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Lochaber Smelter, Fort William, Highland

Archaeological Metal Detector Survey
Report No. 3777

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**Lochaber Smelter, Fort William,
Highland**

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1. INTRODUCTION

1.1 General

This report presents the results of an archaeological metal detecting survey and walkover survey undertaken by CFA Archaeology Ltd (CFA) in July 2018 within an area proposed for a new aluminium alloy wheels manufacturing plant (Fig. 13). The proposed development area lies immediately to the west of Lochaber Smelter, Fort William (Fig. 1; NGR NN 1225 7474). The work was commissioned by JLL on behalf of Liberty Aluminium Lochaber Limited.

A Written Scheme of Investigation (WSI) was produced by CFA (dated 4 April 2018) and agreed in advance with Highland Council Historic Environment Team (HCHET).

1.2 Background

The proposed development site overlies the areas defined by Historic Environment Scotland (HES) for two inventory historic battlefield sites: Inverlochy I and II. Inverlochy I is the earlier of the two and is the site of a battle between the Royalist Army and forces of the Lords of the Isles in September 1431. Inverlochy II, (Fig. 14) was fought in February 1645 between the supporters of the Royalist cause under James Graham, the Marquis of Montrose, and the Covenanters under the command of Archibald Campbell, Marquis of Argyll. Both battles are listed in the Inventory of Historic Battlefields and are therefore of national importance.

An entry in the Historic Environment Record, (HER), also alludes to the possibility of a medieval settlement (MHG45326) and castle (MHG4189) at Inverlochy in the 1st millennium BC. No remains have been found to date to support the claims of early settlement in the area. The Minister of Kilmonivaig (Thomas Ross) writing in the OSA (1796) records that “*there was at one time, a thriving borough, of the same name adjacent to this building but of this borough there are now no other vestiges, than some paved works in different places, which were probably the streets of it*”. It is possible that this is a later reference to the settlement recorded in the HER; placing it in closer proximity to the castle rather than to the somewhat imprecise location point cited in the HER.

Archaeological investigations (metal detecting) on the south slopes of Tom na Faire in 2007 (Pollard 2007) found only two musket balls that could tentatively be identified as artefacts related to the second battle at Inverlochy in 1645 and no evidence of potential medieval settlement. Finds attributed to the battle of 1645 were found during construction of the Lochaber Smelter in the 1920s and the two musket balls (Pollard 2007), tentatively identified as evidence of the 1645 battle, were recovered on the lower south-facing slopes of Tom na Faire approximately 300m to the north of the proposed development site. It is possible that other artefacts of the fighting, or of the forces involved, may survive within and around the development site.

In addition to the artefact find-spot at Claggan (MHG 4131), a small hoard of Bronze Age artefacts comprising 18 bronze axes and six dagger fragments (MHG4183) was found between 1981 and 1984 at Dail na Caraidh, near the confluence of the River Lundy with the River Lochy, over 1.5 km to the northeast of the proposed

development site. These finds are indicative of late Neolithic/Bronze Age settlement and exploitation of the local riverside landscape and suggest the possibility that further finds of later prehistoric periods await discovery in the wider landscape.

The majority of the proposed development site is currently largely covered with scrub woodland and areas of concrete hardstanding from the sites previous use as the Carbon Plant for the Lochaber Smelter. The Carbon Plant has been demolished and there are demolition spoil tips and spreads of waste material, including numerous pieces of modern metal, both on areas of the surviving hardstanding and around the surrounding scrub woodland to the north and south. There are also two blocks of Scots Pine plantation, to the south and southwest of the present smelter, and these areas have been deep ploughed prior to planting. Between the two plantations there is an area of unmanaged scrub birch woodland.

Peat depth data shows that there is considerable variation in the depth of peat across the proposed development site; in places up to 4.69m deep. This variation most likely reflects the variable sub-peat ground topography. Deep peat deposits can mask underlying archaeological features.

1.3 Objectives

The objectives of the project were:

- To detect and recover artefacts of archaeological or historical origins, and to Undertake post-scrub clearance field survey to record the baseline condition of any new sites and assess their proximity to construction activities, in order to establish whether any further mitigation is required.
- Carry out metal detector surveys within the Inventory Battlefield prior to ground breaking works in order to detect and recover artefacts of archaeological or historical origins, and to identify potential areas of activity associated with the battles.
- Propose further mitigation measures that may be required as a result of the above listed works.
- Report on the results.

2. WORKING METHODS

2.1 General

Work was conducted with regard to the Chartered Institute for Archaeologists' (CIfA) Standard and Guidance as appropriate.

2.2 Metal Detector Survey

A series of 30m by 30m grids was established over the area which will be directly impacted by the development (Fig. 1 and 13) and detecting took place on a grid by grid basis. Each grid was divided into 5m wide parallel transects and these were detected systematically, typically c.1.5m apart, to ensure that the whole area was covered.

No discrimination was set on the equipment. The positions of the grids were recorded using industry-standard surveying equipment.

All metal finds that were not obviously modern rubbish or demolition material from the site's industrial use were retained for examination. All finds were bagged according to which grid and transect they came from. Finds which were specifically military in nature or potentially dateable to the period of the Battles of Inverlochy I and II were given individual small find numbers (SF), were bagged separately and were individually spatially recorded using DGPS to an accuracy of 1mm.

