

Archaeological Watching Brief
West Mains of Huntingtower
Perth
HR02



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**ARCHAEOLOGICAL WATCHING BRIEF
WEST MAINS OF HUNTINGTOWER
PERTH**

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1	<i>Background</i>	1
2	<i>Details of Work</i>	1
3	<i>Interpretation</i>	4
4	<i>Conclusions and Recommendations</i>	4
5	<i>Bibliography</i>	4
Appendix 1	<i>Context Register</i>	5
Appendix 2	<i>Photographic Register</i>	5
Appendix 3	<i>Discovery & Excavation in Scotland Entry</i>	7
Appendix 4	<i>Standard Terms of Reference for all Fieldwork</i>	8

Title Page: Trench open, view N from Post 13

Illustration 1: Location

Illustration 2: Trench Location

Illustration 3: Trench Plan

Illustration 4: Aerial Photograph, looking WSW

Illustration 5: Aerial Photograph, looking ENE

Illustration 6: General view E.

Illustration 7: View N from post 3 to post 13.

Illustration 8: View N from post 13.

Illustration 9: Detail, E. Brown pit fill 04 visible in upcast, compared with gravel on either side.

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ABSTRACT

Alder Archaeology conducted a watching brief (HR02) on replacement of a faulty 11 Kv power cable where it intersected a line of presumed Roman gravel-pits along the N flank of the Roman road from Camelon to Cargill, SM3630. The pit alignment is clearly seen as crop marks on aerial photographs. The watching brief confirmed that the pits continue right up to the E boundary of the field, where they are obscured by an overgrown hedgerow. The soft brown fill of the pit appeared in the base of the existing cable trench, about 1 m below modern ground surface, cut into yellow natural gravel and defining a feature about 1.8 m across. No artefacts were recovered except for modern rubbish. The cable was renewed within the existing trench, and backfilled.

The watching brief took place on 16th March 2020, and was commissioned by Scottish and Southern Electricity Networks.

1 Background

1.1 Introduction

Scottish and Southern Electricity Networks commissioned Alder Archaeology to undertake an archaeological watching brief on the replacement of a faulty 11 Kv underground power line at West Mains of Huntingtower, on the western outskirts of Perth. The work area is within a Scheduled Monument SM3630, including Roman and Prehistoric crop mark features, and is centred on NGR NO 0734 2485.

The work was carried out on 16th March 2020 in dry cloudy conditions. The requirement was to carry out a watching brief on excavations required to expose and replace the faulty power line. Special attention was to be paid to possible Roman features likely to be intersected by the cable trench.

The work was designed to satisfy the requirements for Scheduled Monument Consent (Case ID 300043780).

1.2 Aims and Objectives

The main aim of this investigation was locate and record any archaeological finds or features exposed or disturbed by the works.

1.3 Reporting

The present document has been prepared as the final report on this watching brief. Copies will be sent to the client, The National Record of the Historic Environment at Historic Environment Scotland, and Perth and Kinross Historic Environment Record.

1.4 Acknowledgements

We wish to thank Les Anderson and Alan Graham of Scottish and Southern Electricity Networks, and Tom Gardner and Tom Parnell of Historic Environment Scotland for help and guidance. The work has been funded by Scottish and Southern Electricity Networks.

2 Details of Work

2.1 The Site (Illus 1)

West Mains of Huntingtower lies on the western outskirts of Perth, on the south side of the A85 road from Perth to Methven and Crieff, at the junction with the unclassified road to Tibbermore, marked by the Agricar tractor dealership which forms a prominent local landmark. The work area lies at the E boundary of a flat field, on a terrace of the River Almond (about 1 km to the N). The field is now in grass, and has produced extensive crop marks on aerial photography. Beyond the S boundary of the field, the ground rises steeply into an area of scrub and woodland, with a disused gravel quarry beyond.

The E boundary of the field is mostly defined by a post and wire fence, and a very overgrown hedgerow with scrubby trees of various sizes. It makes a sharp bend eastwards half way along its length. N of this, the boundary is defined by a cement

block garden wall belonging to the house called Lea, and N of this by post and wire fences and some large mature beech trees, probably planted intentionally.

