60): Plan of stone
				pads 43F – 43H
3	2	1:50	Plan	Site 2: Plan of pits 003, 005, 007, 009, 011,
				013, 015, 017, 019, 021, 023 and 025
4	3	1:50	Plan	Site 2: Plan of pits 027, 029, 031, 033 and
				035
5	4	1:20	Section	Site 2: Pit 003, west facing section
5	5	1:20	Section	Site 2: Pit 005, east facing section
5	6	1:20	Section	Site 2: Pit 007, south facing section
5	7	1:20	Section	Site 2: Pit 009, NW facing section
5	8	1:20	Section	Site 2: Pit 011, west facing section
5	9	1:20	Section	Site 2: Pit 013, NE facing section
5	10	1:20	Section	Site 2: Pit 015, west facing section
5	11	1:20	Section	Site 2: Pit 017, east facing section
5	12	1:20	Section	Site 2: Pit 019, south facing section
5	13	1:20	Section	Site 2: Pit 021, south facing section
5	14	1:20	Section	Site 2: Pit 023, NE facing section
5	15	1:20	Section	Site 2: Pit 025, east facing section
5	16	1:20	Section	Site 2: Pit 027, SE facing section
5	17	1:20	Section	Site 2: Pit 029, east facing section
5	18	1:20	Section	Site 2: Pit 031, east facing section
5	19	1:20	Section	Site 2: Pit 033, west facing section
5	20	1:20	Section	Site 2: Pit 035, south facing section
6	21	1:20	Section	Site 3: Pit 037, north-east facing section (1)
6	22	1:20	Section	Site 3: Pit 037, north-east facing section (2)
6	23	1:20	Plan	Site 3: Pit 037, plan
6	24	1:20	Profile	Site 3: Pit 037, north-east to south-west
				profile

APPENDIX 4b: Watching Brief Drawings Register

Sheet No	Drawing No	Scale	Section/Plan	Contexts
1	1	1:10	Section	Section 0 , Pit WB015 , Southwest facing
				section
1	2	1:10	Section	Section 0 , Pit WB020 , South facing section
1	3	1:20	Plan	Section 0, Plan of Pits WB020, WB015
1	4	1:10	Section	Section 0 , Gully WB023 , East facing section
1	5	1:20	Section	Section 2, Pit WB025, Northeast facing
				section
1	6	1.10	Section	Section 2, Ditch WB027, Southwest facing
				section

