



Highland Archaeology Services Ltd

Bringing the Past and Future Together

Wester Kerrowgair



Archaeological Trial Trenching

7 Duke Street Cromarty Ross-shire IV11 8YH

Tel / Fax: 01381 600491 Mobile: 07834 693378 Email: info@hi-arch.co.uk Web: www.hi-arch.co.uk
Registered in Scotland no. 262144 Registered Office: 10 Knockbreck Street, Tain, Ross-shire IV19 1BJ VAT No. GB
838 735⁸ 20



Wester Kerrowgair

Archaeological Trial Trenching

Report No.	HAS150301
Site Code	HAS_WKG15
Client	Oila Energy
Planning Ref	14/02932/FUL
OS Grid Ref	NH 7566 5204
Date/ revision	04/03/2015
Author	Lynne McKeggie

Summary

An Archaeological evaluation was undertaken to investigate and record features of potential archaeological significance that might be affected by construction of an anaerobic digester plant at Wester Kerrowgair, Dalcross, Inverness. This document presents the results of a programme of trial trenching.

Features included field drains, fire pits, a water main and a modern post-hole.

Contents

Acknowledgements and Copyright	4
Aims and Objectives.....	4
Location	5
Background.....	7
Legislation and Policy	7
Methodology.....	9
Results	9
Discussion.....	17
Appendices	19
Selected Photographs.....	21

Illustrations

Figure 1 Project location (general)	5
Figure 2: Proposed Site Location and Layout (as supplied by client).....	6
Figure 3: Proposed Trench layout. Area 1 is outlined in purple, Area 2 in yellow.....	8
Figure 4 Plan of trenches as dug with identified Features.....	8
Figure 5: Post-ex Plan Feature 4.....	11
Figure 6: Section of Feature 4 (with burrow in yellow).....	11
Figure 7: Feature 5 post-ex plan	13
Figure 8: Feature 5 section	13
Figure 9: Feature 6 Post-ex plan.....	14
Figure 10: Feature 6 section	14
Figure 11: Camera Points	20
Plate 1: Site before investigations (WKG15_12)	4
Plate 2: Feature 1. Drain cut with plastic (WKG15_65)	9
Plate 3: Feature 2, modern drain (WKG15_069)	10
Plate 4: Feature 3, modern drain (WKG15_70)	10
Plate 5: Pre-ex Feature 4 (WKG15_39)	11
Plate 6: Feature 5 pre-ex (WKG15_77).....	12
Plate 7: feature 6 post-ex (WKG15_74).....	14
Plate 8: Feature 7 water main post-ex (WKG15_54)	15
Plate 9: Feature 8 non-archaeological, post-ex (WKG15_84)	15
Plate 10: Feature 9 non-archaeological (WKG15_88).....	16
Plate 11: Feature 10 non-archaeological (WKG15_85).....	16
Plate 12: Feature 11 non-archaeological, post-ex (WKG15_92)	17
Plate 13: Site with all trenches open (WKG15_96)	18
Plate 14: Trench 1 (WKG15_17).....	21
Plate 15: Trench 9 (WKG15_45).....	22
Plate 16: Trench 13 (WKG15_60).....	23

Acknowledgements and Copyright

The fieldwork was undertaken by Lachlan and Lynne McKeggie. The report was written by Lynne McKeggie and edited by Lachlan McKeggie and John Wood. Background mapping has been reproduced by permission of the Ordnance Survey under Licence 100043217. Historic maps are courtesy of the National Library of Scotland.

The report's author(s) and Highland Archaeology Services Ltd jointly retain copyright in all reports produced but will allow the client and other recipients to make the report available for reference and research (but not commercial) purposes, either on paper, or electronically, without additional charge, provided this copyright is acknowledged.

Aims and Objectives

The objectives of the work were to:

- Examine and establish the nature and extent of any features of archaeological significance that would be affected by the proposed development, and to record these to professional standards, in line with current legislation and policy.
- Minimise any possible delay or cost to the development by anticipating archaeological requirements as far as possible, timetabling and integrating archaeological recording work with the project, and dealing with any issues arising quickly and efficiently.



Plate 1: Site before investigations (WKG15_12)