The scheduled area SM3630 forms a track some 85 m wide, which runs across the full width of the field from WSW to ENE, from the W boundary of the field to the E.

At the S end of the work area is a wooden post numbered (3) in the SSEN system, though not numbered on some SSEN plans. This is located 1.3 m W of the boundary fence and 16.5 m S of a bend in the boundary fence. Post (3) receives an 11 Kv supply in three overhead wires coming in from the SW. At post (3) the supply passes underground, and runs N to the low-voltage post (13), where the E boundary fence makes a bend eastwards. The 11 Kv supply is not connected to post (13) at all, but continues underground, running N, about 0.7 m W of the boundary, all the way to the N boundary of the field, where it passes under the fences, under the unclassified road, and on to the crossing of the A85 road.

The present fault was located some 3 m south of the bend at post (13), but the cable had a previous history of failures, and mostly dated back to the 1960s. The decision had been made to replace the entire cable, from post (3), where it first passes underground, to a location some 17 m S of the public road, well beyond the N limit of the scheduled monument area. The new cable is 60 mm in diameter, compared with the 45 mm of the old cable. These precautions should ensure that the scheduled monument will not need to be disturbed again in this area for many decades to come.

2.2 Archaeological Potential

The crop mark features include a Neolithic henge, two prehistoric enclosures, five prehistoric roundhouses, and various groups of pits. However, most of these features do not appear to extend into the area of the present works. The most prominent feature is a parallel pair of pit alignments about 20 m apart, interpreted as gravel quarry pits along the edges of the Roman road from Camelon to Cargill, running WSW – ENE across the full width of the field. This runs right up to the E boundary, and was very likely to be intersected by the existing cable trench, and any excavations required for the replacement cable.

The intended works involved excavation about 0.5 m wide, 1 m deep and 30 m in length within the scheduled area, to locate, expose and re-open the existing cable trench. The intention was to disconnect the existing cable, leave it in the ground, and lay a new cable close alongside it to minimise excavation of undisturbed ground. In practice, it proved possible to reduce the trench width to 0.3 m, locate, remove and replace the faulty cable, and work almost entirely within the line of the existing trench, with even less excavation of undisturbed ground than originally envisaged.

2.3 Archaeological Method

Work began at post (3), at the S end of the work area, and proceeded N. The overhead and underground cables had already been isolated and earthed. The old cable had been disconnected from the overhead supply and detached from post (3) down to ground level. The new cable had been connected to the (inert) overhead supply, fixed to the top of the post, and laid out on the ground parallel to the trench line.

Excavation was conducted with a 0.3 m toothless bucket on a small tracked mini-excavator, under continuous observation by the archaeologist, with occasional hand-digging by SSEN staff to confirm the location of the cable. A larger 0.98 m ditching bucket was used only for back-filling at the end of the work.

The cable was followed directly from the base of post (3). At the base of the post, the trench was slightly expanded to follow the curve of the cable, but quickly settled to a northward track 0.3 m wide. The trench was carefully dug in spits to expose the top of the cable, marked in the south with yellow plastic tape and farther north with wire-reinforced concrete tiles. The upcast from the trench was piled along its W edge. As the old cable was uncovered, it was dragged out of the trench by hand, pulled away to the W, and laid out parallel to the trench.

From the bend at post (13) northwards, a two-strand copper earthing wire was found in the upper fills of the trench, connected at intervals to vertical lead-tube earth spikes. This was related to the low-voltage supply carried on post (13), not the 11 Kv supply being replaced.

The trench was terminated some 17 m S of the public road, at a location well N of the scheduled area, but just S of the large beech trees associated with the house called Elmlea, as the tree roots probably cross the cable line, will be very substantial, and could not be disturbed without damaging and perhaps killing the trees. At the N end, the trench was expanded to a pit c 2.5 m long and 1.1 m wide, to allow working space to connect up old and new cables.