Certain areas of the site were unavailable for metal detecting (Fig. 2). This was due to areas of concrete hardstanding and tarmac roads from the Carbon Factory that previously occupied the site (Fig. 3), piles of rubble from the factory's demolition (Figs. 4-6), dense areas of small trees and bushes that sat within areas of waterlogged peat and moss (Figs. 7-8), a car park which has a gravel covering of up to 0.4m and an area of portacabins built on the eastern side of the car park (Figs. 9-10).

The areas that were available for metal detecting had had their covering of small trees and bushes removed (Fig. 11), either by machine or by hand to ground level, with the resulting brash removed where ground conditions allowed machine access. Other areas of scrub had not been cleared and access was attempted wherever possible (Fig. 12). An area of metal detecting in the south-east corner of the site was only possible to metal detect due to the recent unusually dry weather conditions; normally the area is 'off limits' and inaccessible because of waterlogging.

2.3 Walkover Survey

A walkover survey was undertaken alongside the metal detecting, to allow the identification of any new upstanding archaeological features. Similar constraints were faced as for the metal detector survey regarding access and ground cover.

3. ARCHAEOLOGICAL RESULTS

3.1 Walkover Survey

No new sites or features were recorded during the walkover survey.

3.2 Metal Detector Survey

The metal detector and walkover survey found that the areas of the site, especially surrounding the site of the Carbon Factory and the modern railway (Fig. 3), were heavily contaminated with modern metal debris, railroad fragments and fittings, railroad clinker and fragments of carbon. In these areas the metal detectors gave multiple signals per sweep and all were checked.

The area of trees and scrub to the immediate south of the Carbon Factory contained modern rubbish, nails, fencing material, and tin cans, especially in the areas that had been forestry planted. The areas of unmanaged scrubland were sterile of finds except near the fence line where nails and old fence posts and fittings were found.

Modern finds were not retained.

3.3 Finds, by Christina Hills

Only two finds were recovered: a register of the finds can be found in Appendix 2.

One lead musket ball was found in grid Q11/1 (Fig. 2). It has slight surface damage and is 16mm in diameter.

One grinding ball was found in grid L11/4. The grinding ball is made of a composite of lead and iron and has a lot of surface damage and an irregular diameter. It was part of a ball mill, a machine used to grind or mix materials as part of the processing that took place at the Carbon Factory.

4. CONCLUSIONS

The main focus of the Battle of Inverlochy II, according to Historic Environment Scotland's Inventory of Battlefields, took place mostly to the north and north-east of the development site (Fig. 14). On the basis of current knowledge it is difficult to place the lines with total confidence, hence on the Inventory maps two optional alignments are offered. The first of these has the Covenanters facing north-east to face an attack from Torlundy while the other has them facing east to meet an attack coming from the direction of Glen Nevis. In both cases the Covenanter left is located close to the castle. The alternate Covenanter line intrudes slightly into the northern part of the survey area, with the direction of travel of the lines being generally east to west. A single lead musket ball was recovered from the extreme southern edge of the survey area. Given that the battle would have included musket volleys followed by hand to hand fighting, the lack of musket balls in the metal detected areas indicates that the survey area must have been some distance outside of the area of the battle. The ridge traditionally identified as the Royalist position was metal detected in 2007 and again only a single musket ball was found and no other finds that could relate to the battle. It is possible that the focus of the battle was further to the north.

Large parts of the northern part of the development area have been affected by the construction of the former Carbon Factory (Fig. 3), which had extensive associated works such as railway lines, and much of which was unavailable for detecting due to the continuing presence of hardstanding and spoil heaps.

These two above factors may account for the lack of recovery of material relating to the battle. The musketball could relate to the Battle of Inverlochy II; however, its distance from the main battle area also means it could easily relate to recreational hunting in the area.

Based on the results of the metal detector survey, CFA concludes that the proposed development area is of low archaeological potential especially in the areas where the Carbon Factory used to sit. The decision regarding further mitigation rests with HCHET.

The project archive, comprising all CFA record sheets, maps and reports will be deposited with the NHRE and copies of reports will be lodged with HCHET.

A summary statement of the results of this survey will be submitted for publication in *Discovery and Excavation in Scotland* and will also be reported on through *OASIS Scotland*.

5. REFERENCES

Ordnance Survey 1959 *Inverness-Shire, Mainland, Sheet CL, 6"* to 1 mile.