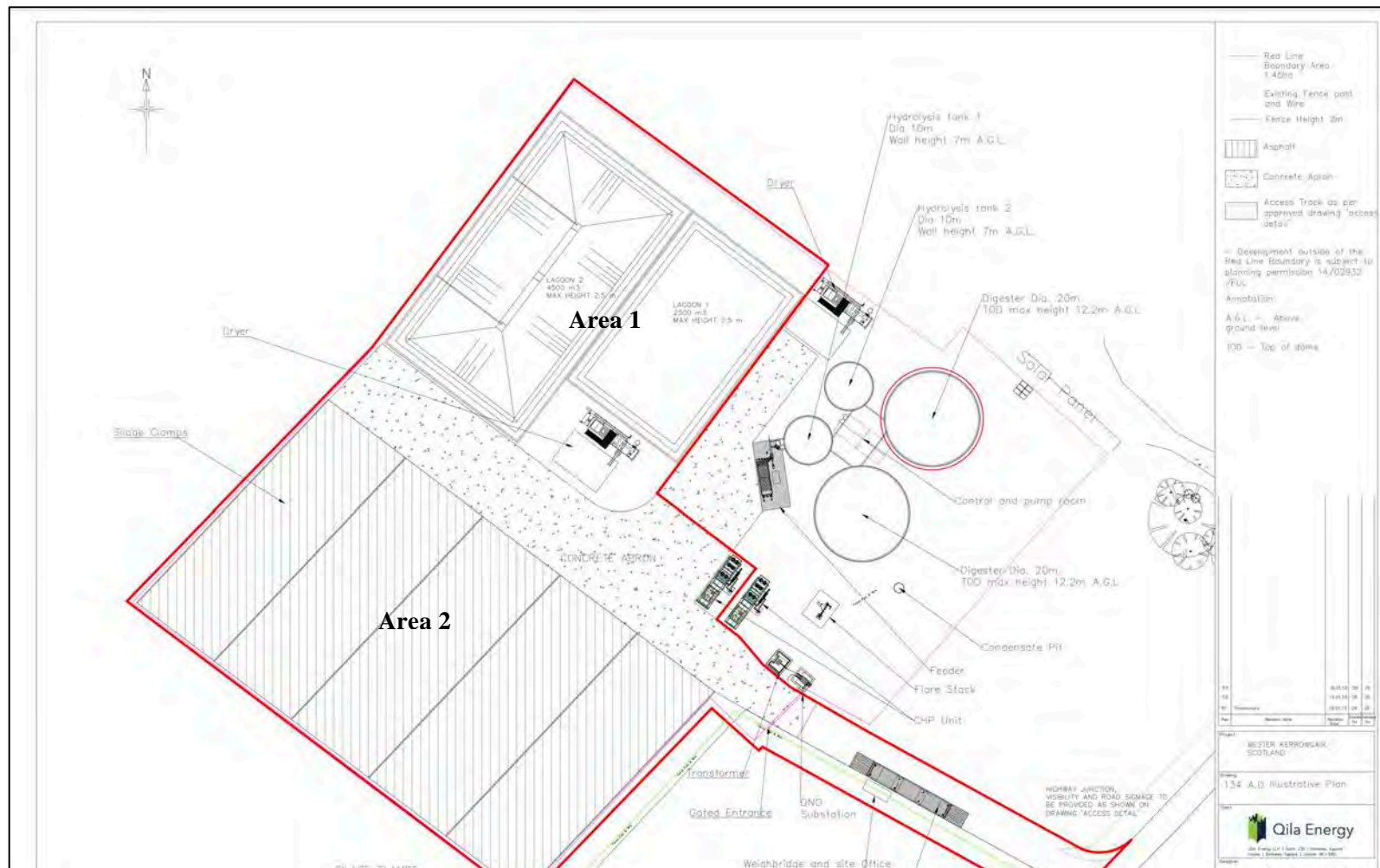
Location

The development is located at Wester Kerrowgair, near Inverness Airport, Highland, centred at approximate grid reference NH 7566 5204.



Figure 1 Project location (general)
From OS mapping. Reproduced under licence. Not to original scale.

Wester Kerrowgair Archaeological Trial Trenching February 2015



Background

The site lies on flat ground to the west of Inverness Airport, overlooking the Moray Firth. All of the areas investigated are currently agricultural fields which had been ploughed before the evaluation took place. Part of the development site intended for digester tanks had been disturbed previously, with an area of hard standing and an existing access track, and these were not investigated by prior agreement with the Highland Council Archaeologists and the developer.

The area investigated here comprises two areas: **Area 1** includes the site to the immediate west of the current farm buildings and has planning permission for a bio digester plant. Fieldwork in this area is in response to a planning condition imposed by the Highland Council at the request of their Historic Environment Team.¹ Fieldwork for this part of the site was outlined in Project Design HAS150106.

Area 2 lies to the southwest of Area 1. This is proposed for an extension to the bio digester plant, and archaeological fieldwork in this instance is in anticipation of a future planning application. Fieldwork for this part of the site was outlined in Project Design HAS150107.

The desk-based assessment identified 4 features in the wider vicinity of the development, although none within the development area:

DBA1 – Military road to Fort George. This follows the line of the present road.

DBA2 – Barrow cemetery. Recorded by RCAHMS using aerial photographs but no further records or details have been added.

DBA3 - Possible enclosure. Identified using aerial photography but not verified.

DBA4 – Socketed axe. Found metal detecting close to the shore.

A programme of trial trenching was then agreed with the Highland Council's archaeologist and the client, with trenches to provide a sample of 7% of the total development area. The proposed trench layout was accepted by Highland Council Archaeologists on 11th February 2015 prior to fieldwork commencement.

Legislation and Policy

The common principles underlying international conventions, national legislation and local authority planning policies are that cultural heritage assets should be identified in advance of development and safeguarded where practicable; if disturbance is unavoidable appropriate recording of features and recovery of portable artefacts should take place. These have been set out in international and European Union agreements, and UK and Scottish legislation, as well as national and local planning policies².

Professional standards during the present project have been secured by adherence to the *Codes of Conduct and Approved Practice and Standards* of the Institute for Archaeologists and the Highland Council's *Standards for Archaeological Work*.

¹ Application no.14/02932/FUL

² A summary of relevant international, EU, UK and Scottish legislation and policies is available from the HAS office on request.

