

KSG 99

**Results of an Archaeological Watching Brief at Kinegar
Sand and Gravel Pit, Cockburnspath, Borders: Phase 4**

Client: Kinegar Sand and Gravel

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Summary

Headland Archaeology were commissioned to undertake an archaeological watching brief during topsoil stripping in advance of an extension to Kinegar Sand and Gravel Quarry, Cockburnspath, Scottish Borders. Forty-four archaeological features were identified, excavated and recorded. For the most part these were pits and postholes and, on the basis of the pottery recovered from them, are prehistoric in date.

1 INTRODUCTION

Headland Archaeology Ltd were commissioned to carry out an archaeological watching brief during topsoil stripping for an extension to Kinegar Sand and Gravel Quarry, Cockburnspath, Scottish Borders, in order to satisfy a condition of planning consent. This report details the results of the fourth phase of this watching brief, earlier strips having been monitored in July and August 2000 (Conolly 2000), January 2001 and June 2001 (Conolly 2000, 2001a and 2001b).

The work was carried out on the 10th and 13th September, 19-20th November and 12-14th December 2001.

2 SITE LOCATION AND DESCRIPTION (fig.1)

Kinegar Quarry is located to the south of Cockburnspath, Scottish Borders (NT 770 706). The area stripped in this phase lies on the north-eastern side of a small knoll sloping gently down to the north and east. As the gravel gives way to glacial till towards the eastern break of slope the ground becomes wetter, to such an extent that field drains have been laid.

Up until the time of the watching brief the field had been under cultivation. The land to the north-west has been extensively quarried.

The underlying geology is sandy gravel and sand overlying boulder clay.

3 ARCHAEOLOGICAL BACKGROUND

The general archaeological background to the watching brief has been fully rehearsed in previous reports (Conolly 2000 & 2001). The site lies in an area where there have been several discoveries of cist burials and there are cropmark sites in the vicinity.

In the course of the first three phases of the watching brief three clusters of prehistoric features and several isolated features were identified and excavated. (Conolly 2000, 2001a & b). The majority of these were pits and postholes with a single sherd of Bronze Age food vessel type pottery being recovered from a pit and sherds of early Neolithic pottery from other features.

4 AIMS AND METHODS

The watching brief was intended to ensure that any archaeologically significant deposits that would be destroyed by quarrying operations might be appropriately recorded.

The topsoil strip was carried out using a 360° mechanical excavator fitted with a toothless ditching bucket, operating under continuous archaeological supervision.

Features identified during the strip were hand cleaned, along with the surrounding area, before being excavated and recorded. Their location was then tied into the national grid using a total station.

5 RESULTS (fig. 2)

A rectangular area, totalling approximately 20,300 m², was stripped of up to 0.3 m of topsoil (001). This overlay natural sand and gravel (002). At the eastern limit of the stripped area the gravel petered out to reveal clay with boulders.

A total of forty-four discrete features were identified. This included twelve pits, seventeen postholes and three probable hearths. These were scattered across the higher flatter ground, with no features occurring where the ground sloped significantly or in the less well drained areas at the north-eastern limit of the stripped area.

One definite structure, a fence line running north-east – south-west for 4.60 m, was identified. This comprised two postholes and four stakeholes. There were no associated features. One cluster of features was identified at the southern limit of the stripped area, which may represent a building. Two postholes, [180] and [182], form a semi-circle with features identified in Phase 2, again indicating the likely location of a building, though most of the features in themselves are not structural.

Prehistoric pottery sherds were recovered from eighteen contexts in the field with further material being recovered from samples. For the most part these were small body sherds with the occasional piece having incised decoration. One large decorated rim sherd was recovered from pit [198]. This may be Early Bronze Age in date. Struck flint and quartz were also recovered from several contexts.

One feature is known to have been missed during the watching brief in September 2001. This was destroyed by quarrying but, from the machine driver's description, it appears possibly to have been a stone-lined pit, containing gravel. The machine driver recovered the base of a rotary quern from the stones and retained as many of the stones as possible. However, none of these appeared to be worked.

6 CONCLUSIONS AND RECOMMENDATIONS

The features identified during this phase of stripping appear to represent domestic occupation of the site and unsurprisingly appear to favour flatter well drained areas of land over wet ground and slopes. They were similar in both character and distribution to those identified in earlier phases.

The presence of the rotary quern suggests occupation of the site extended into the late prehistoric period and was not limited to the Neolithic/Early Bronze Age. The environmental evidence, in the form of carbonised plant remains, can be no more specific than Neolithic to the Roman period.

All the features identified during the course of the watching brief were dealt with appropriately and consequently no further fieldwork is recommended in regard to this phase of stripping. However, it will be necessary to have the pottery assemblage assessed by a specialist to give an indication both of the dates of the features and the significance of the assemblage itself.

The full archive will be deposited with the National Monuments Record of Scotland.

7 ACKNOWLEDGEMENTS

The fieldwork was carried out by Richard Conolly and Liz Jones. A curatorial role was provided by John Dent for Borders Council. The illustrations were prepared by Laura Speed.