Historic Environment Scotland, Inventory Battlefield, *historicenvironment.scot*
Available at: <http://portal.historicenvironment.scot/document/600016652> Accessed 4th September 2018

APPENDIX 1: Photographic Register

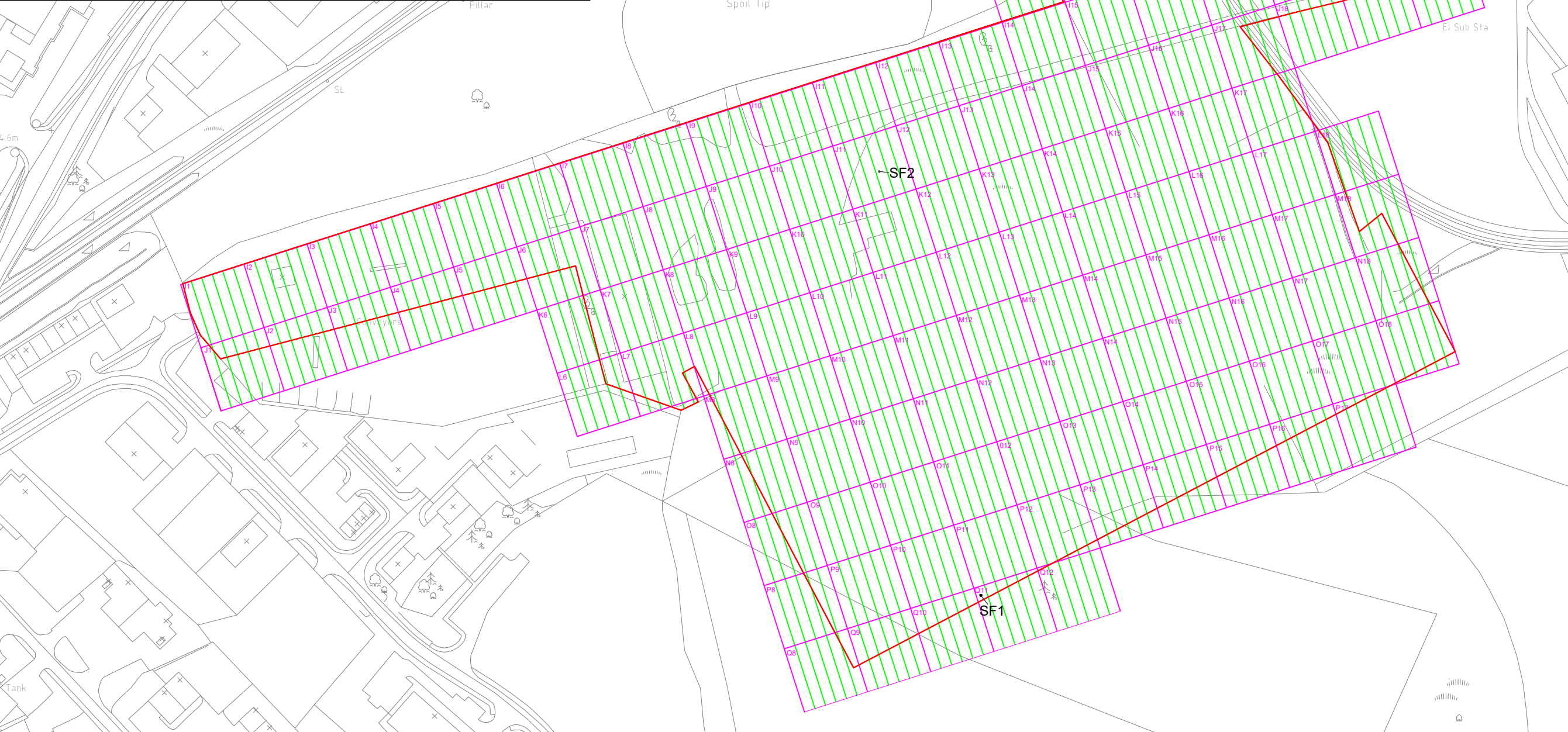
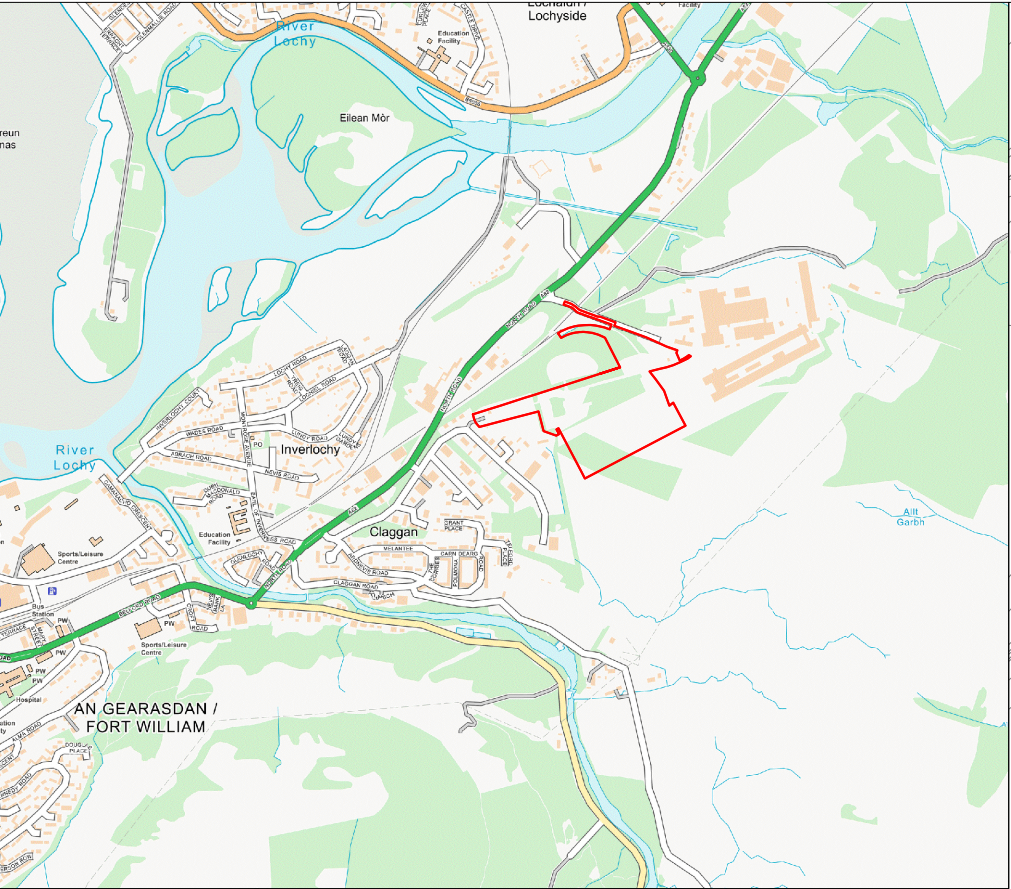
Shot No.	Summary description of subject	Facing
1	General view of site, south side	E
2	General view of site showing brash	S
3	General view of site showing stumps	S
4	Forestry rut showing depth of ruts	SE
5	Density of trees/bushes in centre of S side of site	N
6	Vegetation cover in open area centre of S side	E
7	Depth of wet area on S side of site	W
8	Brash covering area to the south of the carbon factory road	W
9	Area of concrete hardstanding	N
10	Area of levelling on S side of site	SW
11	General view of carbon factory road	W
12	General view of building footprint	S
13	Piles of building demolition	S
14	Concrete plinths	S
15	Area of dumping to the W of the carbon factory road	W
16	In situ railway lines	E
17	Area to the N of the carbon factory road	E
18	Drain in area to the N of the carbon factory road	SW
19	Area to the W of railway, N side of site	S
20	Area of ar parking with stone levelling	N
21	Area of stone levelling and portacabins	NE
22	General view of car parking area	N