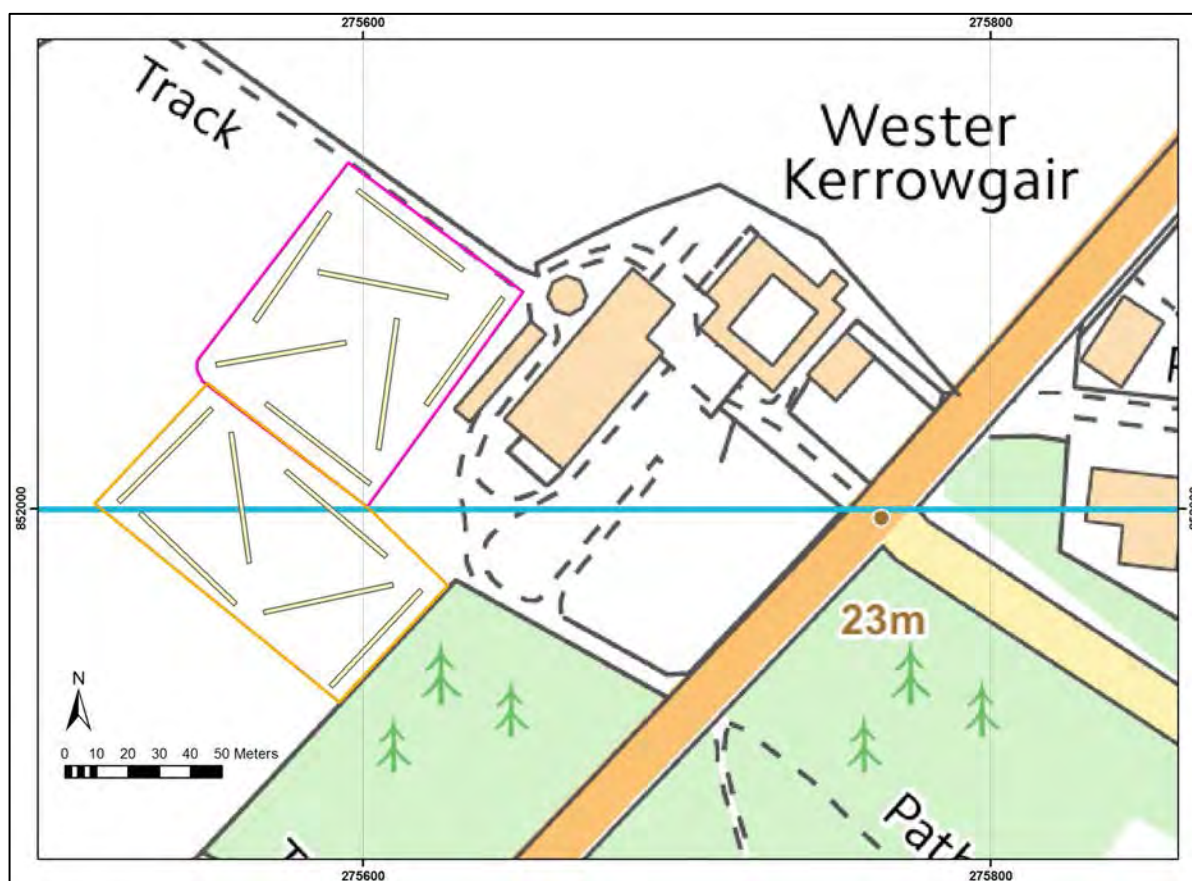


Figure 3: Trench layout as proposed. Area 1 is outlined in purple, Area 2 in yellow

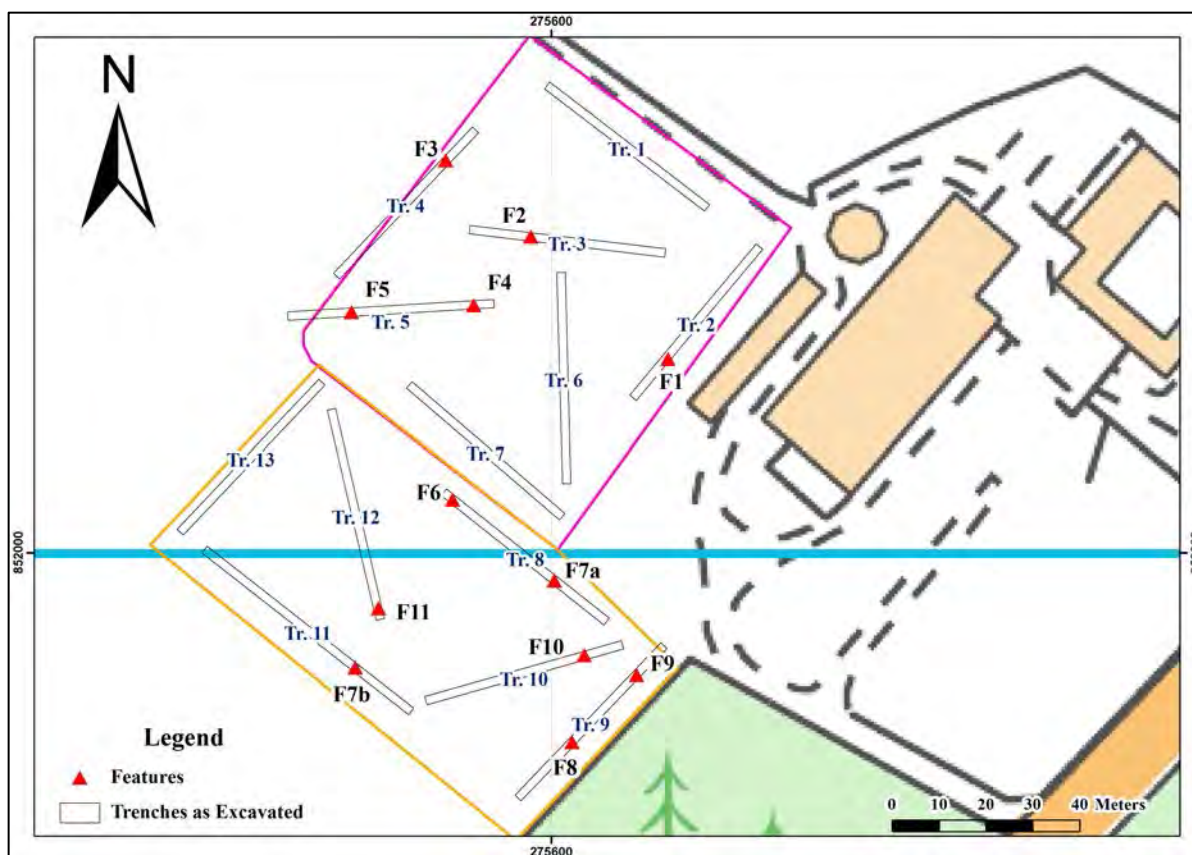


Figure 4 Plan of trenches as dug, with identified Features.