BIBLIOGRAPHY

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APPENDIX 1: FIELD REGISTERS

CONTEXT REGISTER

Context Number	Description	Dimensions (l x w x d)
1 - 127	Used in previous phases	-
128	Fill of pit [129]. Mixed mid greyish brown/brownish grey to black friable silty sand with common sub-angular stones <15cm.	-
129	Cut of pit. Sub ovoid with moderate to steep slightly concave sides and near flat base.	0.90 x 0.80 0.13 m
130	Fill of posthole [131]. Mixed very dark greyish brown to mid brownish grey friable silty sand with moderate sub-angular stones <5 cm.	-
131	Cut of posthole. Sub-ovoid with steep slightly concave sides and very slightly concave base.	0.30 x 0.30 x 0.08 m
132	Fill of posthole [133]. Mid brownish grey to black firm silty sand and rare gravel <3 cm. Sparse charcoal flecks.	-
133	Cut of posthole. Sub circular with steep sides and concave base.	0.15 x 0.14 x 0.05 m
134	Fill of posthole [135]. Mid brownish grey to black firm silty sand and rare gravel <3 cm. Sparse charcoal flecks.	-
135	Cut of posthole. Sub circular with steep sides and concave base.	0.16 x 0.14 x 0.05 m
136	Fill of pit/scoop [137]. Mixed mid yellowish/greyish brown loose silty sand with abundant sub-angular stones 8 – 15 cm and moderate <8 cm. Sparse charcoal flecks.	-
137	Cut of pit/scoop. Sub ovoid with shallow sides and near flat base. Very gentle breaks of slope, top and bottom.	1.76 x 1.22 x 0.09 m
138	Fill of pit [139]. Mid greyish brown loose fine sand with abundant gravel <5 cm. Rare charcoal flecks.	-
139	Cut of pit. Sub-rectangular/ovoid with moderate to steep slightly concave sides breaking gently to a slightly concave base.	0.80 x 0.56 x 0.21 m
140	Fill of pit [141]. Mid brownish grey loose fine sand with yellowish brown ?burnt silty sand at western side. Common gravel <8 cm throughout.	-

Context Number	Description	Dimensions (l x w x d)
141	Cut of pit. Sub-ovoid with very steep sides and slightly concave base.	0.56 x 0.39 x 0.11 m
142	Fill of pit [143]. Mid to very dark brownish grey silty sand with common gravel <10 cm and single sub-rounded stone 30 cm long at top of deposit. Did not appear to be packing. Rare charcoal flecks.	-
143	Cut of pit. Sub-ovoid with near straight steep sides breaking to concave base.	0.58 x 0.43 x 0.19 m
144	Fill of pit [145]. Mid greyish brown friable silty sand with abundant grit and gravel <5 cm with lump of yellowish brown ?burnt silty sand. Rare burnt bone fleck.	-
145	Cut of pit/posthole. Sub-ovoid with steep slightly concave sides and slightly concave base.	0.50 x 0.46 x 0.16 m
146	Upper fill of pit/posthole [148]. Very dark grey brown to black soft silty sand with moderate gravel <5 cm. Rare charcoal flecks and fragments.	-
147	Fill of pit/posthole [148].	-
148	Cut of pit/posthole. Sub circular with vertical straight sides and flat base.	0.43 x 0.41 x 0.16 m
149	Upper fill of pit/posthole [149]. Very dark grey brown to black with sparse charcoal flecks and fragments and moderate gravel <5 cm. Deeper to south of feature.	-
150	Fill of pit/posthole [151]. Mid greyish brown fine sand with moderate gravel and stones <10 cm. Common charcoal flecking.	-
151	Cut of pit/posthole. Sub-ovoid with near vertical straight sides and flat base.	0.60 x 0.54 x 0.29 m
152	Upper fill of posthole [154]. Black loose silty sand with rare gravel <3 cm and very common charcoal flecks and fragments.	-
153	Fill of posthole [154]. Mid greyish brown firm silty sand with moderate gravel <5 cm and sparse charcoal flecks throughout.	-
154	Cut of posthole. Slightly irregular sub-circular cut with vertical sides and near flat base.	0.38 x 0.28 x 0.11 m

Context Number	Description	Dimensions (l x w x d)
155	Fill of pit [156]. Mixed mid greyish brown (25% dark brown) silty sand with moderate gravel <5 cm and sparse charcoal flecks and fragments.	-
156	Cut of pit. Sub ovoid with steep to moderate sides straight sides and flat base.	0.63 x 0.60 x 0.14 m
157	Fill of posthole [158]. Mid brownish grey firm silty sand with common gravel <8 cm and rare charcoal flecks. Very poorly defined interface with natural.	-
158	Cut of posthole. Sub circular with steep sides and flat base.	0.28 x 0.22 x 0.15 m
159	Fill of pit [160]. Mid to dark brownish grey silty sand with common gravel and <5 cm and sparse charcoal flecks and fragments. Lense of light yellowish brown silty sand at north-eastern edge.	-
160	Cut of pit. Sub circular with concave moderate sides and concave base.	0.56 x 0.46 x 0.14 m
161	Fill of pit [162]. Light to mid greyish brown sandy silt with sparse gravel <5 cm and rare charcoal flecks. Two possible packing stones at eastern edge.	-
162	Cut of pit. Sub-ovoid with vertical straight sides and concave base.	0.63 x 0.60 x 0.30 m
163	Fill of pit [164]. Mid brownish grey (darker lense at base) friable sandy silt with moderate gravel and rare sub-rounded stones 10 – 15 cm and rare charcoal flecks.	-
164	Cut of pit/double posthole. Sub-ovoid/figure of eight with vertical to steep straight sides and concave base.	0.68 x 0.55 x 0.22 m
165	Fill of posthole [166]. Light brownish grey friable silty sand with sparse gravel <5 cm and rare charcoal flecks.	-
166	Cut of posthole. Sub-circular with concave moderate sides and concave base.	0.32 x 0.27 x 0.07 m
167	Fill of posthole [168]. Light brownish grey friable silty sand with moderate gravel <5cm. Thin flakes of charcoal at edges.	-
168	Cut of posthole. Sub-circular with vertical straight sides and slightly concave base.	0.26 x 0.20 x 0.20 m