APPENDIX 2: Finds Register

SF no.	Grid no.	Find type	No.	Wt (g)	Diam (mm)	Notes
1	Q11/1	Musket ball	1	22	16	Lead musket ball with damage on surface
2	J11/4	Grinding ball	1	1051	69-74	Iron and Lead composite grinding ball. Irregular surface

APPENDIX 3: Discovery and Excavation in Scotland Entry

LOCAL AUTHORITY:	Highland Council
PROJECT TITLE/SITE NAME:	Lochaber Smelter, Fort William, Metal Detector and Walkover Survey
PROJECT CODE:	LIBA
PARISH:	Kilmonivaig
NAME OF CONTRIBUTOR:	Graeme Carruthers
NAME OF ORGANISATION:	CFA Archaeology Ltd
TYPE(S) OF PROJECT:	Metal Detecting Survey
NMRS NO(S):	n/a
SITE/MONUMENT TYPE(S):	n/a
SIGNIFICANT FINDS:	n/a
NGR (2 letters, 6 figures)	NN 1225 7474 (centre)
START DATE (this season)	17 th July 2018
END DATE (this season)	23 rd July 2108
PREVIOUS WORK (incl. <i>DES</i> ref.)	none
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A metal detecting and walkover survey was undertaken within the boundary of the Battles of Inverlochy I (1431) and Inverlochy II (1645), as defined in the Inventory of Historic Battlefields. A single musketball was recovered that may relate to the 1645 battle or may relate to general recreational hunting.
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	None
SPONSOR OR FUNDING BODY:	Liberty Aluminium Lochaber Limited
ADDRESS OF MAIN CONTRIBUTOR:	CFA Archaeology Ltd, The Old Engine House, Eskmills Park, Musselburgh, East Lothian, EH21 7PQ
EMAIL ADDRESS:	cfa@cfa-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	Full archive to NHRE and copies of reports to SMR



Key:

- Site boundary
- Metal detecting grids
- Small find location

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Title:
Location plan showing metal detecting grids and location of finds

