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Client: SLP Energy Ltd.
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Inchkeith Island, Firth of Forth, Fife Planning Application - 07/00864/CFULL

Archaeological Works – Phase 2

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PROJECT SUMMARY SHEET

Client	SLP Energy Ltd.
Address	Island Of Inchkeith, Burntisland, Fife, KY3 0UA
National Grid Reference	NT 2960 8230 (centre)
Project Manager	Simon Stronach
Text	George Geddes
Illustrations	Elin Evertsson George Geddes
Fieldwork	George Geddes Dean Williams Nick Moignard Clionadh McGarry
Schedule	
Fieldwork	15 th to 18 th October 2007
Report	December 2007

SUMMARY

SLP Energy Ltd. commissioned Headland Archaeology Ltd to undertake a second phase of archaeological work in an area chosen for a temporary anemometer mast and anchor points at the south end of Inchkeith Island in the Firth of Forth, a Scheduled Ancient Monument. This involved the archaeological excavation of six 'trenches' for securing and raising the mast. The trenches demonstrated the degraded nature of much of the volcanic bedrock in addition to illustrating that certain topographic areas retain deep soil profiles. Finds from the excavations were late 19th and 20th century in date. Archaeological features included cables and services, relating to the first or Second World War occupation. All noted archaeological features were left in situ. The work was required as part of a Scheduled Monument Consent, and formed a second phase after an initial survey and assessment (Atkinson 2007).

CONTENTS

PROJECT SUMMARY SHEET	1
SUMMARY	2
CONTENTS	3
INTRODUCTION	4
SITE LOCATION AND DESCRIPTION	4
HISTORICAL BACKGROUND	4
ARCHAEOLOGICAL BACKGROUND	5
OBJECTIVES	5
METHODOLOGY	5
RESULTS	5
Mast Platform (Trench 1)	5
Anchor Point 1 (North)	6
Anchor Point 2 (East)	6
Anchor Point 3 (South)	6
Anchor Point 4 (West)	6
Anchor Point 5 (Lifting anchor)	6
DISCUSSION	6
REFERENCES	7
Maps (National Library of Scotland)	7
APPENDIX 1 – Trench, Context and Sample Register	7
APPENDIX 2 – Photo Register	8
APPENDIX 3 – Finds Register	9

Figure 1: Site location

Figure 2: Location of excavated pits

All photographs are reproduced here and will be provided on a compact disc.

INTRODUCTION

This document presents the results of the second phase of archaeological works in connection with the erection of a temporary anemometer mast on the southern end of Inchkeith Island in the Firth of Forth, Fife (Figure 1). The development required Scheduled Monument Consent, and a strategy was agreed between the client, Historic Scotland, Fife Council and Headland Archaeology. The first phase of work (Atkinson 2007) included a detailed survey and assessment of the planning application area, and recommendations on the exact position of the proposed mast. Phase 2 (presented here) involved the excavation of 5 anchor points for the mast, either by archaeologists or under direct archaeological supervision. The fieldwork was carried out on 15th to 18th October 2007, in predominantly windy weather conditions.

SITE LOCATION AND DESCRIPTION

The Island of Inchkeith is located in the Firth of Forth, approximately midway between Kirkcaldy on the north shore and the Port of Leith to the south. It is orientated roughly north to south and is approximately 1km long and ½ km wide, dominated by a central spine of high ground, with the highest point (59m OD) towards the northern end. The island comprises three main headlands; the East and West Stell at the north end and one at the southern end. The shore comprises rocky, bedrock outcrops and areas of boulder strewn beaches backed by steep cliffs.

The area under assessment measured approximately 90m by 60m, or 5400m², and is located at the southern end of the island and to the north of the rock-cut ditch of the south fort. The ground rises upslope to the former brick and concrete anti-aircraft installation (see Structure 1 below). The area was bounded to the east by the cliff edge and to the west by a former metalled track or road.