Context Number	Description	Dimensions (l x w x d)
169	Fill of posthole [170]. Light brownish grey friable silty sand with sparse gravel <5 cm and rare charcoal flecks.	-
170	Cut of posthole. Sub-ovoid with vertical straight sides and slightly concave base.	0.25 x 0.12 x 0.05 m
171	Fill of posthole [172]. Very dark brownish grey friable silty sand with moderate gravel <5 cm and sparse charcoal flecks.	-
172	Cut of posthole. Sub-circular with concave base.	0.20 x 0.20 x 0.04 m
173	Fill of posthole [174]. Very dark brownish grey (with 15% mid yellowish brown) firm silty sand with moderate gravel <5 cm and sparse charcoal fragments and flecks.	-
174	Cut of posthole. Sub-circular with very steep slightly concave sides and concave base.	0.28 x 0.14 x 0.10 m
175	Fill of posthole [176]. Very dark brownish grey (with 15% mid yellowish brown) firm silty sand with moderate gravel <5 cm and sparse charcoal fragments and flecks.	-
176	Cut of posthole. Sub-circular with very steep slightly concave sides and concave base.	0.28 x 0.26 x 0.05
177	Fill of posthole [178]. Very dark brownish grey (with 15% mid yellowish brown) firm silty sand with moderate gravel <5 cm and sparse charcoal fragments and flecks.	-
178	Cut of posthole. Sub-circular with very steep slightly concave sides and concave base.	0.26 x 0.18 x 0.07 m
179	Fill of posthole [180]. Mid brownish grey with common gravel <5 cm and sparse charcoal fragments.	-
180	Cut of posthole. On surface ill defined sub-ovoid/rectangular with near vertical sides and flat base.	0.30 x 0.24 x 0.14 m
181	Fill of posthole [182]. Mid greyish brown friable silty sand with common gravel <8 cm.	-
182	Cut of posthole. Sub-ovoid with very steep slightly concave sides and concave base.	0.62 x 0.36 x 0.19 m
183	Fill of pit [184]. Mid greyish brown silty sand with common gravel <5 cm. Rare charcoal flecks.	-

Context Number	Description	Dimensions (l x w x d)
184	Cut of pit. Sub-ovoid with steep concave sides and flat base.	0.64 x 0.55 x 0.10 m
185	Fill of pit [186]. Dark greyish brown firm to friable silty sand with common gravel <5cm and sparse jumbled sub-angular stones 5 – 15 cm. Rare charcoal.	-
186	Cut of pit. Sub-ovoid with moderate concave sides and slightly concave base.	0.70 x 0.64 x 0.15 m
187	Fill of pit [188]. Mid greyish/yellowish brown firm silty sand with common gravel <5 cm and rare stones 5 – 15 cm. Rare charcoal flecks.	-
188	Cut of pit. Sub-square with steep straight sides and slightly concave base.	0.54 x 0.56 x 0.25 m
189	Fill of pit [190]. Black loose sand with abundant charcoal fragments and common grit.	-
190	Cut of pit/scoop. Sub-circular with steep to moderate sides and flat base. No sign of <i>in situ</i> burning.	0.50 x 0.40 x 0.05 m
191	Fill of scoop [192]. Mixed light yellowish brown to dark greyish brown loose silty sand with very common sub-angular stones < 10 cm and common charcoal fragments and rare roundwood charcoal in lighter ?burnt portion.	-
192	Cut of scoop. Irregular in plan with shallow concave sides and concave base.	1.02 x 0.56 x 0.14
193	Void	-
194	Void	-
195	Void	-
196	Uppermost fill of pit [198]. Mid greyish brown firm silty sand with common sub-rounded stones 10 – 15 cm, possibly placed, common gravel < 5 cm throughout and rare charcoal. Darker siltier patches around stones.	-
197	Primary fill of pit [198]. Light reddish brown firm grit to small gravel in sand matrix. Thickest at eastern side.	-
198	Cut of pit. Well defined sub-circular with vertical sides breaking sharply to near flat base.	0.62 x 0.62 x 0.20 m

Context Number	Description	Dimensions (l x w x d)
199	Upper fill of ?hearth [201]. Mid greyish brown firm slightly silty sand with common sub-rounded/angular stones 10 – 15 cm and moderate gravel.	-
200	Lower fill of ?hearth [201]. Very mottled light reddish brown to mid greyish brown medium sand with moderate gravel < 3 cm and rare charcoal.	-
201	Cut of ?hearth. Sub ovoid with vertical slightly concave sides breaking sharply to near flat base.	1.00 x 0.80 x 0.31 m
202	Cut of pit or tree throw. Oval with slightly irregular gently sloping to concave base.	1.40 x 1.10 x 0.25 m
203	Fill of feature [202]. Light to mid brown sand with frequent patches of compact sand with sparse rounded gravel < 2 cm.	-
204	Cut of posthole. Steep straight sides breaking sharply to flat base.	0.74 x 0.70 x 0.16 m
205	Packing stones in posthole [204]. Medium to large (7 – 20 cm) sub-angular stones with largest stones in centre, set in (206).	-
206	Fill of posthole [204]. Mid reddish brown sand with sparse gravel < 1 cm.	-
207	Fill of shallow feature [208]. Mottled black to mid greyish brown silty sand with sparse charcoal.	-
208	Cut of feature. Pit base? Sub-ovoid with slightly concave sides.	0.52 x 0.34 x 0.04 m
209	Upper fill of possible hearth [211]. Mid yellowish brown slightly silty sand with sparse gravel < 3 cm.	-
210	Fill of possible hearth [211]. Black to very dark greyish brown silty sand with common possibly heat effected gravel < 5 cm and moderate charcoal.	-
211	Cut of possible hearth. Sub-ovoid with shallow sides, steep at south-west and slightly concave base. No sign of intense burning on natural.	0.66 x 0.50 x 0.15 m
212	Cut of possible hearth. Oval with shallow slightly concave sides breaking gently to concave sides.	1.00 x 0.64 x 0.16 m
213	Upper fill of hearth [212] Mid to dark greyish brown compact sand with moderate rounded gravel < 0.05 cm and rare charcoal flecks.	-