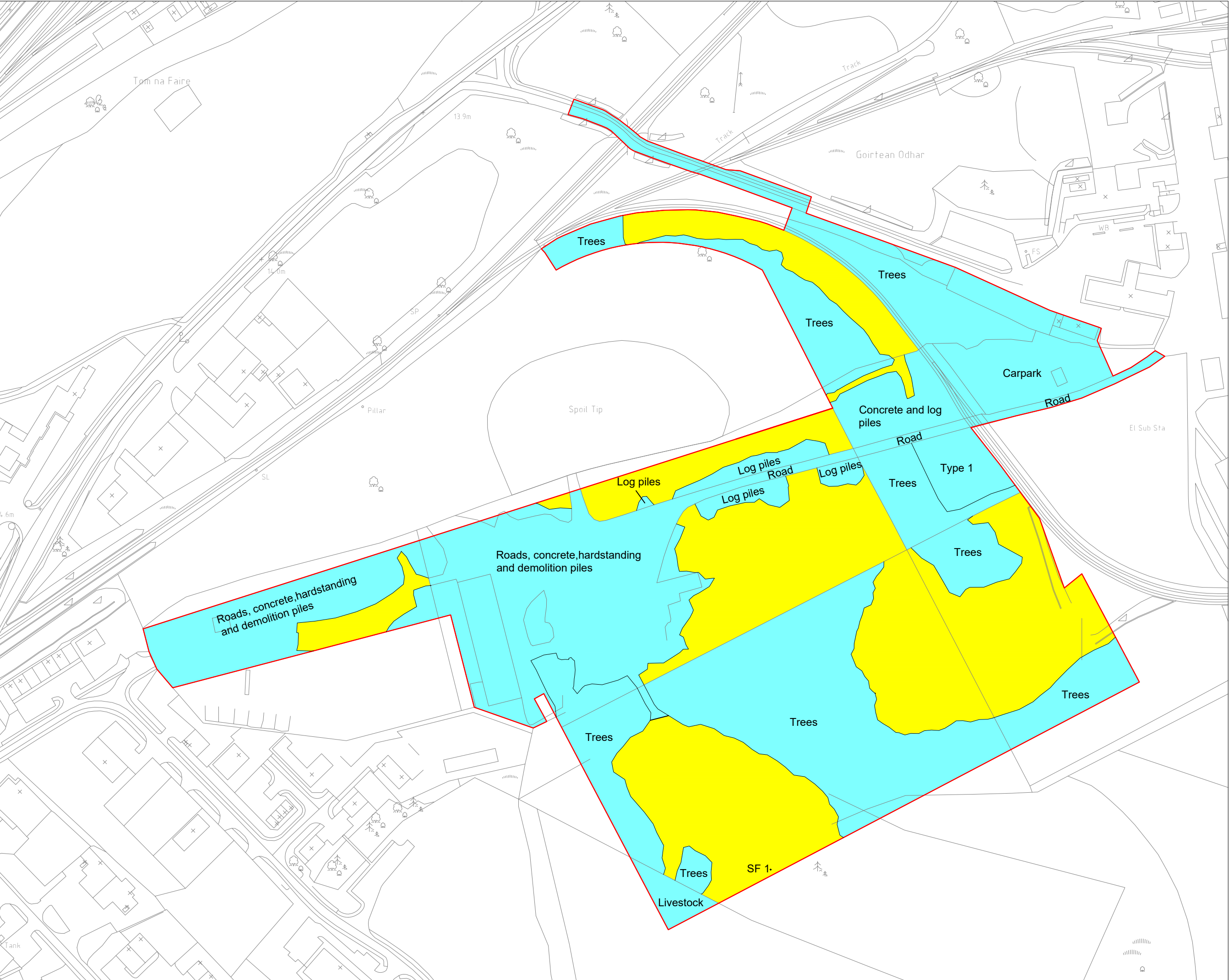
Project:
Lochaber Smelter, Fort William, Highland, Archaeological Metal Detector Survey

Client:
Liberty Aluminium Lochaber Limited

Scale at A3:
1:2000

Drawn by: GC	Checked: SW	Date: 01/08/2018
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Report No: 3777	Fig. No: 1
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Key:

- Site boundary
- Areas unavailable for metal detecting
- Areas metal detected

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Title:
Areas available for metal detecting and location of Small Find