HISTORICAL BACKGROUND

Although the early history of Inchkeith Island is perhaps little understood, its dominant position, both geographically and strategically, suggests that the island would have been utilised from early times. Since the Roman period the Firth of Forth has been an influential base for maritime activity, and an important centre for trade, commerce, and more recently, military and naval activities.

Other than references to the use of the island as a quarantine and burial ground for plague victims in the 15th and 16th centuries, Inchkeith first rose to prominence with the construction of a Franco-Scottish fort in the 16th century. The fort remained the only defences until a proposal in the 1850s to build two heavy gun batteries on Inchkeith. Despite approval of the plans, the batteries were not completed until the early 1880s. The planned defences were increased from two batteries to three, comprising self-contained forts.

With the changing political climate throughout the late 19th and early 20th century the defences located on the Forth Islands were constantly modified, especially in response to the increasing threat from Germany. By the turn of the century, the defences on Inchkeith included batteries established outside the three forts culminating in six battery groups. The southern battery was known as A Group which in 1915 was equipped with two 4.7" BL Mark VII guns, replaced in 1916 with 6" guns.

The area immediately to the north of the south fort (the area of assessment) remained little developed during this period with the solitary presence of a 'Battery Command Post' and 'Telephone Room' to direct fire from the south fort, and stores and gun platforms for practice batteries along the margin of the east cliff. The area remained as such until 1939 and the outbreak of the Second World War with

the introduction of stores and barracks blocks and an anti-aircraft and light installation upslope to the north. Following the cessation of hostilities, the facilities fell into gradual disrepair culminating in the current condition of the remains.

ARCHAEOLOGICAL BACKGROUND

Archaeological intervention on the site has been minimal, the most recent of which comprised an evaluation/excavation and survey of several features on the Island (Pollard *et al* 2001). This included the excavation of the 'Battery Command Post' located within the assessment area. Other archaeological investigations on the island include the discovery of a kitchen midden in the late 19th century and again in the 1990s (Grieve 1873; Mowat *et al* 1973).

The current planning application has prompted two phases of archaeological work; Phase 1 included a survey of the site area and an assessment of all archaeological features (Atkinson 2007). Phase 2 included the excavation of a series of small trenches within the site boundary.

OBJECTIVES

The objective was:

- To archaeologically hand excavate five anchor points for a temporary anemometer mast; this was amended to six, to include leveling of the ground at the central mast platform
- To establish the presence, nature and extent of any archaeological deposits with the excavations

METHODOLOGY

Each of the five anchor points needed to be either a) directly drilled into strong rock or b) fixed to large plate held in place in a trench by the weight of backfilled earth above. This meant that each trench had to be excavated to a depth of up to 1.5m or to a depth where the rock was sufficiently strong.

All trenches were opened by archaeologists and all deposits were excavated and recorded by hand. The natural bedrock was overlaid by a layer of loose natural boulders and the bedrock itself was very fragmented and decayed. In places, the bedrock had to be excavated a further 1 metre to expose 'strong' rock. This was done by pick and pneumatic drill under archaeological supervision.

All the trench locations were slightly altered from the proposal to avoid archaeological features (Figure 2).

RESULTS

Mast Platform (Trench 1)

The first trench was excavated in the proposed position of the mast itself (Figure 2, Photos 1/2, 1-3¹); the position was adjusted in order to avoid the tarred path just to the SE. This trench only needed to form a leveled surface, and was excavated by archeologists to a maximum depth of 0.25m, approximately 2.4m by 1.75m. Only one context was exposed, consisting of a dark brown sandy loam [001]. Finds included fragments of copper wire, Bakelite fragments and fragments of plastic.

¹ Photo1/2 refers to Film 1, Shot 2 etc

Anchor Point 1 (North)

The northern anchor point trench was excavated in shallow soil to a maximum depth of approximately 0.35m (Figure 2, Photos 1-4, 1-5, 1-33, 2-1). The trench (1.05 m by 1.05m) exposed badly decayed and fragmented bedrock [102] which had to be partly excavated by the erecting team. The topsoil [101] was a mid brown silt loam, with fragments of bedrock and root matter. There were no archaeological features.