Context Number	Description	Dimensions (l x w x d)
214	Fill of hearth [212]. Charcoal rich sandy fill with rare rounded gravel < 0.05 cm.	-
215	Fill of posthole [216]. Mid greyish brown firm slightly sand with rare gravel < 3 cm.	-
216	Cut of posthole. Sub-circular with vertical sides and near flat base.	0.30 x 0.29 x 0.08 m
217	Fill of posthole [218]. Mid greyish brown firm slightly sand with rare gravel < 3 cm.	-
218	Cut of posthole. Sub-circular with vertical sides and near flat base.	0.42 x 0.36 x 0.14 m
219	Fill of stakehole [220]. Black loose sand with abundant charcoal and rare gravel < 1 cm.	-
220	Cut of stakehole. Sub-circular with near vertical straight sides and concave base.	0.12 x 0.11 x 0.05 m
221	Fill of unexcavated stakehole.	-
222	Fill of unexcavated stakehole.	-
223	Fill of unexcavated stakehole.	-

PHOTO REGISTER

Film numbers 1 – 15 were used in previous phases.

Film no. 16		Film Type: Colour Slide and Colour Print
Shot no.	Direction Facing	Description
1	-	ID shot
2	N	South facing section pit [129]
3	N	South facing section pit [129]
4	N	South facing section pit [129]
5	N	South facing section posthole/pit [131]
6	N	South facing section posthole/pit [131]
7	N	South facing section posthole/pit [131]
8	N	South facing section posthole [133]
9	N	South facing section posthole [133]
10	N	South facing section posthole [133]
11	NE	South-west facing section posthole [135]
12	NE	South-west facing section posthole [135]
13	NE	South-west facing section posthole [135]

Film no. 16		Film Type: Colour Slide and Colour Print
Shot no.	Direction Facing	Description
14	W	Pre-ex shot pit [137] (Colour print only)
15	W	Pre-ex shot pit [137] (Colour print only)
16	W	Pre-ex shot pit [137] (Colour print only)
17	NE	Working shot (Colour print only)

Film no. 17		Film Type: Colour Slide
Shot no.	Direction Facing	Description
1	-	ID shot
2	NW	East facing section of pit [137] (oblique)
3	NW	East facing section of pit [137] (oblique)
4	NW	East facing section of pit [137] (oblique)
5	NE	General view of stripped area.
6	NE	General view of stripped area.
7	NE	General view of stripped area.
8	SW	North-east facing section of pit [139]
9	SW	North-east facing section of pit [139]
10	SW	North-east facing section of pit [139]
11	S	North facing section of pit [141]
12	S	North facing section of pit [141]
13	S	North facing section of pit [141]
14	E	West facing section pit [143]
15	E	West facing section pit [143]
16	E	West facing section pit [143]
17	SW	Post-ex plan shot pit [143]
18	SW	Post-ex plan shot pit [143]
19	SW	Post-ex plan shot pit [143]
20	S	North facing section pit [145]
21	S	North facing section pit [145]
22	S	North facing section pit [145]
23	SW	North-east facing section of posthole [148]
24	SW	North-east facing section of posthole [148]
25	SW	North-east facing section of posthole [148]
26	SW	North-east facing section of posthole [151]
27	SW	North-east facing section of posthole [151]
28	SW	North-east facing section of posthole [151]
29	SW	North-east facing section of posthole [154]
30	SW	North-east facing section of posthole [154]
31	SW	North-east facing section of posthole [154]
32	SW	North-east facing section of posthole [156]
33	SW	North-east facing section of posthole [156]
34	SW	North-east facing section of posthole [156]
35	S	Post-ex shot features [148] – [156]
36	S	Post-ex shot features [148] – [156]

Film no. 18		Film Type: Colour Slide
Shot no.	Direction Facing	Description
1	-	ID shot
2	NW	South-east facing section posthole [158]
3	NW	South-east facing section posthole [158]
4	NW	South-east facing section posthole [158]
5	NW	South-east facing section pit [160]
6	NW	South-east facing section pit [160]
7	NW	South-east facing section pit [160]
8	W	East facing section pit [162]
9	W	East facing section pit [162]
10	W	East facing section pit [162]
11	W	East facing section pit [164]
12	W	East facing section pit [164]
13	W	East facing section pit [164]
14	SW	North-east facing section of posthole [166]
15	SW	North-east facing section of posthole [166]
16	SW	North-east facing section of posthole [166]
17	SW	North-east facing section of posthole [168]
18	SW	North-east facing section of posthole [168]
19	SW	North-east facing section of posthole [168]
20	SW	North-east facing section of posthole [170]
21	SW	North-east facing section of posthole [170]
22	SW	North-east facing section of posthole [170]
23	SW	North-east facing section of posthole [172]
24	SW	North-east facing section of posthole [172]
25	SW	North-east facing section of posthole [172]
26	N	South facing section posthole [174]
27	N	South facing section posthole [174]
28	N	South facing section posthole [174]
29	N	South facing section posthole [176]
30	N	South facing section posthole [176]
31	N	South facing section posthole [176]
32	S	North facing section posthole [178]
33	S	North facing section posthole [178]
34	S	North facing section posthole [178]
35	N	South facing section posthole [180]
36	N	South facing section posthole [180]
37	N	South facing section posthole [180]