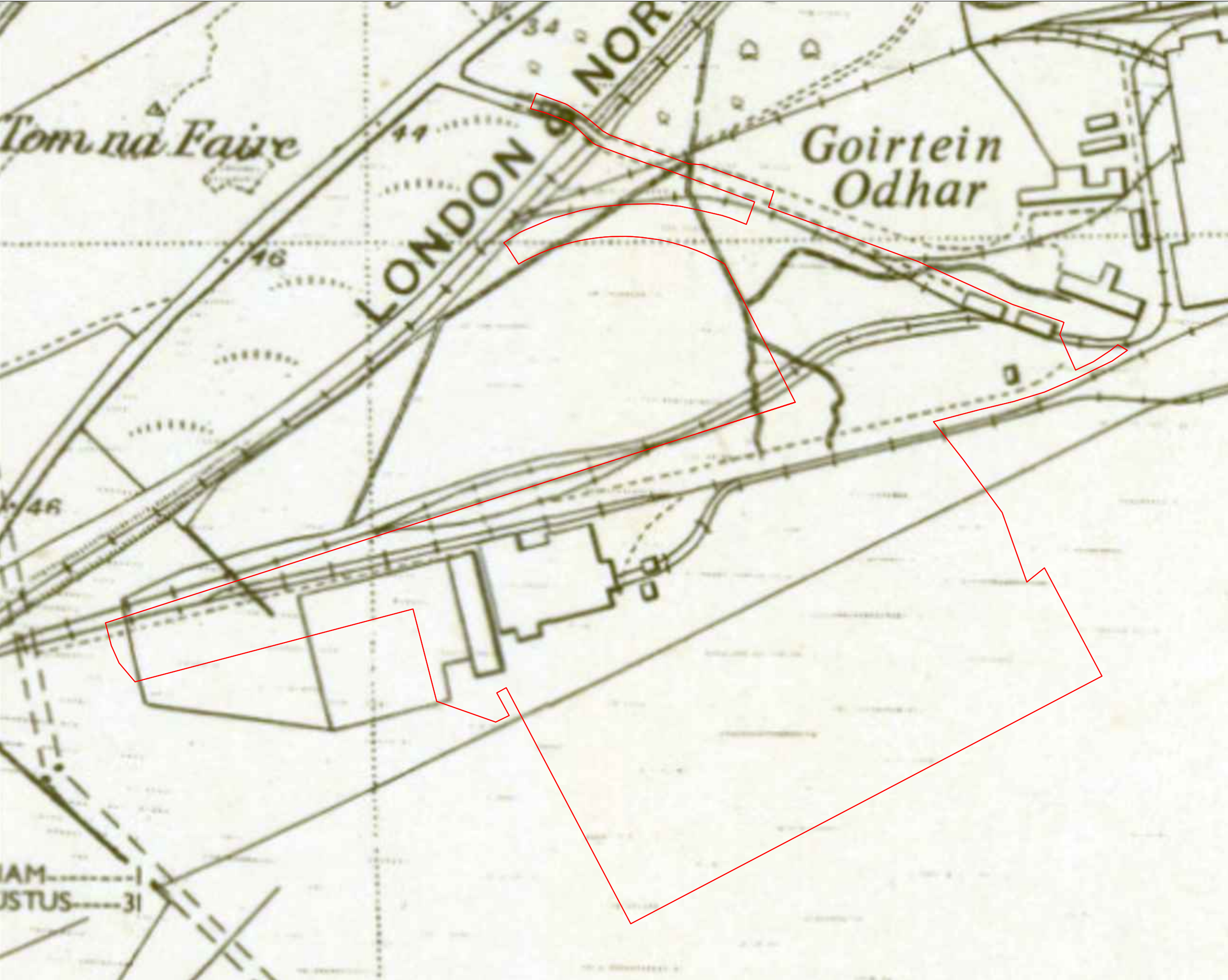
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Scale at A3:
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Drawn by: GC	Checked: SW	Date: 01/08/2018
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Report.No: 3777	Fig. No: 2
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Key:

Site Boundary

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Title:
OS Map Inverness-Shire, Sheet CL, 1959, showing footprint of Carbon Factory and associated roads and railways

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Report.No: 3777	Fig. No: 3
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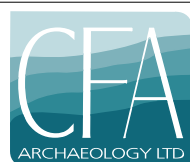


Fig. 4 Access road to Carbon Factory, looking west



Fig. 5 Concrete hardstanding at the Carbon Factory

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Fig. 6 Demolition rubble in area of the Carbon Factory



Fig. 7 Areas of trees and bushes in the centre of the site

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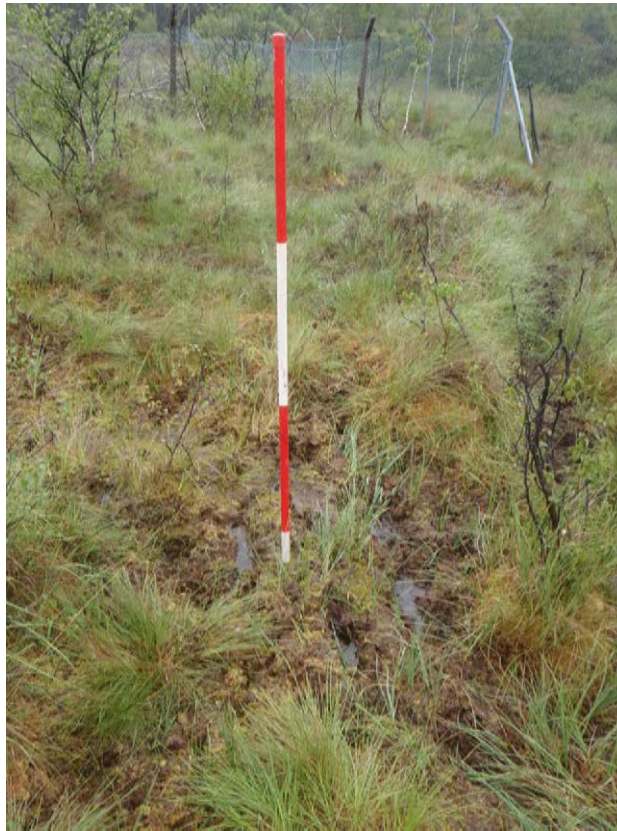


Fig. 8 Area of waterlogging in metal detecting area at the south-east of the site



Fig. 9 Car park at the east of the site with gravel covering

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Fig. 10 Portacabins to the east of the car park

