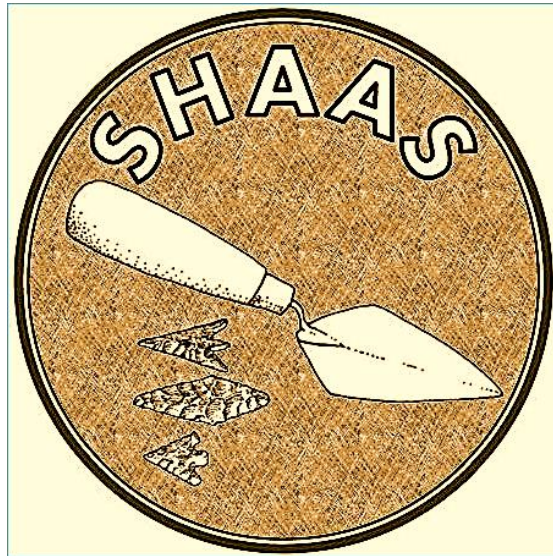


# Southborough and High Brooms



## Amateur Archaeology Society

### A Metal Detector Survey of Pembury Village Green October 2017

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Report SHAAS/MDS/PEM17 Issue 1 dated 30/11/2017

# SHAAS Metal Detecting Survey PEM17

## 1. Background

Southborough & High Brooms Amateur Archaeology Society (SHAAS) were approached by The Pembury Society (TPS) with a request for practical assistance with an investigation of former structures on Pembury Village Green. A meeting was held on the 21<sup>st</sup> January 2017 between SHAAS members Anthony Palmer and John Turley and TPS members David Hanes and Kathryn Franklin to discuss the possible options for collaboration. Of particular interest to TPS was the site of the former Wheelwright's workshop and house on the South West corner of the green. Old photographs and maps (Figures 1 and 2) showing the approximate location of the former Wheelwright's workshop and house were presented to SHAAS, followed by an inspection of the area of green to be surveyed.

For public safety reasons, it was considered that the opening of archaeological trenches or test pits would not be a practical proposition on this site. Given this restriction, SHAAS proposed the following two options:-

### Option 1. A Metal Detector Survey

It was anticipated that material recovered from a metal detecting survey of the area of interest by SHAAS could provide background information into the nature and distribution of any former structures and past activities on this site. This option would be cost free, but would require permission from the Parish Council to dig small holes to extract the finds. It was estimated that this survey would take approximately two days to complete, depending on ground conditions and the quantity of finds in the ground.

### Option 2. A Geophysical Survey

SHAAS do not currently have this capability in-house, but could arrange for a Geophysical Survey of the green by a competent associate who has provided this service to SHAAS on previous sites. Depending on ground conditions, this survey could reveal the position and plan of previous structures on the green. There would currently be a cost associated with this option. This option has the advantage that it involves non-invasive procedures, but would still require permission from the Parish Council.

It was agreed that initially a metal detector survey would be carried out by SHAAS during 2017, subject to TPS obtaining the necessary permission from Pembury Parish Council (PPC). It was suggested that this survey should take place in the autumn when the soil was moist, as this would be beneficial to the recovery of disturbed turf and also enhance detection depths by increasing soil conductivity. Permission to carry out the survey was subsequently obtained from PPC, on the condition that it was supervised by TPS and that no large holes would be dug unless specifically agreed by PPC.

## 2. Equipment & Personnel

Table 1. Survey equipment

Item	Equipment	Remarks
1	Minelab Advantage metal detector with 10" standard coil	John Turley
2	Minelab Safari metal detector with 11" standard coil	Michael Sawyer
3	Garrett Ace 300i metal detector with 7"x10" standard elliptical coil	Terry Cheeseman
4	Sanven MD3010II metal detector with 8" standard coil	Rick Stewart
5	50m Survey tape	
6	1m long spacer battens x 2	
7	50m builders line x 3	
8	Survey pins x 20	

# SHAAS Metal Detecting Survey PEM17

Table 2. SHAAS Personnel

	Name	Role	Dates
1	Anthony Palmer	Director / recording	8 <sup>th</sup> , 22 <sup>nd</sup> & 29 <sup>th</sup> October 2017
2	John Turley	Metal Detectorist	8 <sup>th</sup> , 22 <sup>nd</sup> & 29 <sup>th</sup> October 2017
3	Michael Sawyer	Metal Detectorist	8 <sup>th</sup> , 22 <sup>nd</sup> & 29 <sup>th</sup> October 2017
4	Terry Cheeseman	Metal Detectorist	22 <sup>nd</sup> & 29 <sup>th</sup> October 2017
5	Rick Stewart	Metal Detectorist	22 <sup>nd</sup> & 29 <sup>th</sup> October 2017
6	Jenny Kneller	Support / recording	8 <sup>th</sup> October 2017
7	Simon Bamblett	Support	8 <sup>th</sup> October 2017
8	Di Drummond	Support / recording	22 <sup>nd</sup> October 2017