The new cable was manually laid in the bottom of the old trench, and marked with yellow tape prior to backfilling. The pit at the N end was left open to give access so that the old and new cables could be cut to length and connected together, after completion of necessary safety checks and documentation. No further excavation was required, so the watching brief was ended at this point.

2.4 Results of Investigations

The top layer removed was turf over stony brown topsoil 01. This extended, without clear demarcation, down into a stony brown silty loam 02, apparently the fill of the old cable trench, with occasional plastic bags and bottles (not retained), probably late 20th century. At the bottom was yellow plastic hazard marker tape, and displaced concrete hazard marker tiles, probably of 1960s vintage. It was not possible to clean or interpret the sections in the trench sides, because the trench was too narrow to work in (only 0.3 m), and full of tree roots from the overgrown hedgerow immediately to the E.

Under these layers was the failed electricity supply cable. When this was removed, clean yellow natural gravel 03 became visible in the trench base, about 1 m down. This gravel was interrupted by a stretch of fine brown silty loam 04, appearing 2.3 m S of the bend in the E boundary, and continuing N for about 1.8 m. Natural gravel (numbered 05) then resumed, at 0.5 m S of the bend, and continued uninterrupted, all the way to the N end of the cable trench.

These changes were measured in on the trench bottom, and photographed with difficulty, but can also be clearly seen in photographs of the spoil heap along the W side of the trench. The change in the colour and texture of the upcast material is quite

obvious. Only the top surface of the loam 04 was cleaned off as the trench was bottomed. Although this area was watched closely and the spoil heap carefully examined, no artefacts were seen.

3 Interpretation

The silty loam 04 was very obviously the fill of a feature cut into the natural gravel 03 and 05, about 1.8 m across N – S. Comparison with aerial photographs shows that it lines up well with the presumed Roman gravel-pits along the N edge of the Roman road, and may be identical with an uncertain smudge at the very E end of the pit alignment, in the shadow of the hedgerow and partly masked by surface changes in vegetation and soil.

It can now be confirmed that the pit alignment continues right up to the boundary, and that the pits survive at least 1 m below present ground surface. This particular pit has been truncated and disturbed by the old cable trench and by the tree roots, but other pits in the rest of the field might well survive undisturbed nearer the surface.

The pit alignment is not visible on the aerial photograph in the domestic gardens to the E of the field boundary, but must originally have continued into this area. As we now know that the pits are at least 1 m deep, it is very likely that they will survive, perhaps truncated, under the modern gardens to the E.

4 Conclusions and Recommendations

No further excavations are required in connection with present repair. The affected cable run through the scheduled area has been fully replaced, and ‘future proofed’ by upgrading from 45 mm to 60 mm diameter. It is expected that no further disturbance will be required in this area for many decades to come.

However, it is extremely likely that the pit alignment continues and survives at depth in the unscheduled areas to the E of the present work, and quite likely that the pits will be encountered from time to time in various developments and minor works in coming years. It is recommended that these should be investigated or monitored as they arise, depending on the nature of any works affecting them.

5 Bibliography

Bowler, D P 2020 West Mains of Huntingtower, Perth, Archaeological Watching Brief, Written Scheme of Investigation. Unpublished grey literature, Alder Archaeology Ltd, Perth.

Historic Environment Scotland Aerial Photograph Collection SC0170623, SC0170736

Appendix 1 Context Register

<i>No:</i>	<i>Description</i>
01	Turf and stony brown topsoil.
02	Fill of old cable trench. Stony brown silty loam. Contains yellow plastic marker tape, displaced concrete marker tiles of previous cable, modern plastic rubbish. Old cable is red plastic coated, 45 mm diameter.
03	Natural yellow gravel appears in trench base, N of old repair. Under 1960s steel armoured cable. Base here 1 m down. Sections not legible due to tree roots.
04	Brown silty loam in trench base, appears 2.3 m S of bend, instead of natural gravel 03. Presumed fill of Roman gravel-pit on N boundary of Roman road. Overall length N – S c1.8 m.
05	Natural yellow gravel, = 03. Resumes c 0.5 m S of bend. Sections not legible due to tree roots.