Anchor Point 2 (East)

The eastern anchor point was positioned in the basin east of the main ridge (Figure 2, Photos 1-9 to 1-18, 1-31, 1-32, 2-6). The position of the trench was adjusted to avoid a kerb. This trench was 1.9m by 1 m and 1.2m deep. Four contexts were exposed above the degraded natural at 1.2m deep. Context [201], the topsoil, was a mid brown silt loam 0.4m deep. Below this, there was a 0.35m layer of more compact soil of the same type [202] with a clear interface to [201]. A second lighter layer of loam [203] was a similar depth. Below the silts and above the bedrock, there was a layer of boulders [204], sub-rounded to sub-angular, almost certainly a natural layer of eroded volcanic rock, derived from the fragmentary bedrock below. A fragment of brick was recovered from the topsoil.

Anchor Point 3 (South)

This southern anchor point was located near to the N edge of the rock-cut ditch of the south fort built in the late 1870s and 1880s (Figure 2, Photos 1-7, 1-28). This area has a high density of known archaeological features and demolition material related to former buildings. Some asbestos sheeting was moved to reveal a clear area devoid of positive archaeological features. The topsoil [301] was 0.38m deep, and similar to that seen elsewhere on the site; a dark brown sandy loam. After removal of this, red-brown sandy loam was exposed [302]. This was 0.21m deep, with common inclusions of stone and roots and it was heavily disturbed by a rabbit burrow on the east side. Below [302], there was a layer of natural boulders [303] as found elsewhere. Fragments of glass and pottery in the topsoil were of 19th or 20th century date.

Anchor Point 4 (West)

The west anchor point was located between two roads near the W edge of the island (Figure 2, Photos 1-19 to 1-24, 2-3 to 2-5). The trench location was altered when a large diameter braided cable was uncovered below the surface. The trench was 2m by 1m and excavated to a maximum depth of 0.75m. Below the grass, there was a single context [402] of red/brown silt loam. Below this, over 0.5m of degraded bedrock had to be removed to expose a strong rock surface.

Anchor Point 5 (Lifting anchor)

The final anchor point was placed to provide the lift for the erection of the mast (Figure 2, Photo 1-6, 1-7, 1-25 to 1-27). As with the other trenches, a single dark brown sandy loam [502] overlay the degraded bedrock. The trench was extended to 2 by 1m, and excavated to a depth of 0.30m.

DISCUSSION

Archaeological features were limited to service pipes and cables which probably date to the 20th century occupation of the island for military purposes. Finds were typical of the late 19th and 20th century and related to buildings and services, as well as including domestic material such as glass

and pottery (see Appendix 3). Generally, topsoil overlay bedrock or fragmented and degraded bedrock. The east trench (AP2) exposed a substantial depth of accumulated deposits, suggesting that specific parts of the island may have considerably more potential for archaeological survival.

REFERENCES

NPPG 5 *National Planning Policy Guideline 5: Archaeology and Planning*, Scottish Office 1994

PAN42 *Planning Advice Note 42: the Planning Process and Scheduled Monument Procedures*, Scottish Office 1994

Ancient Monument and Archaeological Areas Act 1979

Aerial Photographs

RCAHMS (2000) *Catalogue of the RAF World War II Photographs* in the National Monuments Record of Scotland – Inchkeith Island, Firth of Forth, 20th October 1941

Maps (National Library of Scotland)

- 1855 Ordnance Survey 1:10560 scale Fifeshire sheet XLI (surveyed 1853)
- 1891 Ordnance Survey 1:2500 scale Fifeshire sheet XLI (revised 1909-10)
- 1896 Ordnance Survey 1:10560 scale Fifeshire sheet XLI SW & XLV NW (resurveyed 1892-3)
- 1911 Ordnance Survey 1:500 scale Fifeshire sheet XLV.1.3 (surveyed 1891; revised 1909-10)
- 1958 Ordnance Survey 1:10560 scale sheet NT28NE (revised 1957)
- 1983 Ordnance Survey 1:25000 Explorer Series Edinburgh Sheet 350