Film no. 19		Film Type: Colour Slide
Shot no.	Direction Facing	Description
1	-	ID shot
2	N	South facing section posthole [182]
3	N	South facing section posthole [182]
4	N	South facing section posthole [182]
5	N	South facing section pit [184]
6	N	South facing section pit [184]
7	N	South facing section pit [184]
8	N	South facing section pit [186]
9	N	South facing section pit [186]
10	N	South facing section pit [186]
11	N	South facing section pit [186]
12	N	South facing section pit [188]
13	N	South facing section pit [188]
14	N	South facing section pit [188]
15	N	South facing section pit [190]
16	N	South facing section pit [190]
17	N	South facing section pit [190]
18	S	South facing section scoop [192]
19	S	South facing section scoop [192]
20	S	South facing section scoop [192]
21	-	Record shot of possible cist fragment
22	-	Record shot of possible cist fragment
23	-	Record shot of possible cist fragment
24	-	Record shot of possible cist fragment
25	-	Record shot of possible cist fragment
26	-	Record shot of possible cist fragment

Film no. 20		Film Type: Colour Slide and Colour Print
Shot no.	Direction Facing	Description
1	-	ID shot (Discarded)
2	SE	Erratic boulder
3	SE	Erratic boulder
4	SW	Erratic boulder
5	SW	Erratic boulder
6	NE	Erratic boulder
7	NE	Erratic boulder
8	NE	Pit [198]: South-west facing section
9	NE	Pit [198]: South-west facing section
10	SW	Pit [201]: North-east facing section
11	SW	Pit [201]: North-east facing section
12	SE	Pit [202]: North-west facing section
13	SE	Pit [202]: North-west facing section
14	E	Posthole [204]: Pre-ex shot
15	E	Posthole [204]: Pre-ex shot
16	E	Posthole [204]: West facing section (Colour print only)
17	E	Posthole [204]: West facing section (Colour print only)

Film no. 21		Film Type: Colour Slide and Colour Print
Shot no.	Direction Facing	Description
1	-	ID shot (Discarded)
2	E	Posthole [204]: Post-ex shot
3	E	Posthole [204]: Post-ex shot
4	N	Feature [208]: Post-ex shot
5	N	Feature [208]: Post-ex shot
6	NW	?Hearth [211]: South-east facing section
7	NW	?Hearth [211]: South-east facing section
8	E	?Hearth [212]: Post-ex shot
9	E	?Hearth [212]: Post-ex shot
10	E	?Hearth [212]: West facing section
11	E	?Hearth [212]: West facing section
12	N	Postholes [216] & [218] and stakeholes [220] – (223)
13	N	Postholes [216] & [218] and stakeholes [220] – (223)

DRAWING REGISTER

Sheet number.	Drawing	Scale	Description
100 - 108	-	-	Used in previous phases.
109	A	1:10	South-east facing section of pit [129]
109	B	1:20	Post-ex plan of pit [129]
109	C	1:10	South-east facing section of posthole [131]
109	D	1:20	Post-ex plan of posthole [131]
109	E	1:10	South-east facing section of posthole [133]
109	F	1:20	Post-ex plan of posthole [133]
109	G	1:10	South-east facing section of posthole [135]
109	H	1:20	Post-ex plan of posthole [135]
109	I	1:10	North-east facing section of pit [137]
109	J	1:20	Post-ex plan of pit [137]
109	K	1:10	North-east facing section of pit [139]
109	L	1:20	Post-ex plan of pit [139]
109	M	1:10	North-east facing section of pit/posthole [141]
109	N	1:20	Post-ex plan of pit/posthole [141]
109	O	1:10	West facing section of pit [147]
109	P	1:20	Post-ex plan of pit [147]
110	A	1:10	North-east facing section of pit [145]
110	B	1:20	Post-ex plan of pit [145]
110	C	1:10	North facing section of posthole [148]
110	D	1:20	Post-ex plan of posthole [148]
110	E	1:10	North facing section of posthole [151]
110	F	1:20	Post-ex plan of posthole [151]
110	G	1:10	North facing section of posthole [154]
110	H	1:20	Post-ex plan of posthole [154]
110	I	1:10	North facing section of posthole/pit [156]
110	J	1:20	Post-ex plan of posthole/pit [156]
110	K	1:10	South-east facing section of posthole [158]
110	L	1:20	Post-ex plan of posthole [158]
110	M	1:10	South-east facing section of pit [160]
110	N	1:20	Post-ex plan of pit [160]
110	O	1:10	West facing section of pit [162]
110	P	1:20	Post-ex plan of pit [162]
110	Q	1:10	East facing section of pit [164]
110	R	1:20	Post-ex plan of pit [164]
110	S	1:10	North-east facing section of posthole [168]
110	T	1:20	Post-ex plan of posthole [168]
111	A	1:10	South facing section of posthole [174]
111	B	1:20	Post-ex plan of posthole [174]
111	C	1:10	South facing section of posthole [176]
111	D	1:20	Post-ex plan of posthole [176]
111	E	1:10	North facing section of posthole [178]
111	F	1:20	Post-ex plan of posthole [178]

Sheet number.	Drawing	Scale	Description
111	G	1:10	South facing section of posthole [180]
111	H	1:20	Post-ex plan of posthole [180]
111	I	1:10	South facing section of posthole/pit [182]
111	J	1:20	Post-ex plan of posthole/pit [182]
111	K	1:10	South facing section of pit [184]
111	L	1:20	Post-ex plan of pit [184]
111	M	1:10	South facing section of pit [186]
111	N	1:20	Post-ex plan of pit [186]
111	O	1:10	South facing section of pit [188]
111	P	1:20	Post-ex plan of pit [188]
111	Q	1:10	South facing section of pit [190]
111	R	1:20	Post-ex plan of pit [190]
111	S	1:10	South facing section of scoop [192]
111	T	1:20	Post-ex plan of scoop [192]
112	A	1:10	West facing section posthole [204]
112	B	1:20	Post-ex plan posthole [204]
112	C	1:20	Post-ex plan of pit [202]
112	D	1:10	West facing section pit [202]
113	A	1:10	South west facing section pit [198]
113	B	1:20	Post-ex plan pit [198]
113	C	1:10	North-east facing section pit [201]
113	D	1:20	Post-ex plan pit [201]
113	E	1:10	South facing section feature [208]
113	F	1:20	Post-ex plan pit [208]
113	G	1:10	South-east facing section hearth [211]
113	H	1:20	Post-ex plan hearth [211]
113	I	1:20	Plan of fenceline [216] to (223)
113	J	1:10	West facing section through pit (hearth/) [212]
113	K	1:20	Plan of hearth [212]