Appendix 2 Photographic Register

<i>No</i>	<i>Description</i>	<i>View</i>
01-2	Location. View from N boundary of site. Wooden post (13) at bend in E boundary. Red replacement cable (60 mm diameter) lying on grass surface.	S
02	Location. Start of work. View from bend in E boundary down to wooden post (3). Red replacement cable already connected to overhead lines, but not live. Ground rises steeply beyond S boundary of field.	S
03	Start of work. Detail around wooden post (3)	E
04	Start of work. Detail around wooden post (3). Buckets are 0.3 and 0.98 m wide. 0.98 m bucket used only for backfilling.	N
05	Start of work. Tracing the cable at base of post (3). Old red 45 mm cable.	N
06	Tracing the cable in the trench.	N
07-8	Exposing old cable.	N
09	Older repair to cable, located c 3 m S of post (13). Black shrink-wrapped sleeve.	N
10	Detail, initial cable-finding pit adjacent to post (3). Pit extends c 1 m W of post, 2 m N of post.	N
11-16	General views, progressing N from post (3). Black flakes in trench base are tar coating cracking off earliest (1960s) steel-armoured cable.	N

17-19	General views, progressing N from post (13). E boundary here marked by cement block wall.	N
20	Old (45 mm) cable extracted from trench, still attached to insulator cluster on ground, alongside new (60 mm) cable.	N
21	Detail, old repair in 45 mm cable. Concrete marker tile on spoil heap.	N
22	Detail, old 45 mm cable joins on to 1960s steel-armoured cable, just S of post (13). Broken concrete marker tile adjacent.	N
23-4	1960s steel-armoured cable extracted from trench, N of post (13) and bend in E boundary.	N
25-6	Detail of 'Roman gravel-pit', just S of post (13). Natural gravel 03 in trench base changes to soft brown fill 04.	S
27-8	Location of 'Roman gravel-pit' just S of post (13) and bend in E boundary. Note change of colour and texture in spoil heap, from brown gravelly soil to cleaner brown pit fill 04.	E
29	Detail of 1960s steel-armoured cable with black tar coat, and broken concrete marker tile.	E
30	View from bend in E boundary and post (13). Progress. Concrete block wall on E boundary. Agricar tractor dealership in distance.	N
31-3	Progress. Post (13) with low-voltage overhead wires. N end of cable trench stops short of large grey beech tree, to avoid roots.	E
34-5	Expansion of trench at N end of boundary wall, to extract old earth spike, and provide working space to join new cable to old. Exposes yellow-brown gravel.	N
36-8	Expansion Pit. N end of trench expanded to allow working space. N end of cement block wall.	S
39-42	Expansion Pit. N end of trench expanded to allow working space. N end of cement block wall.	E
43-4	Expansion Pit at N end of trench. New cable laid out along trench, with spare length towards NE corner of field and public road.	ENE
45	New cable in place at S end of trench, post (3).	ENE
46	New cable in place at S end, fixed to post (3) and laid out in trench.	N
47	New cable laid in N end of trench. Back-filling begins	S