Methodology

Fieldwork was undertaken on 17th and 18th February 2015. Trenches were opened using a back-acting digger with a straight-edged ditching bucket measuring 1.8m wide. This resulted in the trenches being wider than the 1.5m allowed for in the project design. Trenches were also slightly elongated. As a result, the total area excavated was 1045sqm, in a site of 11,182 sqm, so the total area excavated represented 9.34% of the whole.

Features were recorded by photography prior to investigation and then hand excavated by trowel. Archaeological contexts were recorded with notes, photography and drawings. Feature and trench locations were recorded by a professional grade hand-held GNSS device providing better than sub-metre accuracy.

Results

13 Trenches were excavated in total. 11 possible features were initially identified, although some of these turned out to be natural. The topsoil varied from 0.5m to 0.65m in depth and was a rich dark brown loam. The subsoil was gravel and sand which varied from orange to dark red with patches of brown and grey.

Feature F1

A linear feature running approximately NW-SE across Trench 2, exposed across the full width of the trench and approximately 1.25m wide. The top fill of this feature was a yellow sand. The client informed the archaeologist on site that this was a modern drain that he had excavated. Upon investigation it was indeed found to have a plastic lining some 0.7m below the surface of the subsoil and investigations halted there.

The fill of the feature was mixed topsoil and subsoil with various inclusions such as fragments of wood and baler twine. Having confirmed that this was a modern feature no drawings were made and the feature was recorded photographically. (Plate 2)



Plate 2: Feature 1. Drain cut with plastic (WKG15_65)

Feature F2

A modern field drain running roughly NW-SE across Trench 3, just over 1m wide. This was clearly a modern drain. It contained clean gravel covered by black plastic which was in turn covered by yellow sand. The orientation suggests that this may be part of the same drain as F1 but the fill is rather different. This feature was cleaned and photographed, but not recorded further. (Plate 3)



Plate 3: Feature 2, modern drain (WKG15_069)

Feature F3

A modern field drain running c. NW-SE across Trench 4, just over 1m wide. This was clearly a modern drain as it contained clean gravel covered by black plastic which was in turn covered by yellow sand. The orientation and similarity to F2 suggests that this may be part of the same drain. This feature was cleaned and photographed but not recorded further. (Plate 4)



Plate 4: Feature 3, modern drain (WKG15_70)

Feature F4

A small charcoal-rich pit at the edge of Trench 5, approximately 0.4m by 0.5m although some of the feature was not exposed. The feature has been disturbed by burrowing although this did not affect the interpretation (Figure 6).

(401) - upper fill of pit, dark black sandy loam with lots of charcoal. Some particularly large chunks were found towards the base of this deposit including a 7x10cm piece. This was cleaned and photographed in situ but found not to be artefactual. Probably the remains of a fire pit. No artefacts were present although a sample was taken of this deposit (sample <1>).

(402) - a halo of claggy sand surrounding (401), this deposit was grey gradiating to orange and had occasional small charcoal flecks. This is likely to be a mixed layer of subsoil stained by (401).

[403] – cut of pit, gently sloping sides with flat base. The extent of excavation probably exceeds the actual cut as (402) represents an interface between the pit and the natural subsoil.



Plate 5: Pre-ex Feature 4 (WKG15_39)

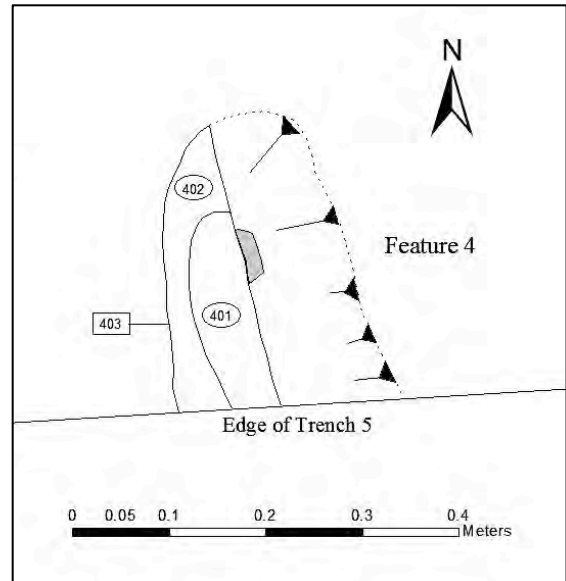


Figure 5: Post-ex Plan Feature 4

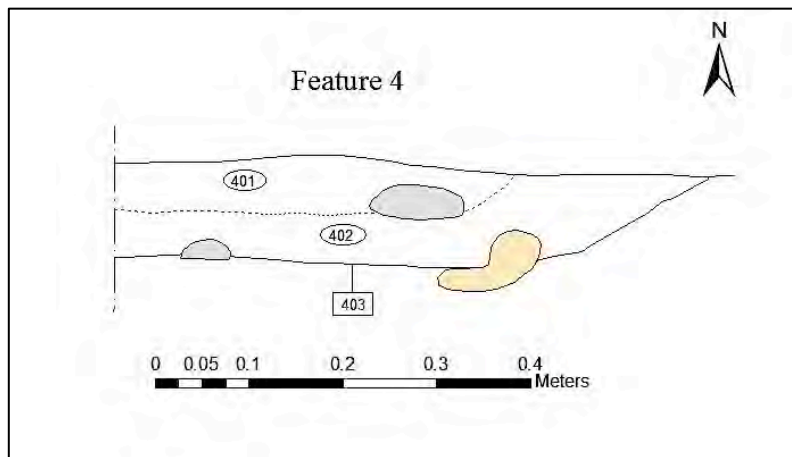
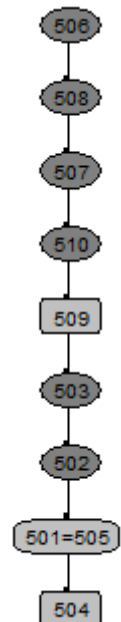