APPENDIX 5: Samples Register

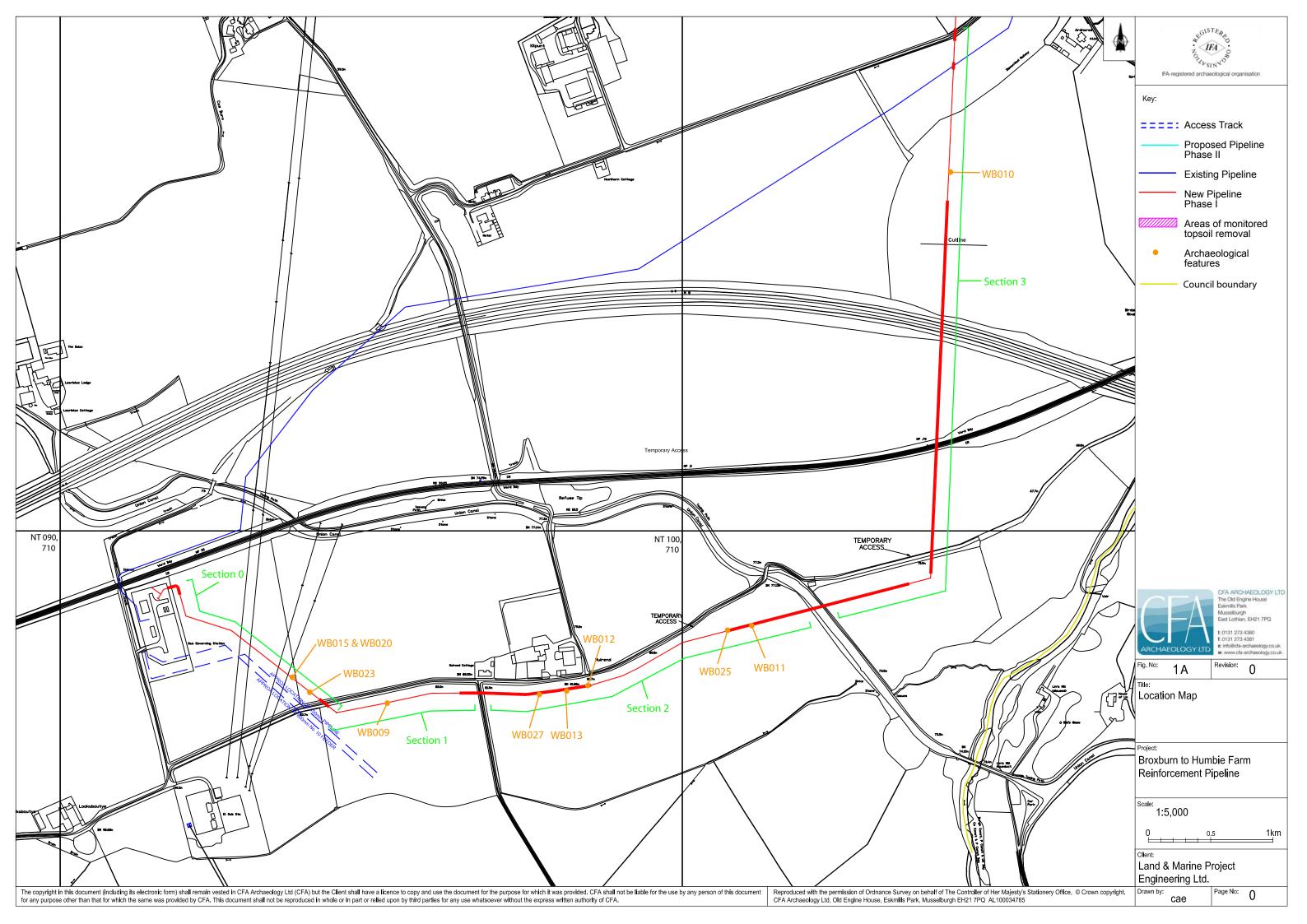
Sample	Context	Site/	Comment	Litres
no.		Section		
1	WB016	Sec 0	Charcoal rich-deposit with heat affected stones	10L
2	WB021	Sec 0	Charcoal rich-deposit	10L
3	006	2	Fill of pit 005	10L
4	010	2	Fill of pit 009	10L
5	022	2	Fill of pit 021	10L
6	038	3	Fill of field drain 041	30L
7	039	3	Fill of pit 037 (Same as 040 but divided from it	50L
			by field drain 041)	
8	040	3	Fill of pit 037 (Same as 039 but divided from it	50L
			by field drain 041)	
9	042	3	Primary fill of pit 037	10L