Appendix 3 Discovery & Excavation in Scotland Entry

LOCAL AUTHORITY:	Perth and Kinross
PROJECT TITLE/SITE NAME:	West Mains of Huntingtower
PROJECT CODE:	HR02
PARISH:	Tibbermore
NAME OF CONTRIBUTOR:	David Bowler
NAME OF ORGANISATION:	Alder Archaeology Ltd
TYPE(S) OF PROJECT:	Watching Brief
NMRS NO(S):	NO02SE 49, NO02SE 66
SITE/MONUMENT TYPE(S):	Roman road and gravel-pits
SIGNIFICANT FINDS:	-
NGR (2 letters, 8 or 10 figures)	NO 0734 2485
START DATE (this season)	16 March 2020
END DATE (this season)	16 March 2020
PREVIOUS WORK (incl. DES ref.)	
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	<p>Alder Archaeology conducted a watching brief (HR02) on replacement of a faulty 11 Kv power cable where it intersected a line of presumed Roman gravel-pits along the N flank of the Roman road from Camelon to Cargill, SM3630. The pit alignment is clearly seen as crop marks on aerial photographs. The watching brief confirmed that the pits continue right up to the E boundary of the field, where they are obscured by an overgrown hedgerow. The soft brown fill of the pit appeared in the base of the existing cable trench, about 1 m below modern ground surface, cut into yellow natural gravel and defining a feature about 1.8 m across. No artefacts were recovered except for modern rubbish. The cable was renewed within the existing trench, and backfilled.</p> <p>The watching brief took place on 16th March 2020, and was commissioned by Scottish and Southern Electricity Networks.</p>
PROPOSED FUTURE WORK:	n/a
CAPTION(S) FOR ILLUSTRS:	
SPONSOR OR FUNDING BODY:	Scottish & Southern Electricity Networks
ADDRESS OF MAIN CONTRIBUTOR:	Alder Archaeology Ltd, 55 South Methven Street, Perth PH1 5NX
EMAIL ADDRESS:	director@alderarchaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	HES (intended)

Appendix 4 Standard Terms of Reference for all Fieldwork

4.1 Recording Methodology

Alder Archaeology employs a Single Context Recording System that allows full cross-referencing of stratigraphy, finds and environmental samples, as well as site-wide phasing. All features will be planned at scale 1:20, and sections drawn at scale 1:10. Sections and profiles will be drawn and all features will be photographed with metric scale included. Environmental samples will be taken from archaeologically significant contexts, if the analysis of these samples would aid significantly in the interpretation of any features identified.

4.2 Human Remains

If human remains are encountered they will be left in situ and the local police will be informed. If removal is required this will take place in compliance with Historic Scotland's Policy Paper *The Treatment of Human Remains in Archaeology*.

4.3 Products and Reporting

A Data Structure Report will normally be prepared within a period agreed within the Written Scheme of Investigation/ Project Design, after the completion of the fieldwork. This forms the basic level of reporting. Further reporting may be required on the basis of discoveries made during excavations.

A copy of the report and the project archive will be deposited in the NMRS. Further copies will be sent to the client, LAAO and others, as appropriate.

4.4 Artefacts

Finds of objects will be subject to the Scots Laws of Treasure Trove and *Bona Vacantia*. We will report such finds, if recovered, with supporting documentation to the Secretariat of the Treasure Trove Panel for disposal to the appropriate museum.

4.5 Discovery and Excavation in Scotland

A brief summary of the results will be submitted to *Discovery and Excavation in Scotland*.

4.6 General Conditions and Health and Safety

We adhere to the Code of Conduct of the Institute for Archaeologists.