Figure 6: Section of Feature 4 (with burrow in yellow)

Feature F5

An ephemeral elongated feature with various colours running approx. NW-SE across Trench 5, and was around 2m by 0.5m. Cleaning revealed a mixed fill with dark halos around patches of yellow sand with a grey brown surrounding soil. This lay within an area of gravel and the edges were difficult to distinguish, although the base of the feature was fairly clear. This is interpreted as the site of two or possibly three successive fire pits quenched with sand. No artefacts were present but samples were taken of the charcoal-rich deposits.



(501) dark black fill with some charcoal flecks in south part of F5. Appears to be basal deposit within cut [504] encircling (502) and (503), may represent burnt material from fire.

(502) dark grey brown soil with stones encircled by (501) in SE part of feature. This may represent material which is less burnt and therefore has more loam.

(503) pale yellow deposit, although described as sand this may actually be an ashy deposit with some stones at centre of SE part of F. Possibly represents the centre of a fire. One stone present in top.

[504] very rough and poorly defined cut in SW part of F5 through gravelly subsoil with sloping sides and uneven level bottom.

(505) light grey deposit in bottom part of [504] with charcoal flecks and stones. This merges with (501) and seems to be part of the same deposit but affected by higher or lower temperatures.

(506) pale yellow deposit in NW part of feature, similar to (503). Surrounded by (508), also has stone in top. Possibly represents centre of a second phase of fire pit.

(507) grey stony fill slightly lighter than (502) filling most of NW part of feature.

(508) dark black stony fill with charcoal flakes surrounding (506) in NW part of feature. This context was very irregular in shape both in plan and section and was very thin in places. It seems likely this was the remains of an in situ burning.

[509] very rough uneven V shaped cut through gravel on NW part.

(510) dark black fill with charcoal flakes, similar to (508) but at very base of feature. May represent earlier phase of burning.

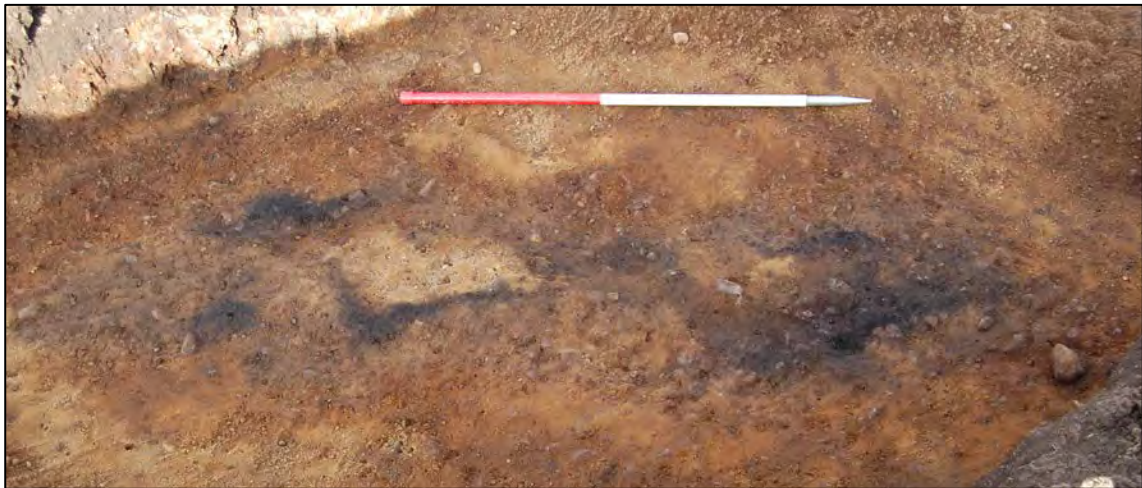


Plate 6: Feature 5 pre-ex (WKG15_77)