### 3. Methodology

A search grid with a resolution of 1m x 1m squares was established over the area of interest to record the location of each find, based on graphical notation (Figure 3). The grass verge alongside the kerb of Lower Green Road was selected as the horizontal (x) axis of the grid. To establish a durable datum for this survey, the position of the x axis origin was measured as being 14m from the nearside of a large steel manhole cover in the grass verge to the north of the grid. The position for the origin of the x axis was selected to ensure that the former Wheelwright's house would be well within the search grid. The length of the vertical (y) axis of the grid was set at 12m with the same objective. In practice, strips 1m wide by 12m long were marked out perpendicular to the verge using string and pins. A survey tape was positioned along the 12m length of the strip to determine the appropriate y axis reference number for each 1m square.

The detectorists were briefed to set their machines to search in all metal mode, or with the discrimination set to minimum as appropriate to their detectors, so as to recover both ferrous and non-ferrous finds. SHAAS detectorists are accustomed to working on archaeological sites, and would also recover any non-metallic items of interest found in the soil during the extraction of finds.

Each detectorist was allocated a strip to search methodically from end to end, until no more positive signals could be obtained. As the survey progressed, addition strips were marked out and searched until the grid was completed at the South West corner of the green (Figure 3). Finds were extracted using a border spade to cut and lift a hinged plug of turf to gain access to the soil below. Immediately after extraction of the find, the soil was replaced and the turf hinged back and pressed down under foot to its original position.

Finds were passed to the SHAAS support team for bagging and marking with the grid reference of the relevant 1m square, and recording into the finds register. It was agreed that any decimal coins found would be bagged up in bulk and not individually recorded into the finds register. Finds of modern rubbish such as ring pulls and bottle caps were removed from the site and disposed of in the adjacent litter bins.

# SHAAS Metal Detecting Survey PEM17

## 4. Results

On completion of the survey, a total of 47 strips had been searched over a period of three days. Of these strips, 43 were a full 12m in length, with strips 44 to 47 being progressively shorter due to the shape of the South West corner of the green. A total of 179 entries were recorded into the finds register, with some of these consisting of multiple finds (particularly coins).

A catalogue of the metal detector finds with descriptions and grid references is given in Table 3 below by PEM17 reference numbers. Photographs of sample finds are contained in Figures 4 to 6 and 8 to 9.

Notable finds included a small bronze Roman coin (PEM17-71), and a well preserved ferrous blade from a Woodsman's Froe (PEM17-72). A number of other interesting Fe artefacts were found, some of which may be connected with activity on the former Wheelwright's location.

A large number of coins were recovered, including examples from the reigns of Geo II, Geo III, Victoria, Edward VII, Geo V, Geo VI and Elizabeth II. A total of 108 decimal coins were recovered, with a face value of £9.78p.

The find of a fired .303" cartridge case (PEM17-15), a fragment of copper driving band (PEM17-31), a fuze fragment (PEM17-113) and a Royal Engineers title badge (PEM17-123) indicate past military activity on or above the green.

## 5. Future actions

A copy of this report and all finds from the metal detecting survey will be handed over to the custody of the landowner Pembury Parish Council. It is hoped that access to the finds will be given to The Pembury Society, to allow members to carry out further research on the artefacts recovered, and to establish whether there is any correlation with the finds and the locations of former structures and activities on the green.

Although single coins in bronze are not subject to the Treasure Act of 1996, it is recommended that the Roman coin found (PEM17-71) is submitted to the Portable Antiquities Scheme (PAS) for recording onto the national database for finds ([www.finds.org.uk](http://www.finds.org.uk)). The majority of finds are usually returned after approximately 3 months, if no museum wants to retain them. The author is registered with PAS and could arrange for submission of this find for recording if required.

It is understood that TPS are interested in pursuing Option 2, for a geophysical survey of the area of interest on the green. SHAAS director Anthony Palmer has recently contacted the contractor David Stavely, who has recommended that a survey using Ground Penetrating Radar would be appropriate for this site. This technique requires the ground to be dry and David Stavely has suggested that this survey, if approved, could take place next summer (2018).