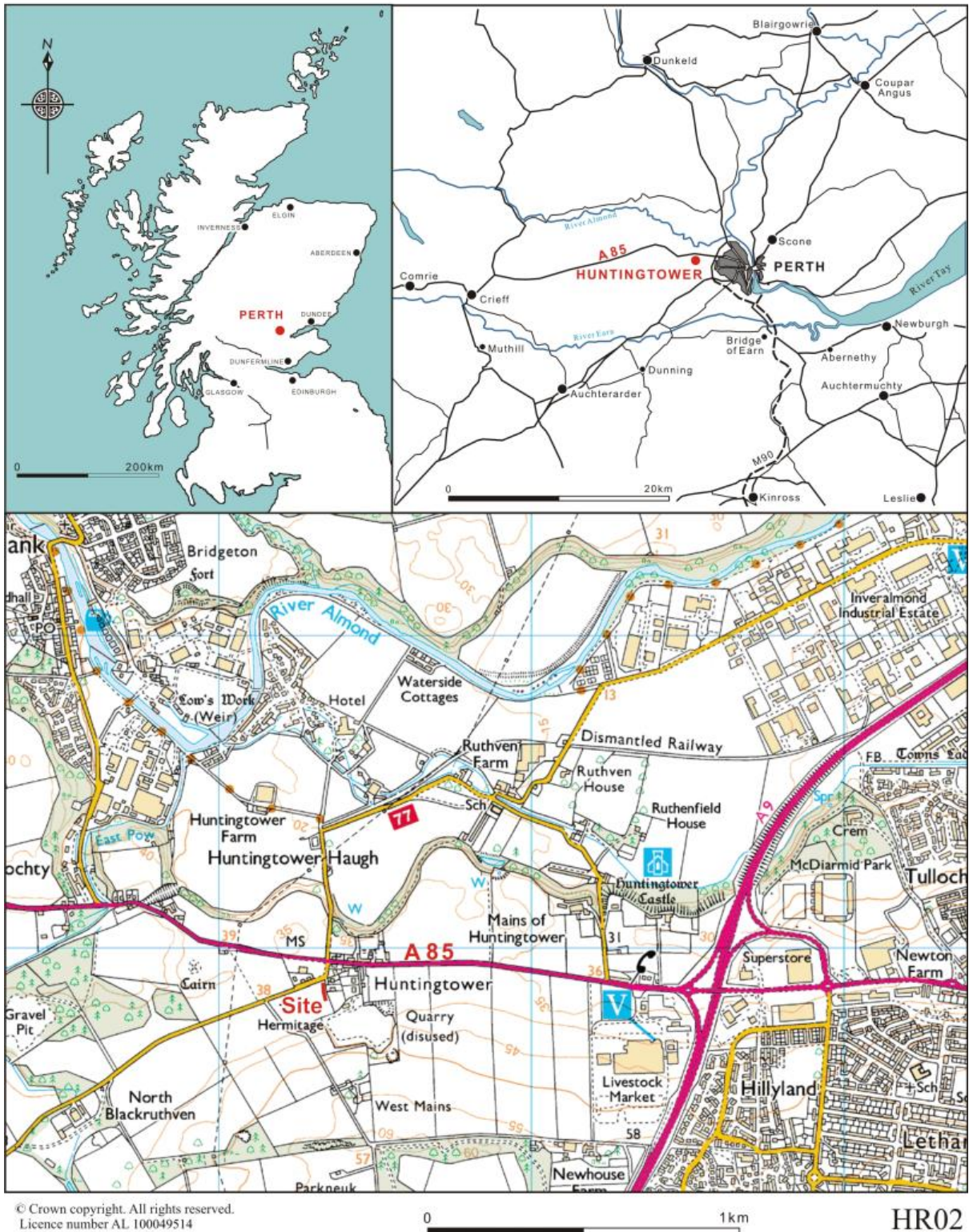
Alder Archaeology Ltd has public liability insurance of £2,000,000. Details of this can be provided on request.

We operate a strict health and safety policy that conforms to the Health and Safety at Work Act. We undertake Risk Assessments on all fieldwork carried out.

Alder Archaeology representatives will at all times wear protective footwear, high visibility clothing and other appropriate clothing. Hard hats will be worn if there is active plant on site or at all times if the site is deemed a hard hat area.