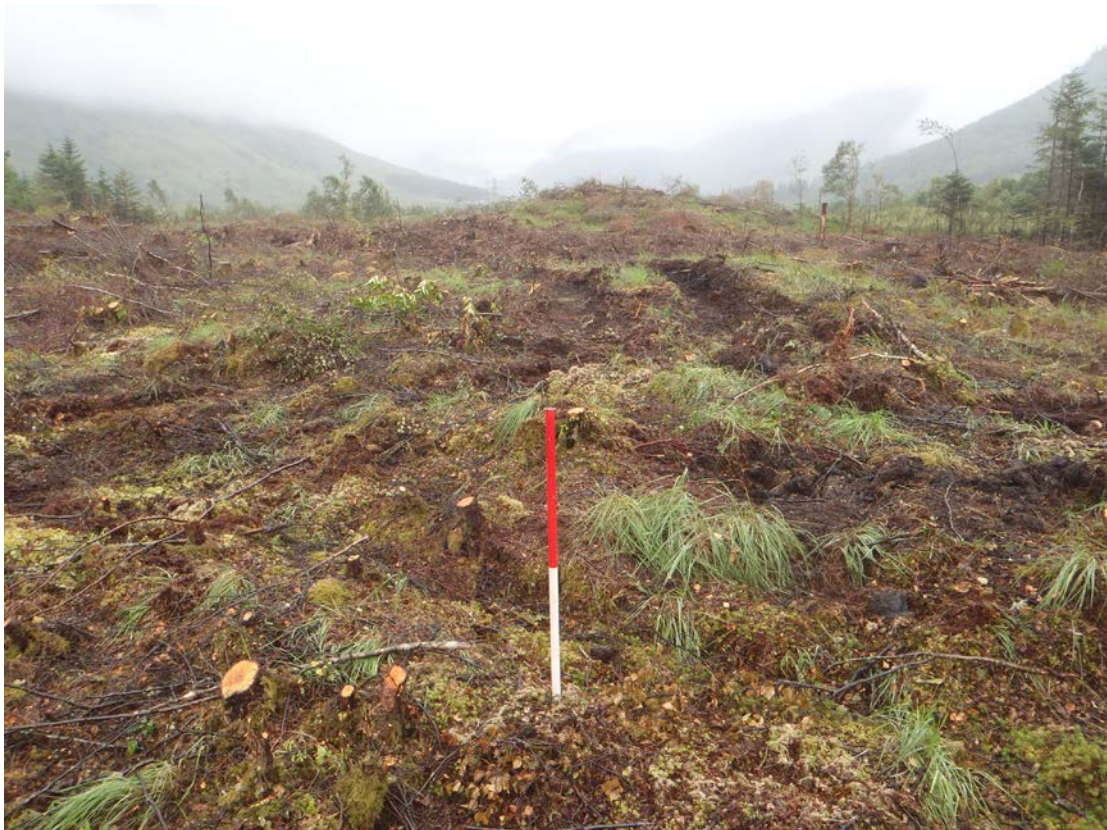


Fig. 11 Tree removal on area of higher ground in the south-west of the site

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Report No: 3777		Fig. No: 10- 11

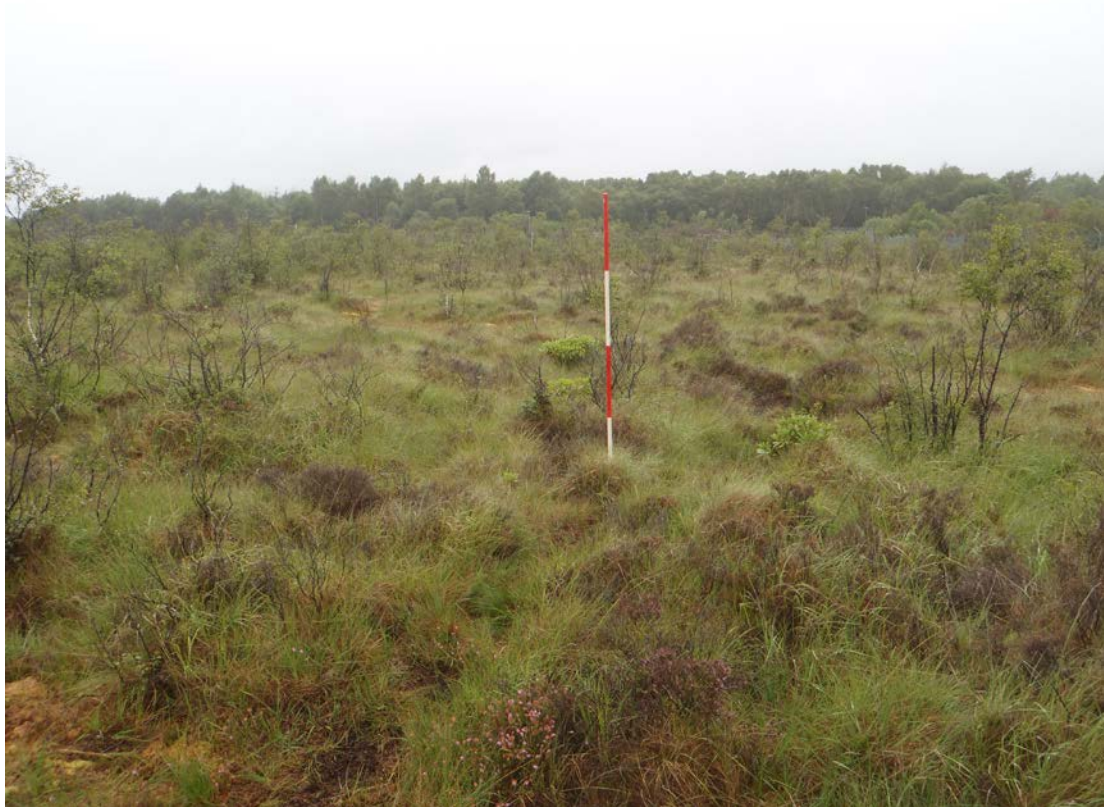


Fig. 12 Area of less dense tree coverage in the south-east of the site

Project:
Lochaber Smelter, Fort William, Highland, Archaeological metal Detector Survey