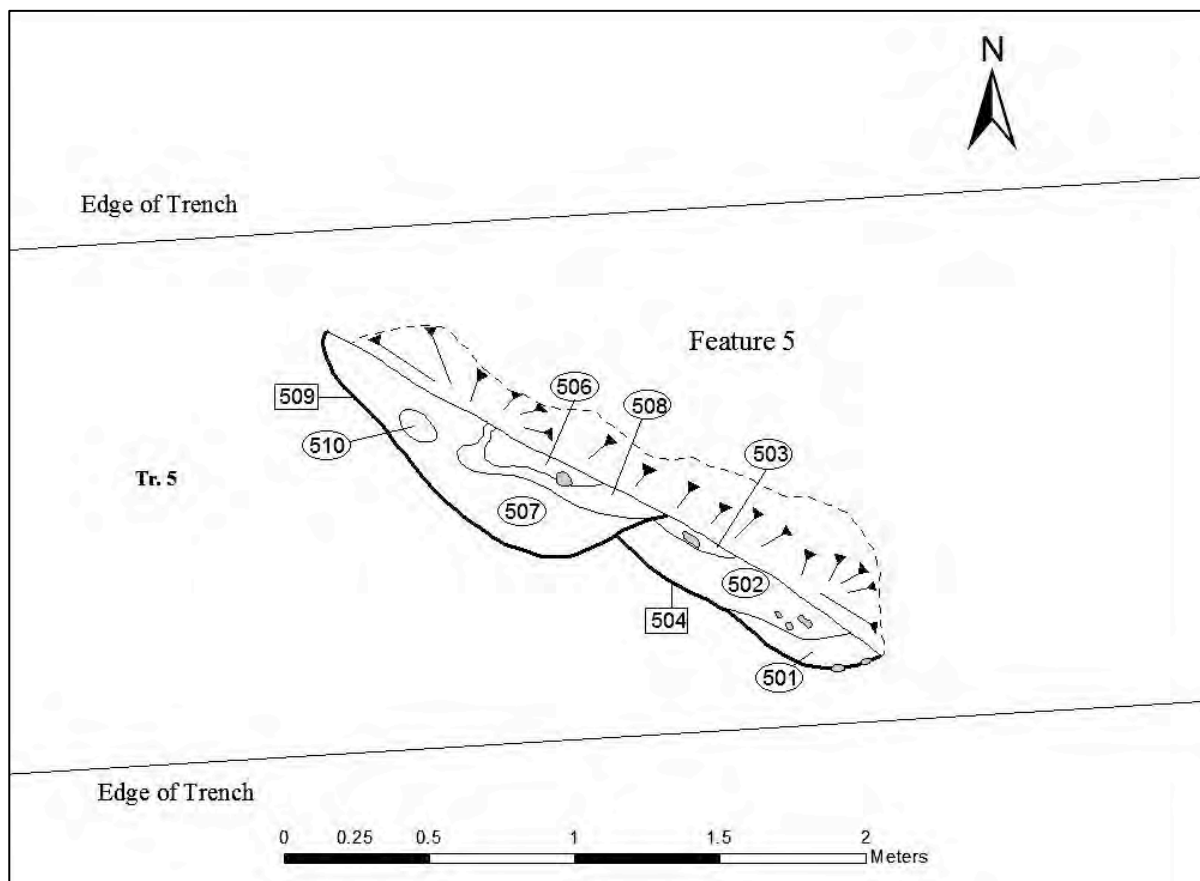


Figure 7: Feature 5 post-ex plan

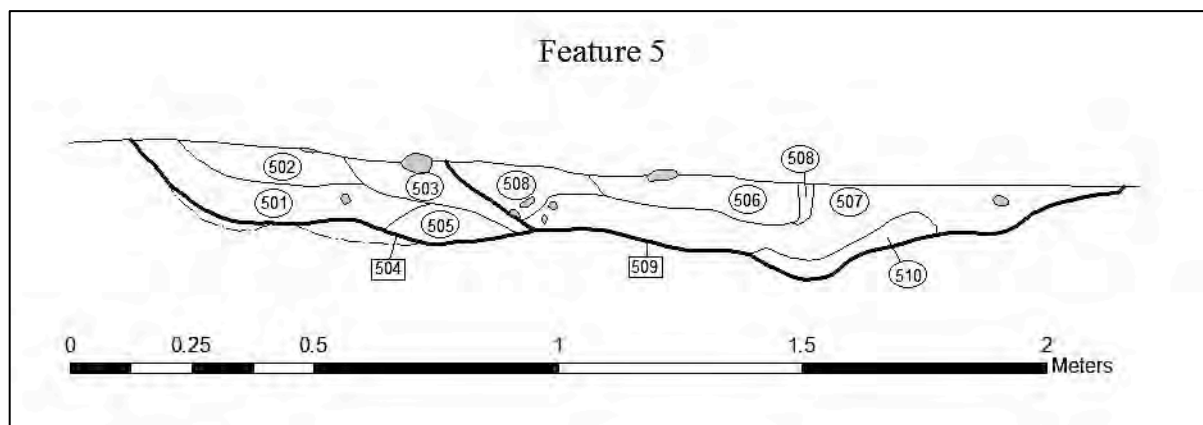


Figure 8: Feature 5 section

Feature F6

A small brown sub-rectangular feature with remains of wooden post visible in the centre. Upon excavation it was confirmed that this was a modern post-hole with no earlier phases.

(601) mid-brown loam, very clean with one large stone in surface. Remains of wooden post.

[602] very clear cut into compact sand.



Plate 7: feature 6 post-ex (WKG15_74)