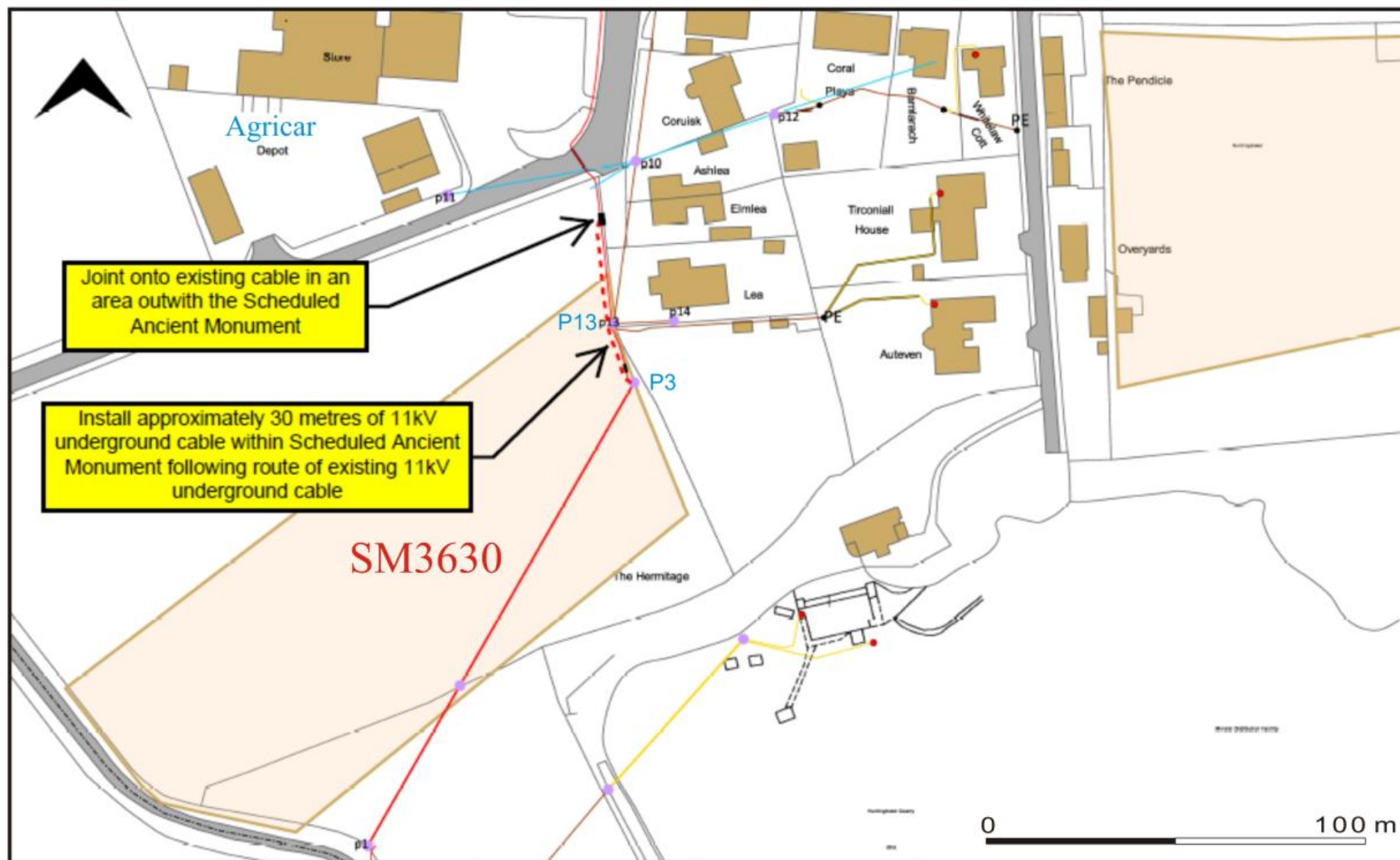
If lightly contaminated deposits are uncovered disposable boiler suits and gloves will be worn. A source of clean water will be made available for staff to clean hands with. If the health risk posed by site contamination is felt to be too high all further archaeological work will stop in that area.