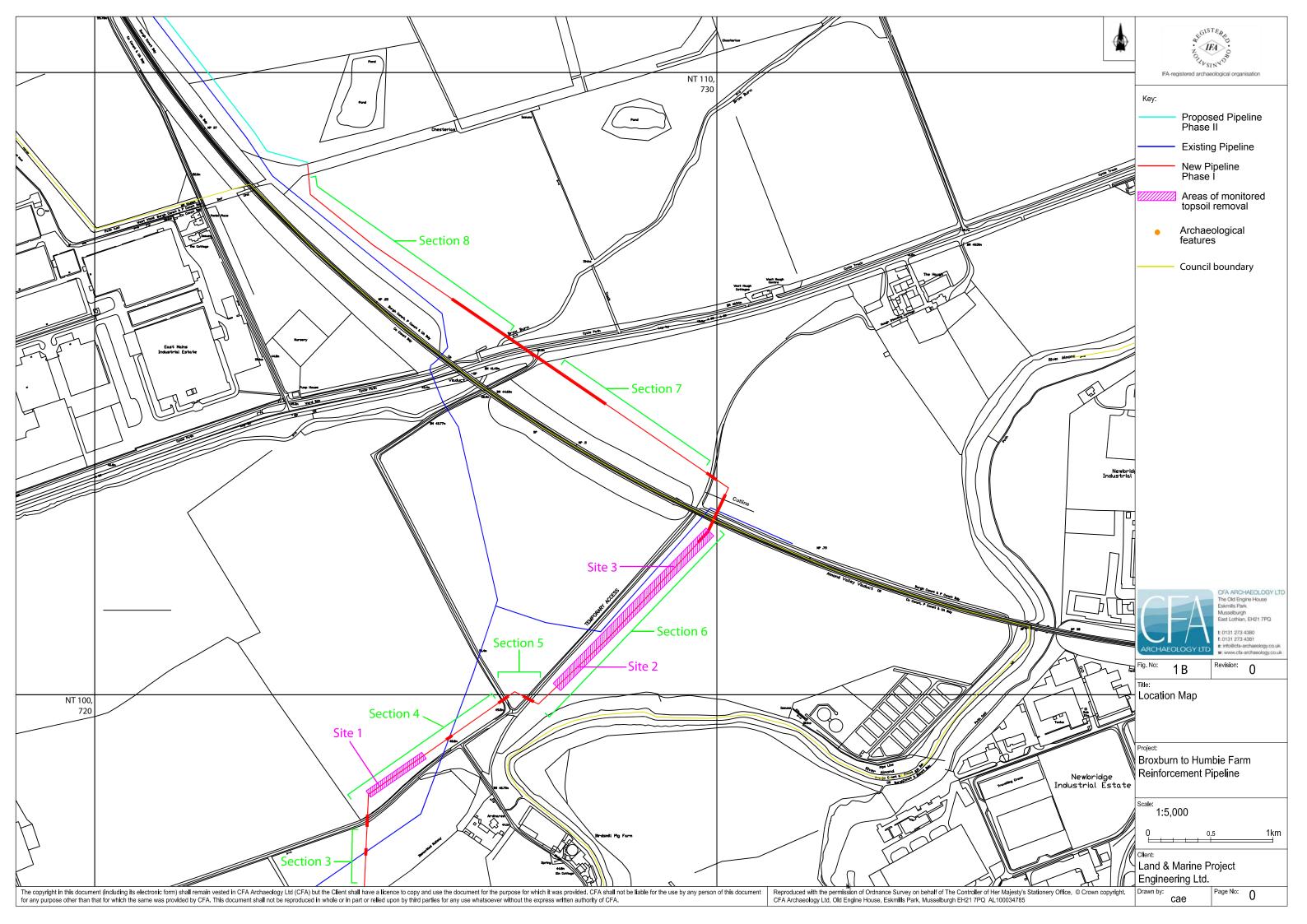
APPENDIX 6: Finds Register

Context	Find Type	No.	Wt	Notes	Date
039	Quartz	1	15	Flake from a pebble, cortex present	preh
040	Flint	2	103	One possible core, one flaked pebble	preh
039	Burnt bone	2	3		
040	Burnt bone	14	4		
038	Pot	1	14	Beaker, decorated with comb impressions	preh
039	Pot	12	170	Beaker, decorated with comb impressions. Some shoulder sherds. At least 2 vessels represented	preh
040	Pot	12	164	Beaker, decorated with comb impressions. Two rim sherds and a base sherd - at least 2 vessels represented.	preh

APPENDIX 7: Discovery & Excavation in Scotland Entry

l e	1
LOCAL AUTHORITY:	West Lothian, City of Edinburgh
PROJECT TITLE/SITE NAME:	Broxburn to Humbie Farm Reinforcement Pipeline
PROJECT CODE:	STPI
PARISH:	Kirkliston
NAME OF CONTRIBUTOR:	Phil Moore and Magnus Kirby
NAME OF ORGANISATION:	CFA Archaeology Ltd
TYPE(S) OF PROJECT:	Watching Brief, Monitored Topsoil Removal and Excavation
NMRS NO(S):	N/A
SITE/MONUMENT TYPE(S):	The remains of Westerton Cottages, a series of possible pits and a pit containing sherds of Beaker pottery.
SIGNIFICANT FINDS:	Beaker Pottery
NGR (2 letters, 8 or 10 figures)	NT 0916 7090
START DATE (this season)	September 2008
END DATE (this season)	October 2008
PREVIOUS WORK (incl. DES ref.)	N/A
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological watching brief was conducted on a section of gas pipeline during ground breaking activity. This archaeological monitoring also included two sections of controlled topsoil removal under direct archaeological supervision on sites of significant potential identified from desk based research.
	Work on the gas pipeline, will form the basis of two separate phases of construction. This report details the findings of the watching brief during Phase I, with Phase II due to commence in the spring 2009.
	The watching brief carried out during groundworks identified three sites which were excavated and recorded during a phase of archaeological mitigation. Site 1 uncovered the badly disturbed remains of Westerton Cottages, the known location of a group of shale miner's cottages of late 19 th century origin. Excavation of Site 2 revealed a cluster of possible pits of unknown date. Site 3 was the location of a large pit containing Beaker pottery from multiple vessels and some fragments of cremated bone. The feature had been substantially disturbed by the incorporation of a field drain in relatively modern times. A series of isolated features were also uncovered and recorded during the watching brief, which were largely attributed to farming practice and land management in the post-medieval period.
PROPOSED FUTURE WORK:	Post excavation analysis of soil samples from Site 3
CAPTION(S) FOR ILLUSTRS:	N/A
SPONSOR OR FUNDING BODY:	Land and Marine Project Engineering Ltd
ADDRESS OF MAIN CONTRIBUTOR:	Old Engine House, Eskmills Park, Musselburgh, East Lothian EH21 7PQ
EMAIL ADDRESS:	Info@cfa-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited with NMRS; reports to be deposited with West of Scotland Archaeology Service and City of Edinburgh Council Archaeology Service SMR.