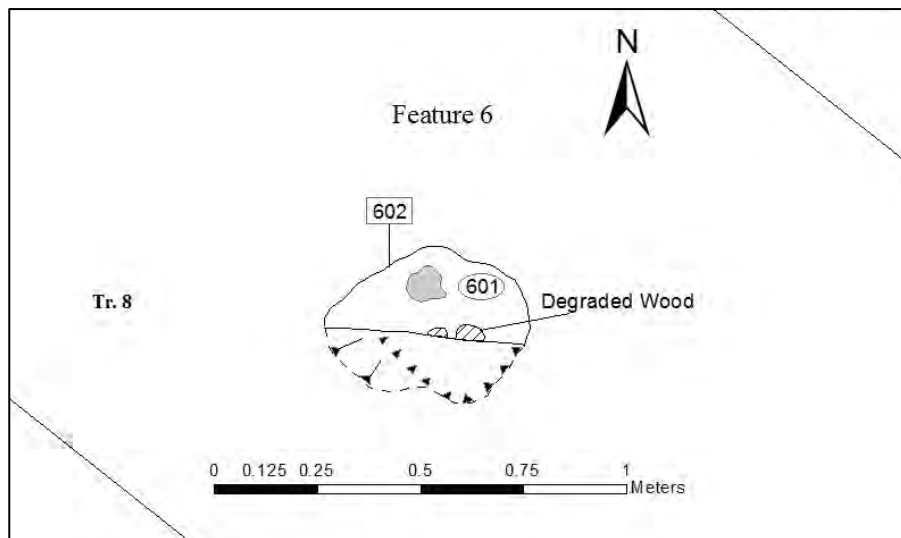


Figure 9: Feature 6 Post-ex plan

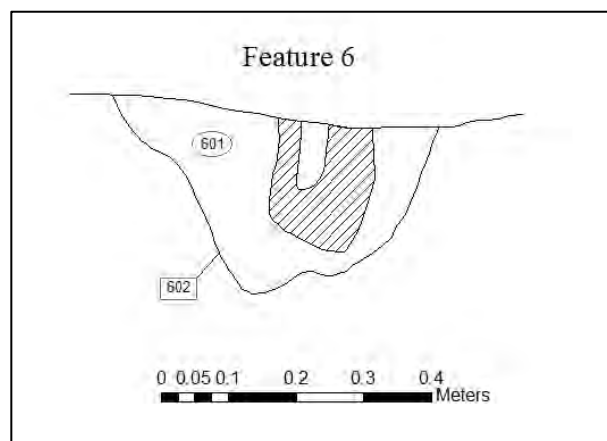


Figure 10: Feature 6 section

Feature F7

A narrow linear feature running across Trenches 8 and 11 in roughly ENE –WSW orientation. 0.4m wide, very irregular fill of mixed topsoil and subsoil. The client informed the archaeologist on site that this was a water main and excavation confirmed this when a pipe was exposed in Trench 8. The feature was recorded photographically and not investigated further.



Plate 8: Feature 7 water main post-ex (WKG15_54)

Feature F8

A very amorphous colourful area with no clear boundaries. This was initially thought to be an area of burning but following cleaning and investigation there was found to be no evidence of charcoal or human activity. It was therefore concluded that this was an area of natural mineral staining. The feature was recorded photographically and no further investigations took place.



Plate 9: Feature 8 non-archaeological, post-ex (WKG15_84)

Feature F9

At the east end of Trench 9, this appeared as a dark irregular area with black soil and some stones. Upon further cleaning this was found to be very irregular and wet with no charcoal. It was concluded that this was an area of natural mineral staining. It was photographed but not recorded further.



Plate 10: Feature 9 non-archaeological (WKG15_88)

Feature F10

A very black sandy patch, initially thought to be an area of burning. Cleaning revealed no charcoal, only compact black sand and veining in surrounding compact orange sand, suggesting an iron-rich area of natural staining. The feature was photographed but not investigated further.



Plate 11: Feature 10 non-archaeological (WKG15_85)

Feature F11

Initially thought to be area of burning as this is a black and grey patch of sand with small piece of what looked like charcoal, but after investigation it was found that there were no other flecks, and the material did not smear.

This feature resolved on excavation to burgundy coloured sand which continued under the natural orange layer, so it was concluded that this was also an area of natural mineral staining. The feature was photographed but not investigated further.



Plate 12: Feature 11 non-archaeological, post-ex (WKG15_92)

Discussion

The project design for this fieldwork was broken down in to two distinct areas, and these have proved to be quite distinct archaeologically.

Area 1 revealed what is likely to be one modern pipe cut in Trench 1 (Feature F1) and a field drain running across 2 trenches (Features F2&F3) as well as two fire pits (Features F4&F5). There was no dating evidence associated with these fire pits, although samples have been taken of the charcoal rich areas. The size and robustness of the remaining charcoal in F4 suggests that despite some minor burrowing these features are not greatly disturbed. These fire pits could be of almost any date, and no associated features, such as structural remains, were uncovered in nearby trenches. Indeed Features F4 and F5 may be of completely different dates to each other.

Area 2 revealed a modern post-hole (complete with post) and a water main, as well as various patches of natural mineral staining (Features F8-F11). There were no field drains in this area, nor any features of any antiquity.

Conclusions

The majority of features identified were either modern or non-archaeological. The only features of possible archaeological interest were Features F4 and F5 which appear to be fire-pits. There is no way of dating these features by their form and no artefacts were found, so they could be of any date from prehistoric to modern. Samples were taken of charcoal-rich layers in these features so it would be possible to gain radio-carbon dates from these.

In terms of further on-site mitigation there is limited value in conducting further investigations of the area surrounding F4 & F5 without an indication of the date of the pits. There is potential for further archaeological features in the area which may be of interest if the pits are of some antiquity, but it is equally possible that they are results of post-medieval burning activity which would be of limited research value.



Plate 13: Site with all trenches open (WKG15_96)

Appendices

Table 1 Table of photographs

Photo No. (WKG15_)	From	Facing	Showing
			17th February 2015
1-7	CP1	pano	Site pre-excavation
8-10	CP2	W	“
11-13	CP3	<SW>	“
14-16	CP4	<ESE>	“
17-18		SE	Trench 1 from north west end
19-20		NW	Trench 1 from south east end
21-22		SSW	Trench 2 from north end
23		SE	Trench 2 – modern drain (Feature 1)
24		NNE	Trench 2 from south end
25		E	Trench 3 from west end
26		W	Trench 3 from east end
27		SW	Trench 4 from north east end
28-29		NE	Trench 4 from south west end
30		W	Trench 5 from east end
31-32		E	Trench 5 from west end
33		S	Trench 6 from north end
34		N	Trench 6 from south end
35		SE	Trench 7 from north west end
36-37		NW	Trench 7 from south east end
38-39	CP5	W	Feature 4 pre-ex
40		SE	Trench 8 from north west end with Feature 6
41		NW	Trench 8 from south east end with Feature 7
42-43		SW	Trench 9 from north east end with Feature 9
44-45		NE	Trench 9 from south west end with Feature 8
46		E	Trench 10 from west end
47	Tr.8	NE	Feature 7 pre-ex from south west
48	Tr.5	NE	Feature 5 pre-ex from south west
49	Tr.5	SW	Feature 5 pre-ex from north east
50-51		W	Trench 10 from east end
52-53		SE	Trench 11 from north west end
54	Tr.8	NE	Feature 7 water pipe, post-ex
55-56		NW	Trench 11 from south east end with water main (Feature 7)
57		S	Trench 12 from north end
58		N	Trench 12 from south end
59		E	Trench 13 from west end
60		W	Trench 13 from east end
			18th February 2015
61	Tr.5	W	Feature 4 mid-ex with charcoal (20cm scale)
62-63	Tr.5	S	Detail of charcoal (20cm scale)
64-65	Tr.2	SE	Post-ex of Feature 1 with plastic at base
66-67	Tr.5	W	Post-ex of Feature 4 (20cm scale)
68	Tr.3	E	Feature 2 drain with plastic
69	Tr.3	N	Feature 2 drain with plastic
70-71	Tr.4	SE	Feature 3 drain with plastic
72-73	Tr.8	NE	Feature 6 pre-ex
74-75	Tr.8	N	Feature 6 post-ex
76-79	Tr.5	SSW	Feature 5 post-ex
80-81	Tr.9	W	Feature 8 pre-ex
82-84	Tr.9	W	Feature 8 post-ex, not archaeological
85-86	Tr.10	S	Feature 10 – not archaeological