## SHAAS Metal Detecting Survey PEM17

Table 3. Catalogue of PEM17 metal detector finds.

PEM17 Find No.	Grid Reference		Description of Find
	x	y	
1	1	2	2 coins: Geo V Halfpenny 1928 & Geo VI Halfpenny 1944.
2	2	4	Geo VI Halfpenny & brass dart body.
3	2	9	2 x Fe nails / bolts?
4	3	3	Chub key; modern.
5	4	3	Geo V Halfpenny 1918.
6	4	6	Geo V Halfpenny 1929.
7	4	8	Fe bar 30mm x 10mm section x 150mm long.
8	4	12	Geo II Farthing Old Bust 1741-54; date illegible.
9	5	5	Fe nail head? & Geo VI Halfpenny 1944.
10	5	9	Heavy gauge Fe collar & nail.
11	6	2	Large Fe disc diameter 90mm x 15mm thick.
12	6	6	Large Fe collar O/D 100mm, ID 64mm x 6mm with 2 raised lugs.
13	6	6	Fe plate 50mm x 120mm x 3mm thick & Geo VI Halfpenny 1950.
14	6	7	Fe bar 30mm x 4mm x 440mm long; ends bent up at approx. 30°.
15	7	7	Cartridge case.303" Mk 7. Headstamps: R↑L 1941 VII, indicating a Mk 7 cartridge manufactured at the Royal Laboratory, Woolwich Arsenal 1941.
16	8	5	Fe curved plate 75mm x 55mm x 4mm thick.
17	8	6	Geo III Penny 4 <sup>th</sup> issue Soho 1806-1807; date illegible.
18	8	6	Large Fe fragment 135mm x 65mm x 15mm thick.
19	8	7	Lead plumb weight; pear shaped. Mass 130g.
20	8	10	Lead plumb weight / pointer with remains of suspension wire. Mass 31g.
21	9	3	Fe nail; square section, probably hand forged.
22	9	6	Geo V Penny 1919.
23	11	2	Cast aluminium ball finial; from brake or clutch lever?
24	11	3	Geo III Halfpenny 1 <sup>st</sup> issue copper coinage 1770-5; date illegible. Livery button; bird design, with 36 stamped on reverse side. Fragment of terracotta peg tile with witness of nail hole.
25	11	10	Solid lead bullet; 9mm diameter approx. Mass 8.5g.
26	12	5	Geo VI Penny 1938.
27	12	6	Maltese 1 cent coin 1972.
28	13	1	Geo VI Two Shillings 1939; .500 fine silver.
29	13	4	Geo V Farthing 1920.
30	13	6	Geo VI Two Shillings 1951; Cupro Nickel & Geo V Penny 1912.
31	13	12	Fragment of copper driving band from 3.7" AA HE shell; WW2.
32	15	6	Geo V Penny 1919 & Elizabeth II Penny 1967.
33	15	6	Geo V Penny 1914.
34	15	8	Geo V Penny 1915.
35	15	10	Screw cap / cover; purpose unknown. Modern.
36	16	11	Elizabeth II Threepence 1959 & Elizabeth II Penny 1963
37	17	1	Geo V Halfpenny 1923, Geo VI Halfpenny 1940 & Geo VI Threepence 1941.
38	17	6	Geo VI Threepence 1943.
39	17	6	3 Pennies fused together: 2 x Geo V & 1 x Geo VI; dates not visible.
40	17	11	Group 4 coins: Geo V Halfpenny 1928, Elizabeth II Halfpennies 1956 & 1966 & Elizabeth II Sixpence 1964.
41	17	12	Small Fe bolt.