309381 670754

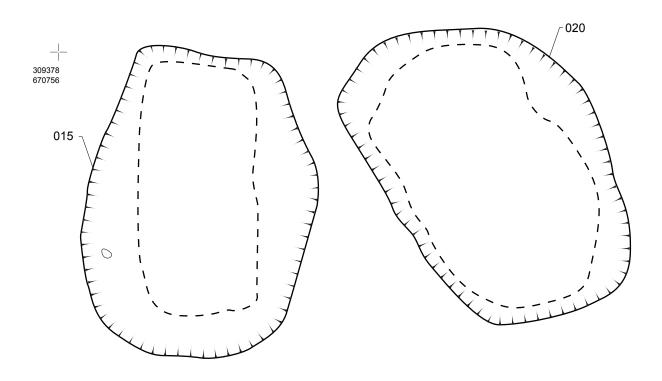


Fig. 2 - Section 0: Plan of Pits WB 015 & WB 020

Fig. No: Revision: Client: CFA ARCHAEOLOGY LTD The Old Engine House Eskmills Park Musselburgh East Lothian, EH21 7PQ LAND & MARINE PROJECT ENGINEERING LTD Key: 2 Title: PLAN OF PITS [WB 015] & [WB 020] SECTION 0 t: 0131 273 4380 f: 0131 273 4381 e: info@cfa-archaeology.co.uk w: www.cfa-archaeology.co.uk BROXBURN TO HUMBIE FARM Drawn by: REINFORCEMENT PIPELINE 0 50 cm ΚH



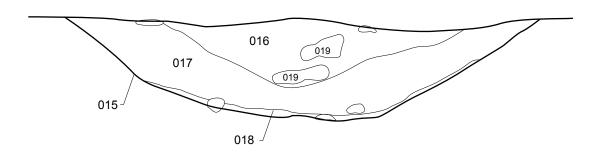


Fig. 3 - Section 0: Pit WB 015, SE-facing section

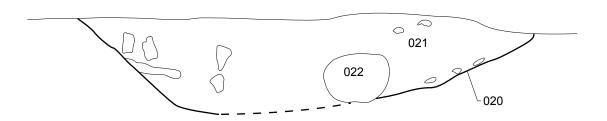


Fig. 4 - Section 0: Pit WB 020, S-facing section

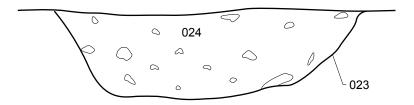


Fig. 5 - Section 0: Gully WB 023 E-facing section



Key:	Fig. No: 3,4 & 5	Revision:	Client: LAND & MARINE PROJECT ENGINEERING LTD		CFA ARCHAEOLOGY LTD The Old Engine House
	Title: FIGURES 3	3, 4 & 5			Eskmills Park Musselburgh East Lothian, EH21 7PQ t: 0131 273 4380 f: 0131 273 4381
		N TO HUMBIE EMENT PIPE	ARCHAEOLOGY LTD Drawn by: KH	a: info@ofa ambacology.co.uk	