Photo No. (WKG15_)	From	Facing	Showing
87-88	Tr.9	SE	Feature 9 – not archaeological
89-90	Tr.12	W	Feature 11 pre-ex
91-92	Tr.12	W	Feature 11 post-ex, not archaeological
93-94	Tr.11	NE	Feature 7 (water pipe) in Trench 11
95-98			Site post-ex
99-101			General views from site

Locations show as from trenches are adjoining the feature photographed.

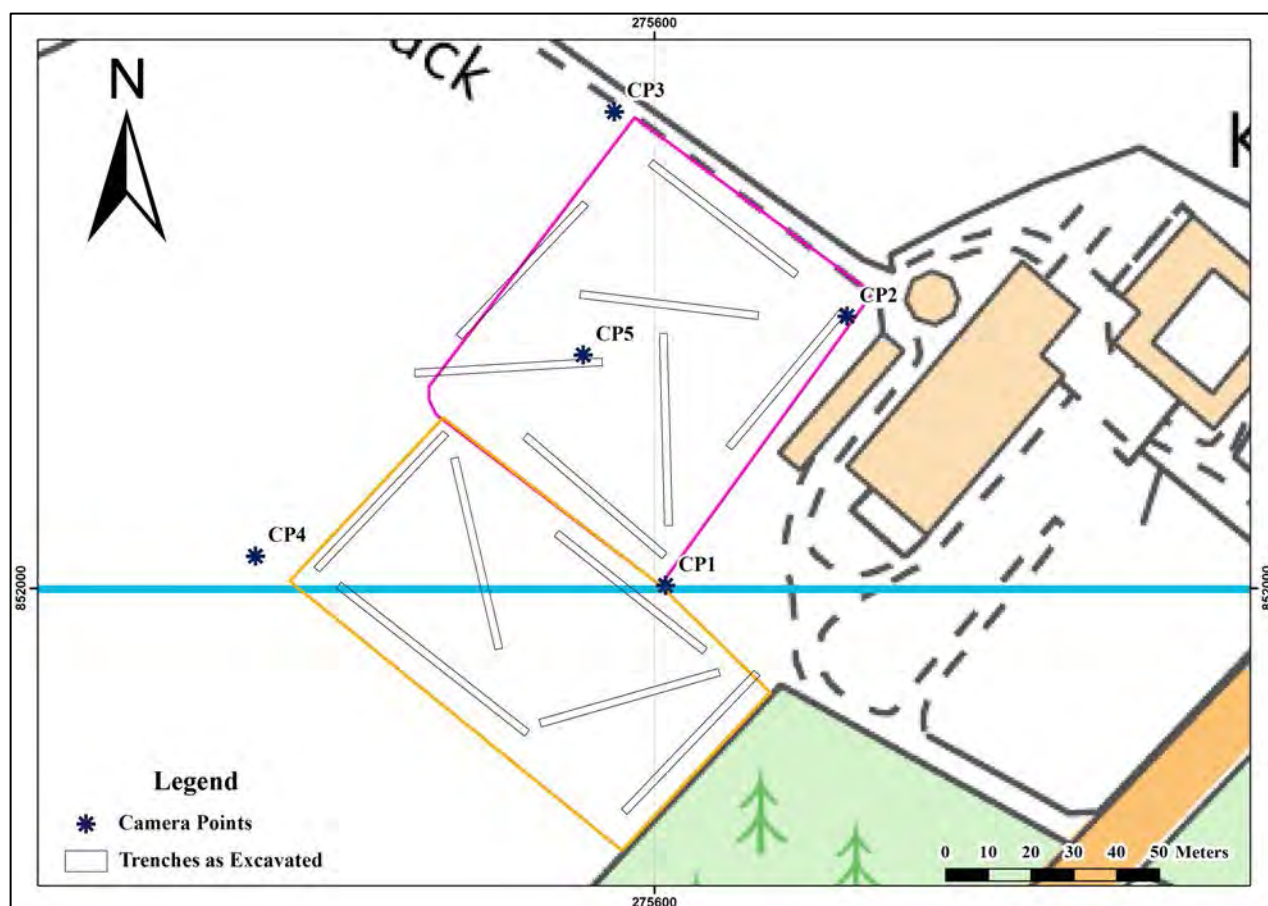


Figure 11: Camera Points

Selected Photographs



Plate 14: Trench 1 (WKG15_17)



Plate 15: Trench 9 (WKG15_45)



Plate 16: Trench 13 (WKG15_60)