Other Documentary Sources

Grieve D, 1873 *On the discovery of a kitchen midden on Inchkeith* Proceedings of the Society of Antiquaries of Scotland. 9:452-455

Mowat R J C, Campbell J B, Morrison I A, 1973 *'Inchkeith Midden'*, Discovery and Excavation, Scotland, 1973:26

Pollard T, Oliver N, Banks I, Duffy P, 2001 *Firth of Forth* GUARD unpublished report

APPENDIX 1 – Trench, Context and Sample Register

Trench	Description	Dimensions
Mast Platform	[001] Dark brown sandy loam (0.25m deep)	2.37 by 1.75m by .25m deep
Anchor Point 1	[101] Topsoil, mid brown (0.2m) [102] Degraded rock (1.2m)	1.05 by 1.05m by 1.4m deep
Anchor Point 2	[201] Topsoil (0.4m) [202] Mid brown silt loam (0.35m) SAMPLE 1 [203] Light brown silt loam (0.35m) SAMPLE 2 [204] Layer of decayed stones (0.10)	1.9 by 1.0m by 1.23m deep
Anchor Point 3	[301] Topsoil [302] Subsoil SAMPLE 6 [303] Degraded rock [304] Service pipe	1.95m by 1.1m by 0.59m deep
Anchor Point 4	[401] Topsoil (0.20m) [402] Red/brown silt loam (0.50m) SAMPLE 3 [403] Degraded rock	2m by 1m by 0.75m deep

	[404] Cable	
Anchor Point 5	[501] Topsoil (0.15m) [502] Dark brown sandy loam (0.45m) SAMPLE 4 and 5 [503] Degraded rock [504] Pipe	2m by 1m by 0.60m deep

APPENDIX 2 – Photo Register

Shot No.	Direction facing	Description
1/1	-	Identification Shot
1/2	NW	MP, SE section
1/3	S	MP, general shot
1/4	NW	AP1, general shot
1/5	NW	AP1, general shot
1/6	SW	AP5, general shot
1/7	NW	AP3, general shot
1/8	SW	AP5, NW section
1/9	NW	AP2, general shot
1/10	NW	AP2, general shot
1/11	N	AP2, general shot
1/12	NE	AP2, general shot
1/13	E	AP2, general shot
1/14	NE	AP2, general shot
1/15	NW	AP2, general shot
1/16	W	AP2, general shot
1/17	W	AP2, general shot
1/18	W	AP2, general shot
1/19	SE	AP4, general shot
1/20	NE	AP4, general shot
1/21	NW	AP4, general shot
1/22	SW	AP4, general shot
1/23	E	AP4, general shot
1/24	S	AP4, ground surface adjacent to trench
1/25	W	AP5, pipe [504]
1/26	E	AP5, pipes [504]
1/27	W	AP5, general shot
1/28	E	AP3, pipe [304]
1/29	W	AP5, E facing section
1/30	N	AP5, S facing section
1/31	S	AP2, N facing section
1/32	W	AP2, E facing section
1/33	S	AP1, N facing section
2/1	E	AP1, W facing section
2/2	W	AP1, E facing section
2/3	NE	AP4, SW facing section
2/4	NW	AP4, SE facing section
2/5	SE	AP4. NW facing section