## SHAAS Metal Detecting Survey PEM17

PEM17 Find No.	Grid Reference		Description of Find
	x	y	
42	18	8	Small Fe bolt & associated Fe fragment.
43	20	4	Geo VI Halfpenny 1949.
44	20	12	Lump of lead dross.
45	21	3	Piece of clay pipe stem.
46	21	6	Elizabeth II Penny 1966.
47	21	6	Geo VI Halfpenny 1946.
48	21	6	2 x Fe fragments and fragment of tile.
49	21	7	Geo V Halfpenny 1917.
50	21	9	Geo VI Halfpenny 1941.
51	21	10	Geo VI Halfpenny 1943.
52	21	11	Geo V Penny 1919.
53	22	4	Fe curved bar 45mm x 7mm x 345mm long; element from leaf spring?
54	22	5	Piece of clay pipe stem.
55	22	9	Fe bar 70mm x 6mm x 120mm long.
56	22	9	Geo V Penny 1912.
57	22	9	Geo V Penny 1919.
58	22	9	Ed VII Halfpenny 1906.
59	22	10	Geo V Penny 1921.
60	22	10	Piece thick black glass.
61	23	7	2 fragments of pierced Cu alloy sheet with folded rim.
62	23	9	Small Fe hook shaped fragment.
63	23	10	Piece white ceramic; from jug or pot handle.
64	23	10	Small offcut of lead sheet.
65	23	10	Geo VI Halfpenny 1943.
66	23	10	3 x Elizabeth II coins: 2 Shillings 1965 & 1½p decimal.
67	23	10	Geo V Halfpenny 1924.
68	23	11	Toy car.
69	23	12	Large Fe molten lump.
70	23	12	3 small Fe fragments.
71	24	2	Roman bronze coin 18.9mm diameter; possibly Constantine II.
72	24	5	Fe Tool: Woodsman's Froe blade. Used to split lengths of wood along the grain for shingles etc.
73	24	6	Geo III Halfpenny 1 <sup>st</sup> issue copper coinage 1770-5; date illegible.
74	24	6	Geo V Penny 1927.
75	24	9	Geo V Penny 1917.
76	24	11	Geo VI Penny 1937.
77	25	9	Elizabeth II Penny 1966.
78	25	12	Geo V Halfpenny 1921.
79	25	12	Geo V Penny 1920.
80	26	2	2 pieces roof slate (1 with remains of fixing nail), beige coloured ceramic pot rim shard and piece of clay pipe stem.
81	26	3	Geo V Halfpenny 1918.
82	26	4	Elizabeth II Halfpenny 1964.
83	26	6	Geo V Penny 1911.
84	26	6	Fe slag?
85	26	7	Large Fe U-shaped artefact with pointed 90° terminations; probably hand forged.
86	26	8	Large Fe square section nail; probably hand forged.
87	26	9	Small Fe hexagon nut.
88	26	9	Edward VII Penny 1907.

## SHAAS Metal Detecting Survey PEM17

PEM17 Find No.	Grid Reference		Description of Find
	x	y	
89	26	10	Fe threaded handle with collar; from split clamp?
90	26	12	Silver bracelet, expanding type for child. Marked STERLING SILVER.
91	27	1	Fe nail.
92	27	2	Geo VI Halfpenny 1939.
93	27	3	2 Fe fragments; head and shank of small nail or bolt?
94	27	4	Fe coach nut with remains of large woodscrew inside.
95	27	5	Geo V Penny 1916.
96	27	7	Geo V Penny 1918.
97	27	8	Geo V Penny 1921.
98	27	11	Victoria Halfpenny 1861; bun head issue.
99	27	12	Fe spike; square section 7mm x 170mm long.
100	28	2	Geo VI Penny 1939.
101	28	12	Geo VI Penny 1946.
102	29	1	Geo V Penny 1936.
103	29	5	Geo V Halfpenny 1919.
104	29	7	Brass stair rod bracket.
105	29	8	Geo V Penny 1936.
106	29	9	Geo VI Penny 1950.
107	30	5	2 coins: Geo V Penny 1920 & Geo VI Penny 1938.
108	30	8	Elizabeth II Halfpenny 1958.
109	30	9	Geo VI Penny 1944.
110	30	10	Lead bar and 3 associated fragments.
111	31	3	Elizabeth Threepence 1964.
112	31	6	Geo V Penny 1912.
113	32	2	Brass fragment from WW2 AA fuze.
114	32	5	Geo VI Threepence 1944.
115	32	6	Geo V Halfpenny 1917.
116	32	8	Elizabeth II Shilling 1966.
117	32	8	Geo V Penny 1919.
118	32	8	Fe bush or collar.
119	32	9	2 pieces of lead dross.
120	32	11	Victoria Penny 1891; bun head issue.
121	33	3	Part of lock mechanism? Modern.
122	33	5	Fe fragment of large horseshoe.
123	33	7	Royal Engineers title badge; 2 loops on rear for retaining pin.
124	33	7	Large Fe hexagon wheel nut 30mm (1.25 inch) AF; modern.
125	33	10	2 pieces of lead dross.
126	33	11	Geo V Penny 1915.
127	33	12	Fe bar 38mm x 6mm x 165mm long.
128	34	3	4 small Fe fragments.
129	34	3	Small padlock.
130	34	5	Elizabeth II Halfpenny 1957.
131	34	7	Small Fe fragment.
132	34	8	Fe fragment of small horseshoe?
133	34	8	Fe screw or nail head.
134	34	10	Fragment of carbon rod 7mm diameter.
135	34	10	Lump of lead with embedded piece of wire.
136	34	11	Fe rod diameter 20mm x 155mm long.
137	34	12	Geo V Halfpenny 1928.
138	35	4	Geo V penny 1920.
139	35	5	Geo VI Threepence 1945.