Illus 1 West Mains of Huntingtower, Location



Illus 2

West Mains of Huntingtower, Trench Location

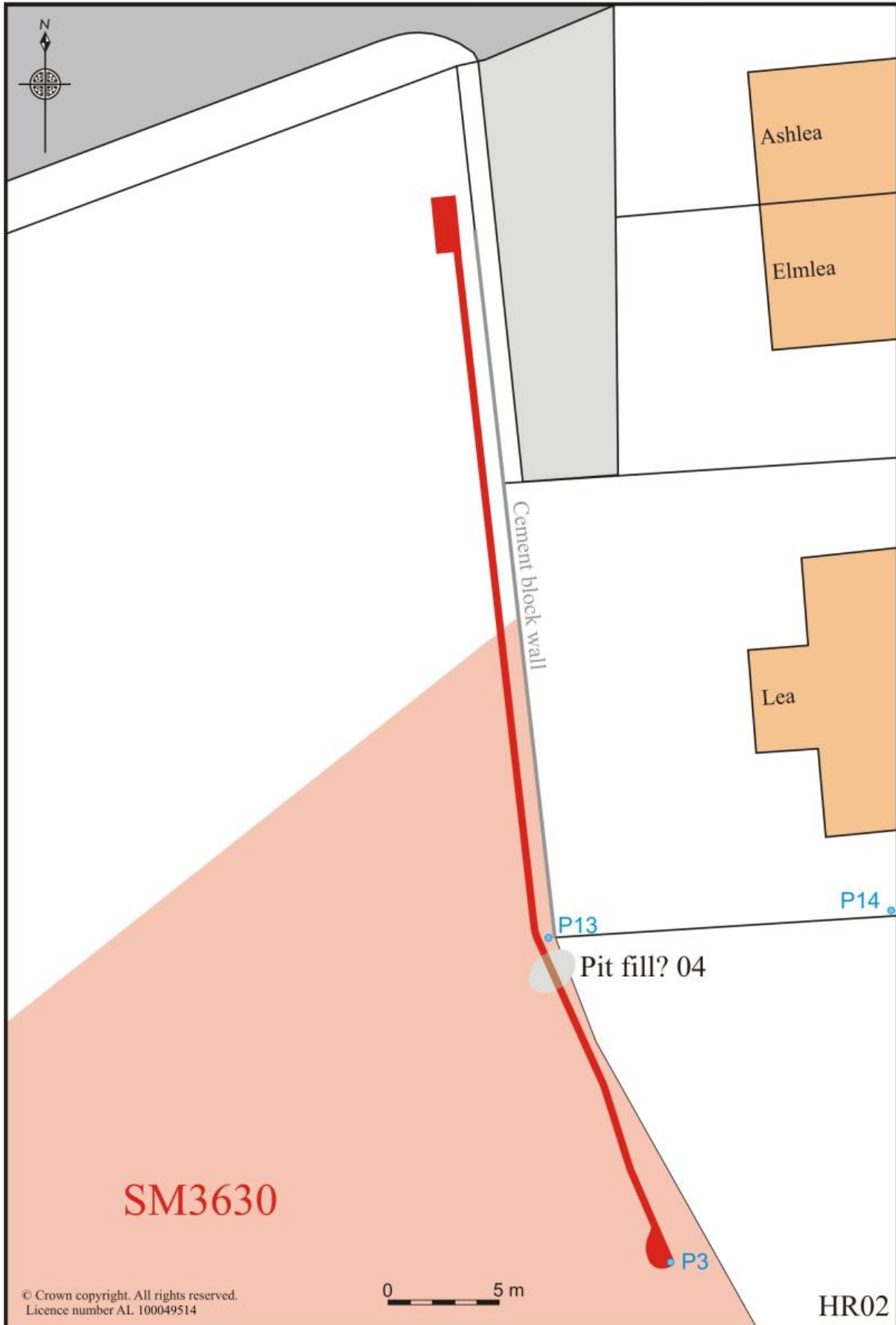


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Base plan supplied by SSEN

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Illus 3 West Mains of Huntingtower, Trench Plan



Illus 4 West Mains of Huntingtower, Aerial Photograph looking WSW



Presumed Roman pit alignments. Location of pit fill? 04 hidden by trees.
Historic Environment Scotland Aerial Photograph Collection SC0170623

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Illus 5 West Mains of Huntingtower, Aerial Photograph looking ENE



Presumed Roman pit alignments. Location of pit fill? 04 obscured by mud or vegetation.
Historic Environment Scotland Aerial Photograph Collection SC0170736

Illus 6 - 7 West Mains of Huntingtower, Photographs



6 General view E. Location of ?pit fill 04.



7 View N from
Post 3 to Post 13.

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Illus 8 - 9 West Mains of Huntingtower, Photographs

8 View N from
Post 13.



P13



9 Detail, E. Brown pit fill 04 visible in upcast, compared with gravel on either side.

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