2/6	N	AP2, general shot
2/7	-	Identification Shot

APPENDIX 3 – Finds Register

Area	Ctxt	Material	Qty	Description	Spot Date
AP2	T/S [201]	CBM	1	Brick/pan tile, coarse sherd, curving?	
AP3	T/S [301]	Ceramic	1	Electrical fitting? Ovoid shaped object with grooves in surface and two holes	L.19 th / 20 th
AP3	T/S [301]	Glass	2	Bottle sherd, green, embossed lettering Window sherd	20 th
AP3	T/S [301]	Pottery	1	Modern whiteware, plain ?dish base	19 th /20 th
AP4	T/S [401]	CBM	2	Brick fragments	18 th /20 th
AP4	T/S [001]	Glass	2	Bottle sherd, green	L.19 th / 20 th
MP	T/S [001]	Ceramic	2	Clay pigeon, black hard ceramic, moulded decoration	20 th
MP	T/S [001]	Cu	1	Wire. Coil of wire, with short length at one end coated in thick layer of glass or plastic. Possibly electrical. Total length c.78cm), wire thickness 1mm	
MP	T/S [001]	Glass	4	Bottle sherds, green and clear	L.19 th / 20 th

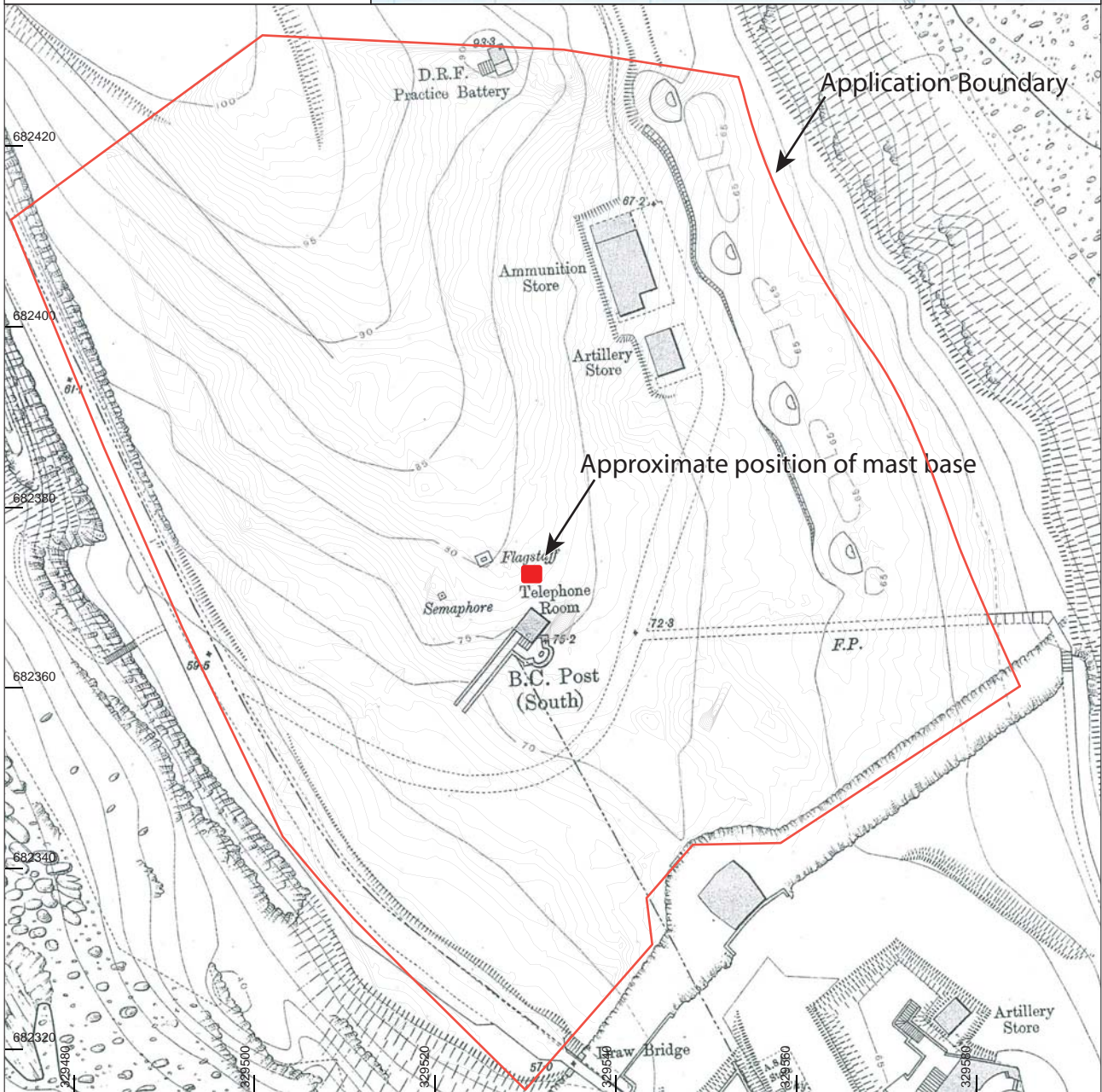
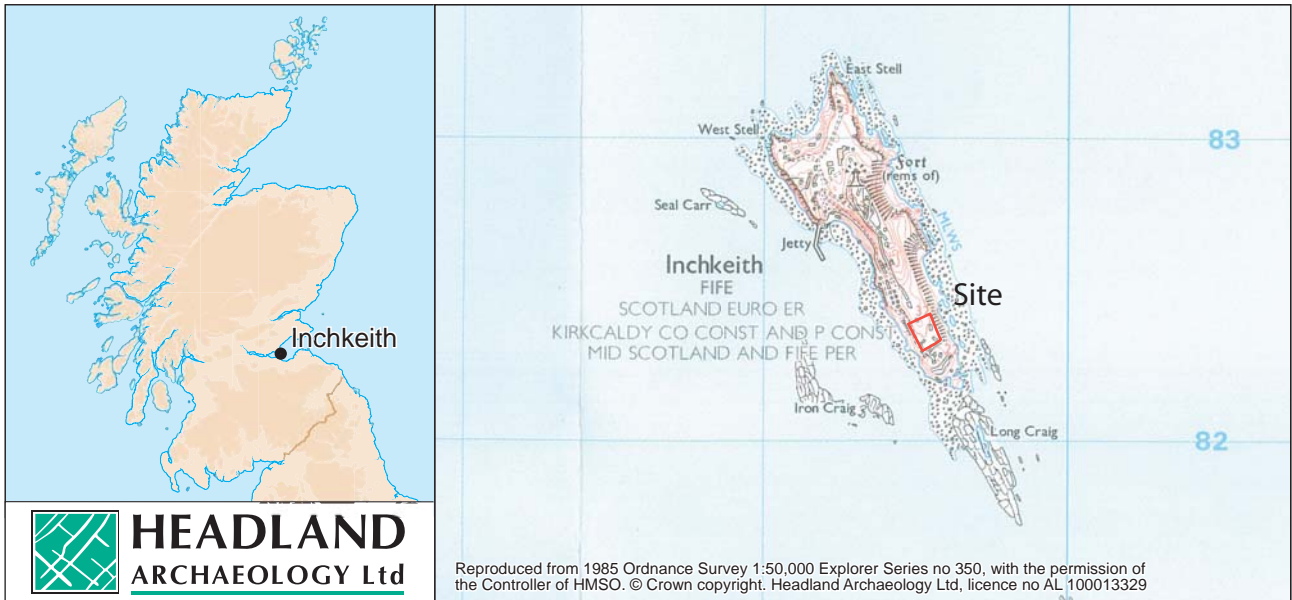


Figure 1 - IKH07: Inchkeith Island, Firth of Forth, Fife. Site Location overlaid on 1911 Ordnance Survey