## SHAAS Metal Detecting Survey PEM17

PEM17 Find No.	Grid Reference		Description of Find
	x	y	
140	35	7	Geo V Halfpenny 1912.
141	35	8	Bell fruit machine 6d token.
142	35	9	Large square Fe coach nut; 38mm (1.5 inch) AF.
143	35	10	Geo V Penny 1913.
144	35	11	Geo V Halfpenny 1917.
145	35	12	Geo V Penny 1919.
146	36	1	Fe nail fragment.
147	36	2	Cu ring with small pierced 5 point star. Offcut of 22mm copper pipe?
148	36	6	Fe fragment of horseshoe.
149	36	6	Fe ringbolt / pin with eye; 140mm overall length.
150	36	9	Geo V Penny 1920.
151	36	11	Eire 2p coin 1971.
152	36	11	Fe nail with collar.
153	36	12	2 x small Fe fragments.
154	36	12	Geo V Penny 1935.
155	37	2	Geo V Halfpenny 1916.
156	37	12	Geo V Halfpenny 1921.
157	38	5	Geo V Penny 1911.
158	38	5	Geo VI Halfpenny 1952.
159	39	5	Small Fe fragment; nail?
160	39	6	2 x Fe nails.
161	39	12	Geo VI Threepence 1942.
162	40	1	3 shards from white ceramic dish.
163	40	3	Fe penknife?
164	40	11	Small Fe hexagon nut; 16mm AF.
165	40	12	Fe nail 100mm (4 inch) long; modern.
166	41	2	Large Fe square section nail; probably hand forged.
167	41	4	6 x Fe fragments various.
168	41	4	Small stamped Fe component; modern in appearance.
169	41	4	Victoria Penny 1880; bun head issue.
170	41	4	Geo V Halfpenny; date illegible.
171	41	10	Geo V Penny 1921.
172	41	12	Geo VI Penny 1944.
173	42	2	2 coins: Elizabeth II Penny 1967 x 2.
174	42	7	Brass chain 230mm long.
175	43	3	Fe nail.
176	43	3	Fe nail & bronze bearing cap with 2 anti-rotation slots.
177	43	3	Geo V Penny 1917.
178	45	5	Cu alloy harness ring.
179	46	1	Cu alloy tube with lip and raised collar; incomplete and squashed flat.



# SHAAS Metal Detecting Survey PEM17



Figure 1. Photograph of former Wheelwright's house and workshop on the green.