FINDS REGISTER

Context Number	Description
Unstrat.	Pottery
Unstrat.	Flint
Unstrat.	Stone
Unstrat	Stone: base of rotary quern
128	Pottery
130	Pottery
136	Flint
136	Pottery
140	Pottery
146	Pottery
149	Pottery

Context Number	Description
150	Pottery
157	Pottery
159	Pottery
181	Pottery
183	Pottery
185	Pottery
187	Pottery
191	Pottery
196	Pottery
198	Quartz: possibly worked
199	Pottery
200	Possible slag
207	Pottery
209	Pottery

SAMPLE REGISTER

Sample Number	Context Number	Description
1 - 21	-	Used in previous phases
22	Void	Void
23	130	Fill of pit [131]
24	161	Fill of pit [162]
25	167	Fill of pit [168]
26	159	Fill of pit [160]
27	155	Fill of pit [156]
28	146	Fill of posthole/pit [148]
29	136	Fill of pit/scoop [137]
30	138	Fill of pit [139]
31	140	Fill of pit [141]
32	142	Fill of pit [143]
33	128	Fill of pit [129]
34	189	Fill of pit [190]
35	185	Fill of pit [186]
36	183	Fill of pit [184]
37	181	Fill of pit [182]
38	150	Fill of posthole [151]
39	152	Fill of posthole [154]
40	173	Fill of posthole [174]
41	175	Fill of posthole [176]
42	191	Fill of scoop [192]
43	214	Fill of hearth [212]
44	199	Fill of pit [201]
45	210	Fill of hearth [211]
46	196	Fill of pit [198]

APPENDIX 2: ASSESSMENT OF SOIL SAMPLES

Mhairi Hastie

METHOD

Soil samples ranging from 5 – 30 litres were taken from a number of primary fills of cut features, principally pits and postholes, and two hearths for palaeoenvironmental assessment.

All samples were subjected to a system of flotation in a Siraf style flotation tank. The floating debris (flot) was collected in a 250 μm sieve and, once dry, scanned using a binocular microscope. Any material remaining in the flotation tank (retent) was wet sieved through a 1mm mesh and air-dried. This was then sorted by eye and any material of significance removed.

Results are presented in Tables 1 and 2.

RESULTS

The results are extremely similar, in composition and quantity of finds, to material recovered during Phase 2 and 3 - watching briefs (Hastie, 2001a and 2001b).

Small finds recovered include prehistoric pottery fragments, small fragments of flint/quartz debitage and occasional fragments of burnt bone. For the most part these are small and occur only in low concentrations throughout the samples.

The most frequently recovered material was wood charcoal, which is present in large quantities. The primary value of this charcoal will be as a source of dating. If wood charcoal were selected, identification of the species would need to be undertaken prior to dating.

Other carbonised material present consists of cereal grains, weed seeds, animal droppings and hazelnut shell. In most cases only low numbers are present but some contexts, such as Context 159 and 191, contain higher concentrations.

Cereal grains are generally poorly preserved though both naked barley (*Hordeum v nudum*) and emmer wheat (*Triticum dicoccum*) could be identified. Emmer is known to have been cultivated in Britain from the Neolithic until the Roman period. (Greig, 1991)

Small fragments of hazelnut shell (*Corylus avellana*) were also present though in low concentrations throughout. Hazelnuts are commonly recovered from a variety of archaeological sites and are recognised as having been used as a food source from as early as the Mesolithic period. Equally they could have been carried to the site as part of the wood collected for fuel.

The fill of a shallow scoop (Context 192) contains the remains of two carbonised animal droppings. The animal droppings are ovoid in shape and taper at one end. The

size and shape of these droppings is comparable with the droppings of goat or sheep (Capra/Ovis). Similar material has been recovered from medieval layers at Kebister, Shetland (Dickson 1999) and Iron Age deposits from Bayanne (Hastie 1999). The presence of carbonised animal droppings may reflect the use of animal dung as fuel, but the very low concentration of remains makes any detailed discussion impossible.

RECOMMENDATIONS

1. The identification of any samples required for radiocarbon dating.
2. All small finds should be incorporated into the analysis of material recovered by hand.
3. Only small fragments of burnt bone were recovered and these are not sufficient for any further detailed analysis.
4. Due to the low concentration of plant remains recovered from each sample detailed analysis of individual assemblages is unlikely to provide any information on crop processing or storage. Nevertheless, the analysis of the distribution of grain-containing assemblages, from each phase of evaluation, could be of some relevance possibly providing information on a) the chronology of the site and b) to define any broad spatial trends.
5. A summary of methodology and results from this assessment should be added to any final report.

REFERENCES

- Hastie, M. 2001a. 'Assessment of Samples' in R. Conolly. *Results of an Archaeological Watching Brief at Kinegar Sand and Gravel Pit, Cockburnspath, Borders: Phase 2*. Unpublished report of Headland Archaeology Ltd.
- Hastie, M. 2001b. 'Assessment of Samples' in R. Conolly. *Results of an Archaeological Watching Brief at Kinegar Sand and Gravel Pit, Cockburnspath, Borders: Phase 3*. Unpublished report of Headland Archaeology Ltd.
- Hastie, M and Holden, T.G. 2000 'The carbonised plant remains from a multi-phase site at Bayanne, Yell.' Archive report for Ease Archaeological Consultants.
- Dickson, C 1999 'The Plant Remains' in Owen, O & Lowe, C Kebister: 'The Four-Thousand-Year-Old Story of One Shetland Township' Edinburgh (= Soc Antiq Scot Monogr, 14).