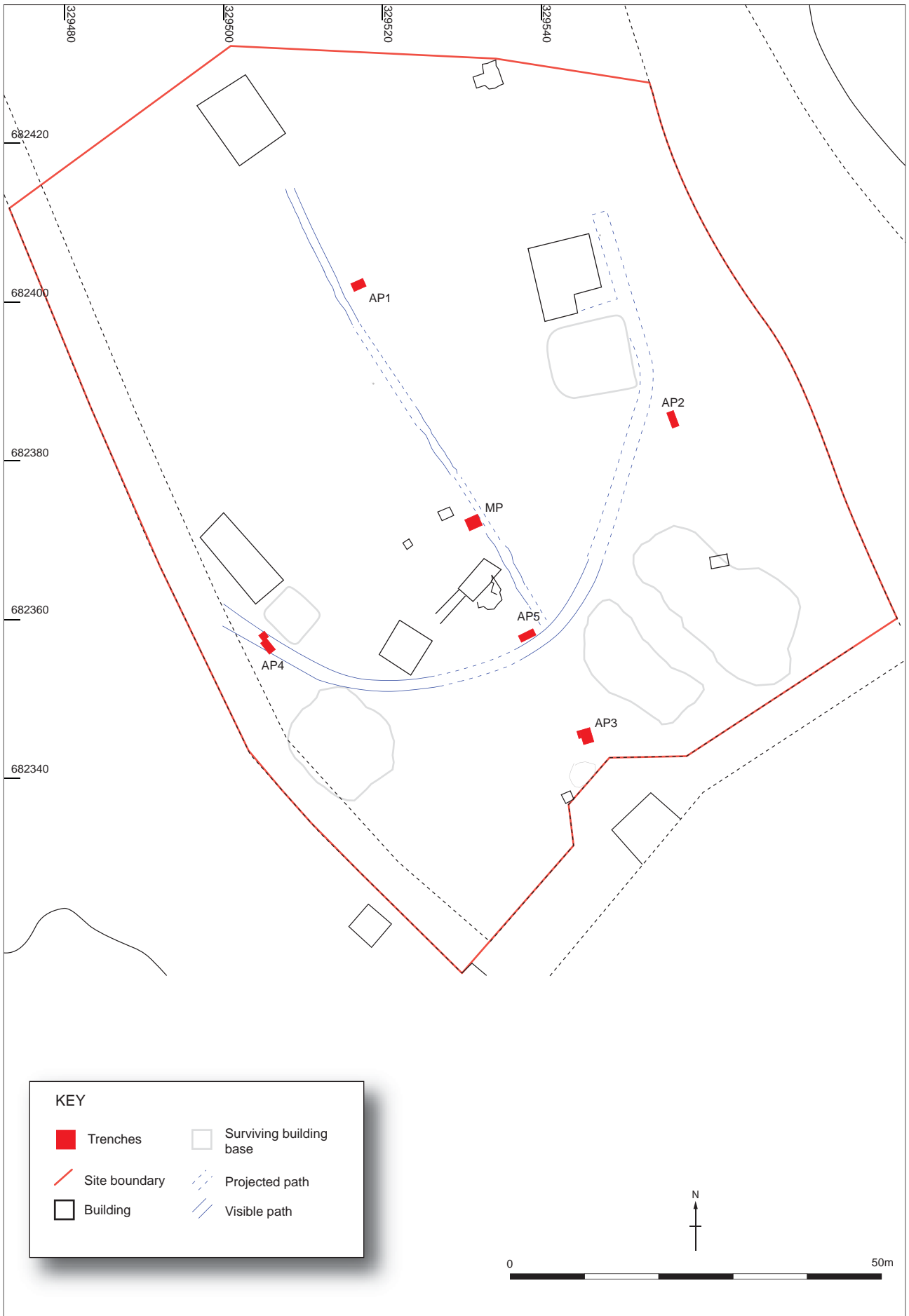


Figure 2: IKH07 - Location of trenches



IKH07-Film 1-Shot#02.JPG



IKH07-Film 1-Shot#03.JPG



IKH07-Film 1-Shot#04.JPG



IKH07-Film 1-Shot#05.JPG



IKH07-Film 1-Shot#06.JPG



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IKH07-Film 2-Shot#01.jpg



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