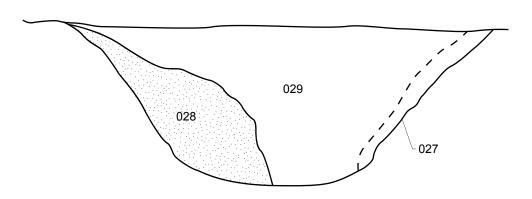
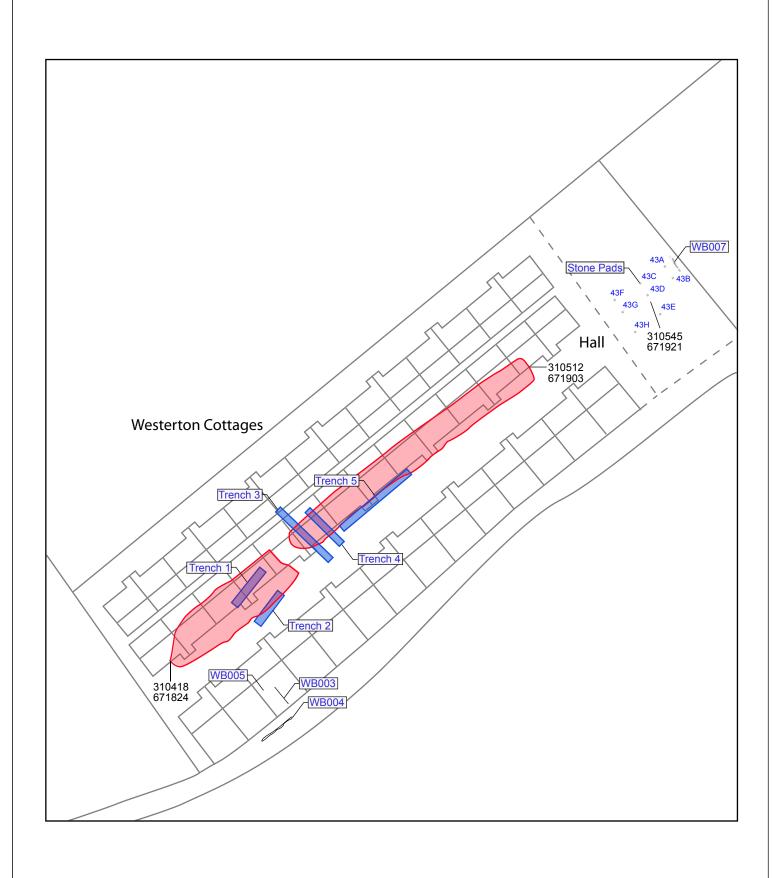
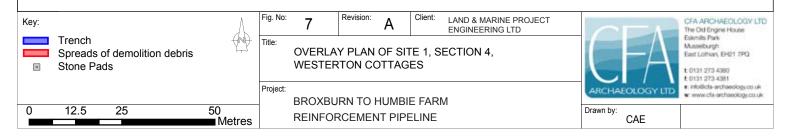


Fig. 6 - Section 2: Ditch WB 027, SW-facing section

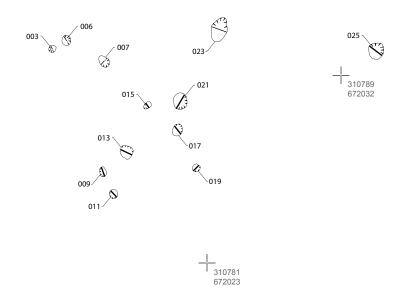
Key:	Fig. No:	6 Rev	vision:	Client: LAND & MARINE PROJECT ENGINEERING LTD	CEA	CFA ARCHAEOLOGY LTD The Old Engine House
Primary fill	Title:	Title: FIGURE 6				Eskmils Park Musseburgh East Lothan, EH21 7PQ t. 0131 273 4386 t. 0131 273 4381 ii infolicts archaeology.co.uk w: www.cfs-archaeology.co.uk
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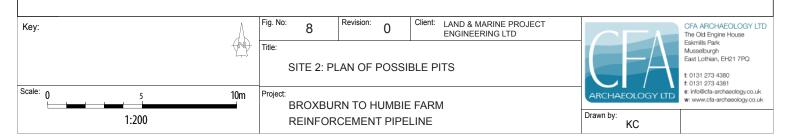