Table 1: Composition of Retents

Sample No	Context No	Context Description	Total Vol of Sample (litres)	Pottery	Flint	Quartz	Burnt Bone	Bone	Charcoal	Hazelnut Shell	Comments
1-21		Used in previous phases									
22		Void									
23	130	Fill of pit [131]	5	+							
24	162	Fill of pit [162]	10	+	+		+		+	+	
25	167	Fill of pit [168]	5				+		+		
26	159	Fill of pit [160]	10	++					+	+	
27	155	Fill of pit [156]	10	+					++	+	
28	146	Fill of posthole/pit [148]	10						+	+	
29	136	Fill of pit/scoop [137]	20	++	+		+		+		
30	139	Fill of pit [139]	10		+						
31	140	Fill of pit [141]	10	++	+					++	1 x poss. worked stone fragment
32	142	Fill of pit [143]	5			+	+		+	++	
33	128	Fill of pit [129]	10	++						+	
34	189	Fill of pit [190]	10					+	++		
35	185	Fill of pit [186]	20	++	+				++		
36	183	Fill of pit [184]	10	+						++	
37	181	Fill of pit [182]	5	+							
38	150	Fill of posthole [151]	5						++		
39	152	Fill of posthole [154]	10	+		+			++	+	
40	173	Fill of posthole [174]	5								No finds
41	175	Fill of posthole [176]	5								No finds
42	191	Fill of scoop [192]	10	.		+	+				

43	214	Fill of hearth [212]	30				+		++		
44	199	Fill of pit [201]	10		+						
45	210	Fill of hearth [211]	10						++		
46	196	Fill of pit [198]	10	++					+++	+	

Key: + = rare, ++ = occasional, +++ = common and ++++ = occasional

Table 2: Composition of Flots

Sample No	Context No	Context Description	Total Flot Vol (ml)	Cereal Grain	Weed Seeds	Charcoal		Hazelnut Shell	Modern Plant	Comments
						Qty	AMS			
1-21		Used in previous phases								
22		Void								
23	130	Fill of pit [131]	500							
24	162	Fill of pit [162]	100	+		++	*		++	Barley indet. x 3 Cereal indet. x 4
25	167	Fill of pit [168]	100			+++	*			Oak charcoal +++
26	159	Fill of pit [160]	100	++		+++	*		+	Barley (naked) + Wheat +
27	155	Fill of pit [156]	100	+		+++	*			
28	146	Fill of posthole/pit [148]	20			++	*		+	
29	136	Fill of pit/scoop [137]	100	+		+++	*			Barley (naked) + Cereal indet. +
30	139	Fill of pit [139]	50			++	*		+	
31	140	Fill of pit [141]	20			+			++	
32	142	Fill of pit [143]	20					+		
33	128	Fill of pit [129]	50			+++	*		+	
34	189	Fill of pit [190]	500							
35	185	Fill of pit [186]	50			+++	*		+	Modern insect puparia +
36	183	Fill of pit [184]	20			++	*		++	Modern insect puparia +
37	181	Fill of pit [182]	50	+		++	*		++	Barley indet. x 1
38	150	Fill of posthole [151]	10	+		+				Cereal indet. x 1

39	152	Fill of posthole [154]	20							
40	173	Fill of posthole [174]	100			+++	*		++	
41	175	Fill of posthole [176]	10			+	*		+	
42	191	Fill of scoop [192]	50	+	+	++	*	+		Barley (naked) + Emmer + Animal dung (sheep/goat) x 2 Polygonum sp. + Rumex sp. +
43	214	Fill of hearth [212]	50			++	*		++	Large % of oak charcoal
44	199	Fill of pit [201]	20			+			+++	
45	210	Fill of hearth [211]	20		+	+				Gramineae x 1
46	196	Fill of pit [198]	20	+		+	*		++	Barley indet. x 1