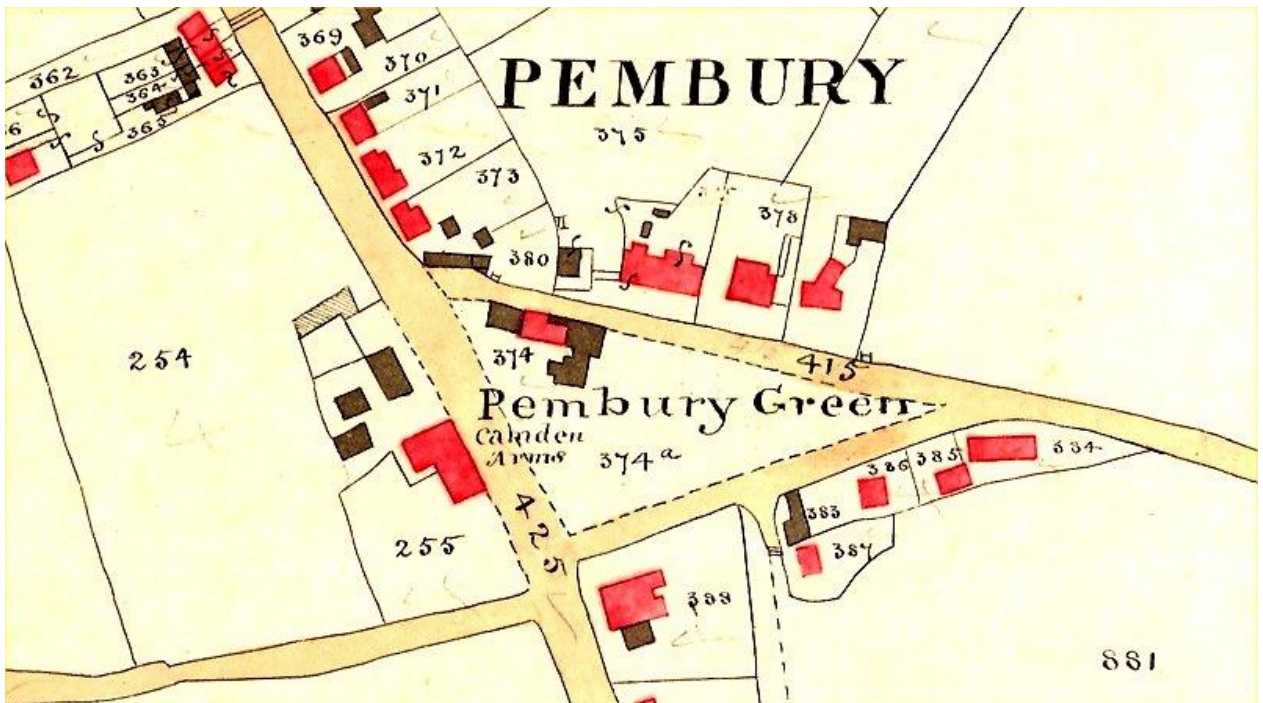


Figure 2. Tithe map of 1840 showing location of buildings on the SW corner of the village green.

# SHAAS Metal Detecting Survey PEM17

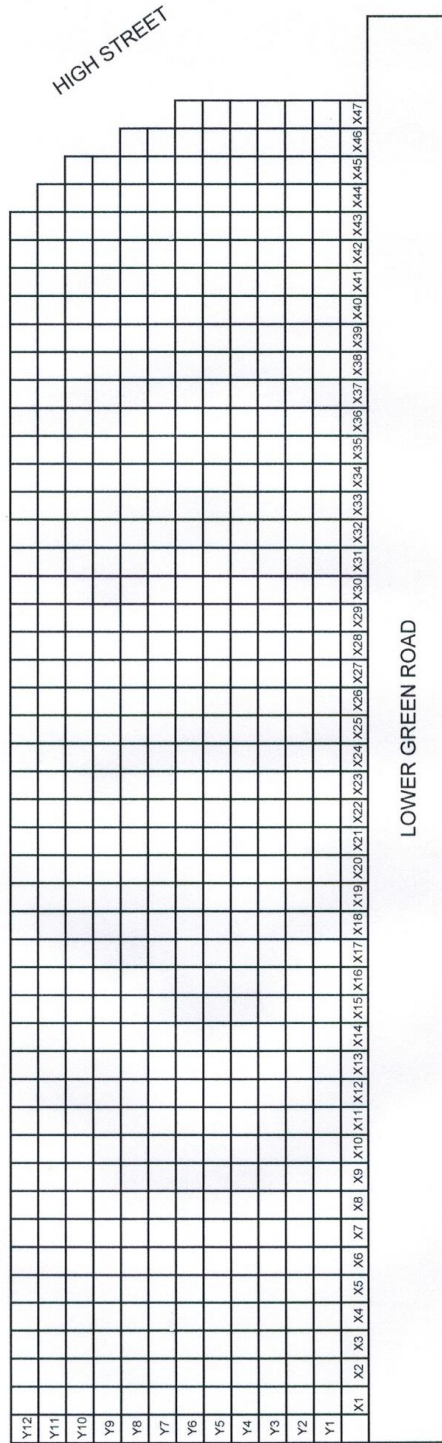


Figure 3. Search grid for SHAAS metal detecting survey PEM17

## SHAAS Metal Detecting Survey PEM17



Figure 4. Photograph of find PEM17-71: Obverse of Roman bronze coin.



Figure 5. Photograph of find PEM17-71: Reverse of Roman bronze coin.

## SHAAS Metal Detecting Survey PEM17



Figure 6. Photograph of find PEM17-72: Woodsman's Froe blade.



Figure 7. Archive photograph showing a complete Woodsman's Froe. Note this Froe has similar bruising on upper edge through usage.

## SHAAS Metal Detecting Survey PEM17



Figure 8. Photograph of sample Ferrous finds PEM17-10, 99, 142 & 149.

## SHAAS Metal Detecting Survey PEM17



Figure 9. Photograph of Military finds PEM17-15, 31, 113 & 123.