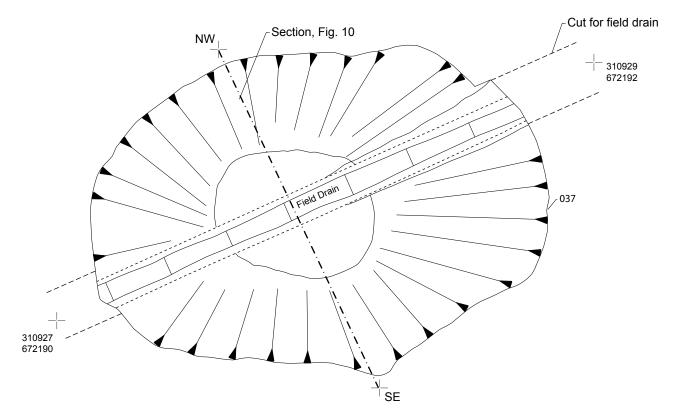


Fig. 9 - Site 3: Plan of pit 037

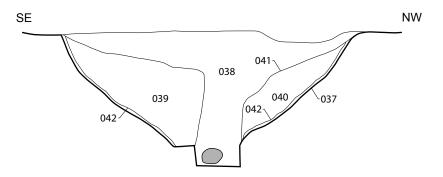


Fig. 10 - Site 3: Section of pit 037, NE-facing section

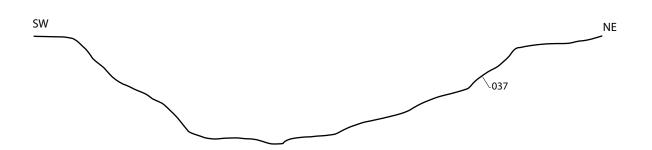
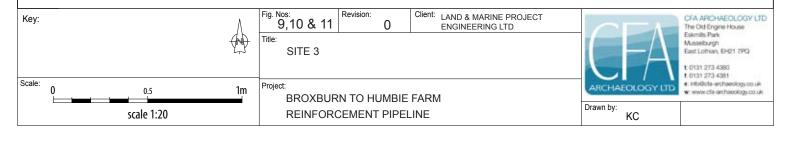


Fig. 11 - Site 3: Pit 037 - NE to SW profile





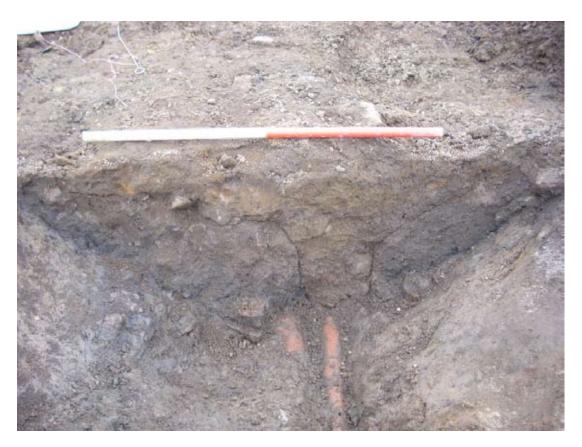


Fig 12 - NE Facing Section of Pit 037



Fig 13 - General Shot of Pit 037, Post-Excavation

Fig. No: 12 &13 LAND & MARINE PROJECT ENGINEERING LTD The Old Engine House Eskmills Park **BROXBURN TO HUMBIE FARM** Drawn by: REINFORCEMENT PIPELINE

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Fig 14 - General shot of Site 1 Section 4



Fig 15 - General shot of Section 6 after monitored topsoil removal

Fig. No: 14 & 15 Revision: A Client: LAND & MARINE PROJECT ENGINEERING LTD

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CFA ARCHAEOLOGY LTD
The Od Engine House Escribe Park
Masseburgh East Lathan B-21 7PO
1 0131 273 4360
1 0131 273 4361
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Www.cfa archaeology.co.i.l.
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Fig 16 - Section 0, Pit WB015, S Facing Section



Fig 17 - Section 2, Ditch WB027, NE Facing Section

Fig. No: 16 &17	Revision:	Client: LAND & MARINE PROJECT ENGINEERING LTD	CEA	CFA ARCHAEOLOGY LTD The Old Engine House
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Fig 18 - Possible surface WB010, NE Facing Section



Fig 19 - Section 1: Probable eroded trackway WB009

Fig. No: 18 &19	Revision: A	Client: LAND & MARINE PROJECT ENGINEERING LTD		CFA ARCHAEOLOGY LTD The Old Engine House Eskinlis Park
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Fig 20 - Site 1: kerbstones WB004



Fig 21 - Section 2: Probable rubbish pit WB025

Fig. No: 20 & 21	Revision:	Client: LAND & MARINE PROJECT ENGINEERING LTD	CEA	CFA ARCHAEOLOGY LTD The Old Engine House Estimilis Park
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