Key: + = rare, ++ = occasional, +++ = common and ++++ = abundant

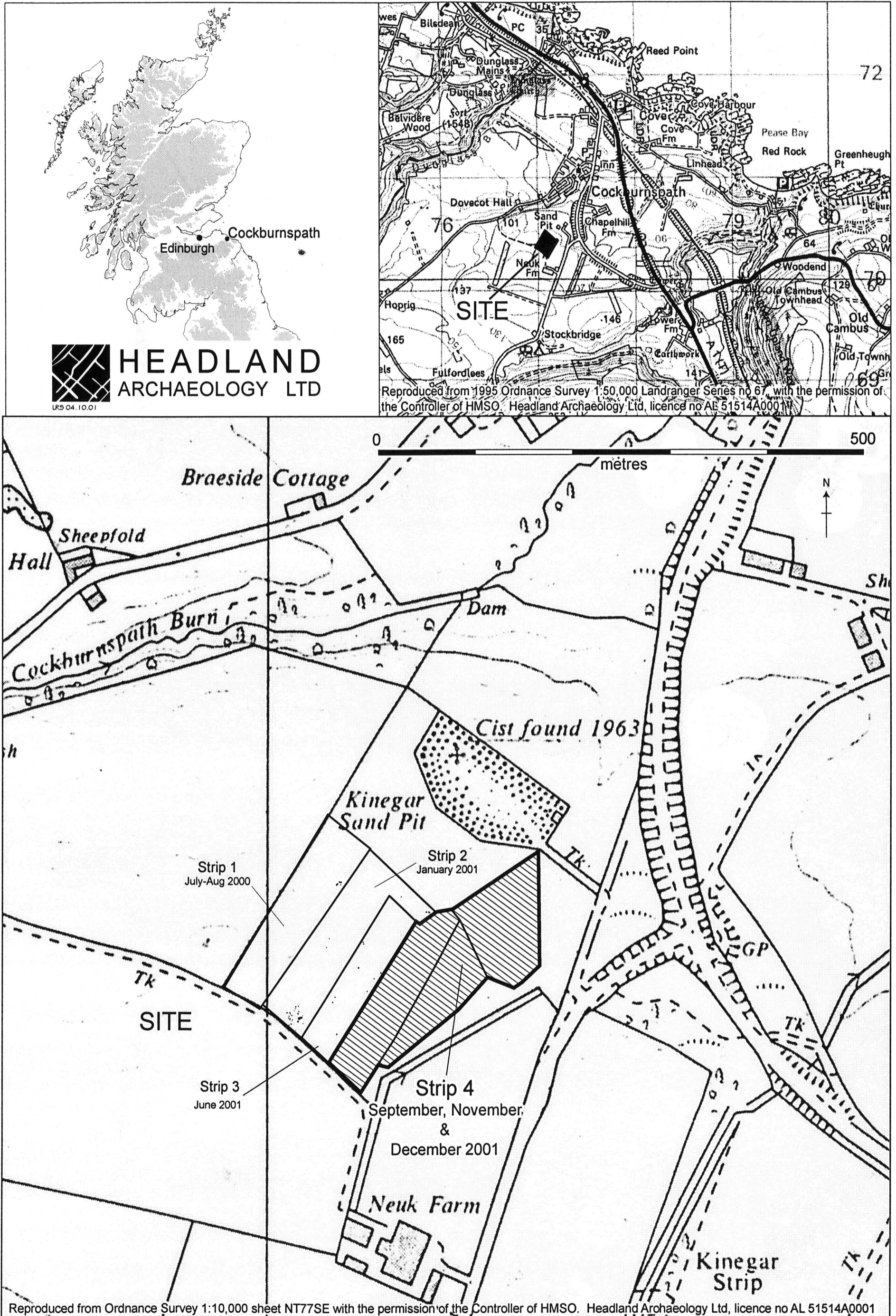


Figure 1. Kinegar Sand and Gravel: Site location

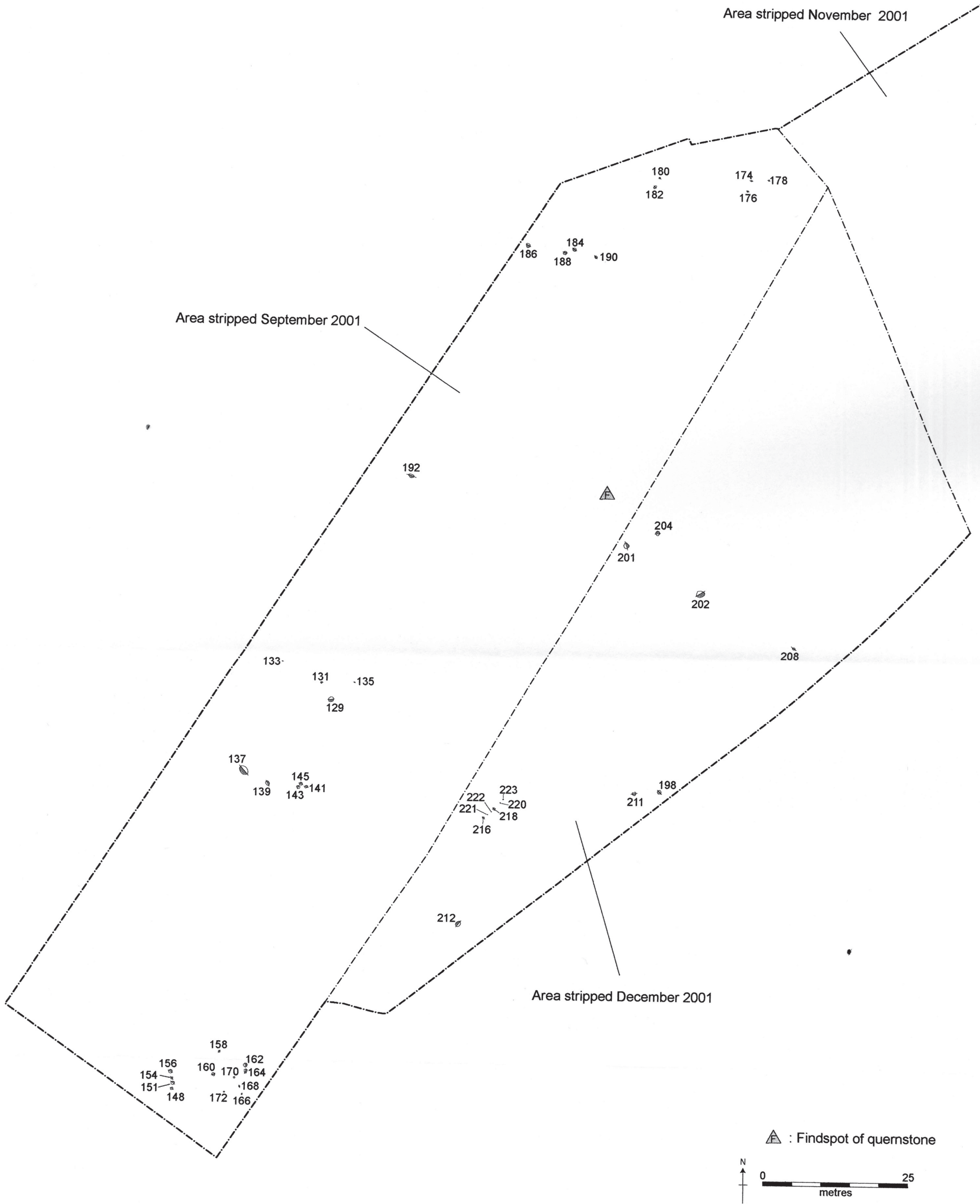


Figure 2. Kinagar Sand & Gravel: Location of archaeological features