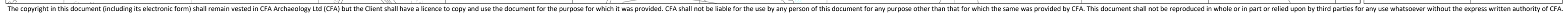


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Report No: 3777	Fig. No: 12
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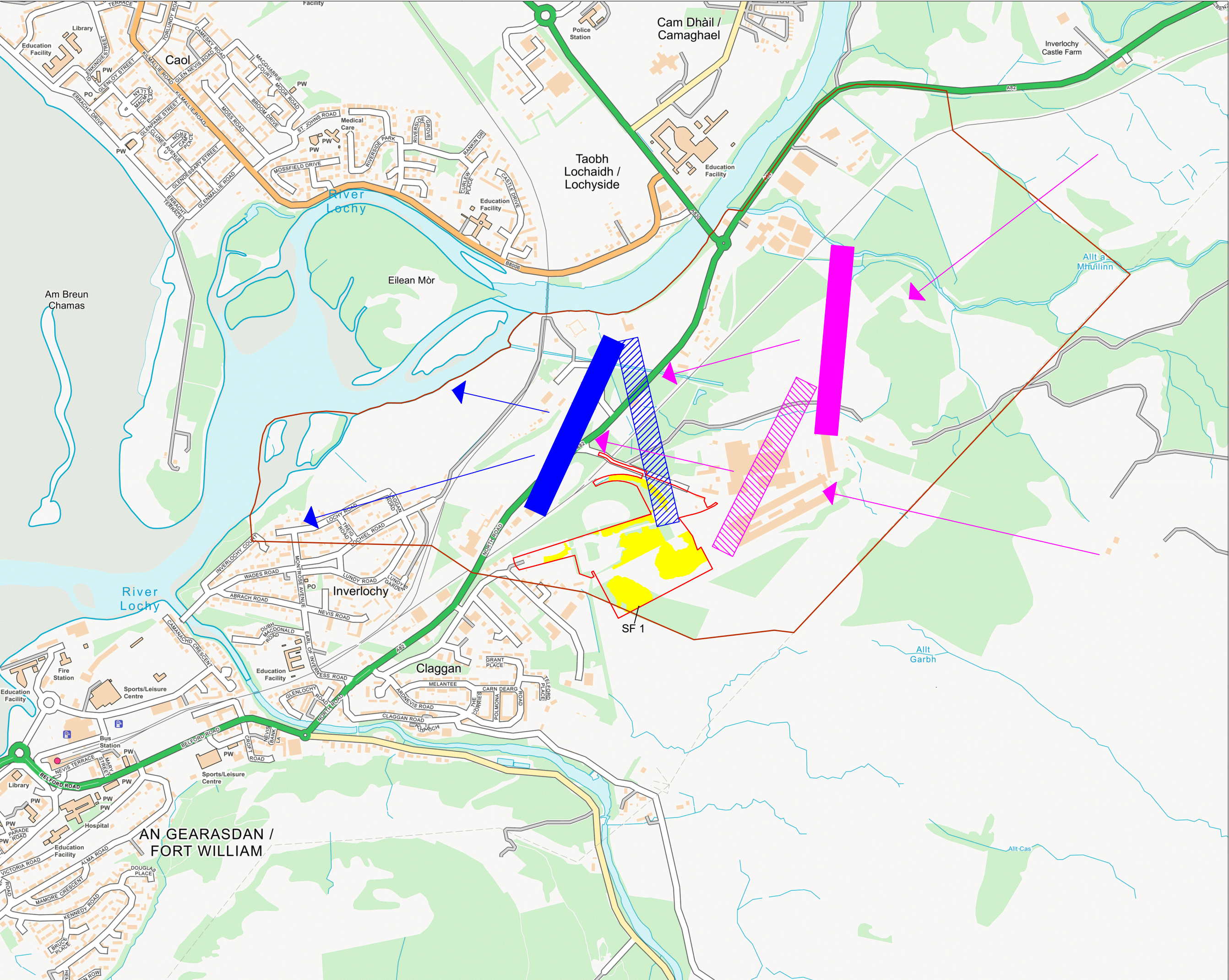


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- Key:**
- Inventory of Historic Battlefields Boundary
 - Areas metal detected
 - Royalist Lines
 - Alternative Royalist Lines
 - Covenanter Lines
 - Alternative Covenanter Lines
 - Site Boundary

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Title:
Inverlochy II Battlefield troop positions and movement, taken from Inventory of Historic Battlefields, Historic Environment Scotland

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Lochaber Smelter, Fort William, Archaeological Metal Detector Survey

Client:
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Scale at A3:
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Report.No: 3777	Fig. No: 14
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