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**Proposed Agricultural Building
Auldhouseburn Farm
Muirkirk, Cumnock
East Ayrshire**

Archaeological Survey

Report No. 3458

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Commissioned by	Alan Blackwood
Date issued	July 2016
OASIS Reference	cfaarcha1-258667
Planning Ref. No.	16/0326/PP
Version	1
Grid Ref	NS 7088 2669

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**Proposed Agricultural Building
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1. INTRODUCTION

1.1 General

This report presents the results of an archaeological survey carried out by CFA Archaeology Ltd (CFA) in July 2016 for a proposed agricultural building at Auldhouse Burn Farm, Muirkirk, Cumnock, East Ayrshire (Fig. 1) (NGR: NS 7088 2669). The work was commissioned by VE-Tech Concrete Ltd on behalf of Alan Blackwood.

A Written Scheme of investigation (WSI) dated 27 June 2016 was produced by CFA for this programme of works. The WSI was designed to fulfil the requirements of WoSAS on behalf of the planning authority.

1.2 Background

Planning permission (Ref. No. 16/0326/PP) has been granted for construction of an agricultural building at Auldhouseburn Farm, Muirkirk, Cumnock, East Ayrshire. The planning permission was subject to an archaeological condition requiring the survey of a dam, sluice and pond. This survey was required because the proposed shed falls within the Archaeological Consultation Trigger (ACT) area relating to an extensive area of upstanding remains associated with former industrial activity in the vicinity of Muirkirk and it was identified that the proposed development may have a direct impact on the aforementioned dam, sluice and pond.

The dam, sluice and pond are first depicted on the Ordnance Survey 25" Second Edition map (1896) (Fig. 2). On this map edition the pond is shown as being fed by a lade, which runs in a north-easterly direction from a weir on the Auldhouse Burn, crossing an aqueduct over an area of former quarry workings and entering the pond from the south. There is no channel depicted exiting the northern end of the pond at the sluice indicating that it probably went underground at this point. A little further to the north, a channel thought likely to represent a continuation of the outfall is depicted running northwards in the direction of Auldhouseburn Farm and passing immediately adjacent to one of the farm buildings before continuing northwards to Auldhouseburn Coal Pit. It is possible that the water from the pond may have driven a threshing mill at the farm before continuing onwards to serve some kind of industrial process related to coal mining. On the earlier Ordnance Survey 6" First Edition map (Fig. 3), the dam, pond and sluice are not depicted, but there is a more substantial watercourse running through the area from south-east to north-west. This watercourse appears to have been diverted in the late 19th century when a reservoir and water treatment works were constructed to the south-east of the proposed development area.

1.3 Objectives

The objectives of the programme of archaeological works were:

- To conduct a survey to create a record of the pond, dam and sluice prior to any change to their state resulting from construction.
- To produce an illustrated report on the survey.

2. WORKING METHODS

2.1 General

CFA follows the Chartered Institute for Archaeologists' Code of Conduct, Standards and Guidelines as appropriate. Recording of all elements was carried out following established methods.

2.2 Survey

A topographic survey was carried out of the pond, dam and sluice using industry standard surveying equipment. This survey was extended to give brief details of the lade that supplied the pond with water from the Auldhouse Burn. The topographic survey was augmented with a photographic and descriptive survey of the surviving elements.

3. ARCHAEOLOGICAL RESULTS

The survey identified a dried up pond with an inlet channel and an outlet channel. At the northern end of the pond there were the remains of a stone-faced earth dam, but the sluice no longer survived. Outwith the proposed development area there was a stone weir across the Auldhouse Burn at the start of the inlet channel, and there was an earth and wood aqueduct taking the inlet channel across an area of deep quarry workings.

Pond

The pond (Fig. 4) had completely dried up and just consisted of an area of rushes set within a natural gully. There was no evidence that this was a cut feature, but appears to have been created by constructing the dam and then diverting water from the Auldhouse Burn into it. Evidence from the First Edition Ordnance Survey map indicates that there used to be a natural watercourse running through the gully, but this had been diverted when a reservoir and water treatment plant was constructed to the south-east of the proposed development area in the second half of the 19th century. It was not possible to determine an exact size for the pond, as it would presumably have varied considerably depending on how much water was in it.

Dam

The dam consisted of earth banks with surviving traces of a stone face constructed along the south-east side against the edge of the pool (Fig. 5). It is unclear if the banks were largely man-made or if they were predominantly part of the natural topography. The dam had been constructed in two lengths with a gap in the middle for the outlet channel where the sluice would have been located. On the eastern side, the dam measured 5m in length and had a surviving length of well constructed facing wall (Fig. 6) measuring 2.4m long by 0.6m wide and surviving to a height of 0.6m. This had been constructed from rough-dressed quarried stone. On the western side, the dam measured 8m in length and survived to a height of c.0.6m. There was no surviving facing on this side, with just a few random stones within the earth bank being in

evidence.

Outlet Channel

The outlet channel (Fig. 7) ran from the dam in a north-westerly direction, disappearing underground at the edge of the existing farm track. It had a width of 0.6m and a depth of 0.4m, and had been partially lined with half-section concrete piping. Evidence from the 1896 Ordnance Survey map suggests that it initially ran to Auldhouseburn Farm where it may have driven a threshing mill and then continued to Auldhouseburn Coal Pit.

Inlet Channel

The inlet channel (Fig. 8) ran from Auldhouse Burn to the pond, continuing along the base of the pond to the dam. It was largely silted up with a grassy base and generally had a width of 1.3m and a depth of 0.3m. At the start of the inlet channel there was a stone built weir (Fig. 9) across the Auldhouse Burn and part way along there was an earth and wood aqueduct (Fig. 10) carrying a large diameter pipe across deep former quarry workings. The weir and the aqueduct were situated well outwith the proposed development area. The inlet, weir and aqueduct are shown on the 1896 OS map.

4. CONCLUSION

A survey was carried out by CFA Archaeology Ltd at Auldhouseburn Farm in advance of the construction of an agricultural building. Information from the 1896 Ordnance Survey map suggested that there was a pond, dam and sluice within the proposed development area. These features were part of a system taking water from the Auldhouse Burn to Auldhouseburn Farm and Auldhouseburn Coal Pit, presumably to drive machinery such as a threshing mill at the farm or a water wheel for driving a pump at the mine. The survey recorded the remains of a stone-faced earth dam constructed across a natural gully with an inlet channel from the Auldhouse Burn and an outlet channel exiting to the north-west in the direction of Auldhouseburn Farm. The sluice was no longer present. A stone weir was identified where the inlet channel exited the Auldhouse Burn and an earth and stone aqueduct was identified where the outlet channel crossed an area of deep quarry workings but both of these features lay well outwith the proposed development area.

CFA recommends that no further work is required in relation to this development. However, it is understood that the final decision lies with WoSAS on behalf of the planning authority.

The project archive, comprising all CFA record sheets, maps and reports, will be deposited with Historic Environment Scotland (HES) and copies of reports will be lodged with the East Ayrshire Council Sites and Monuments Record.

A summary statement will be submitted for publication in *Discovery and Excavation in Scotland* (Appendix 2) and will also be reported on through *OASIS Scotland*.

5. Bibliography

Cartographic

Ordnance Survey 6" First Edition map (1860) *Ayrshire Sheet XXXI*

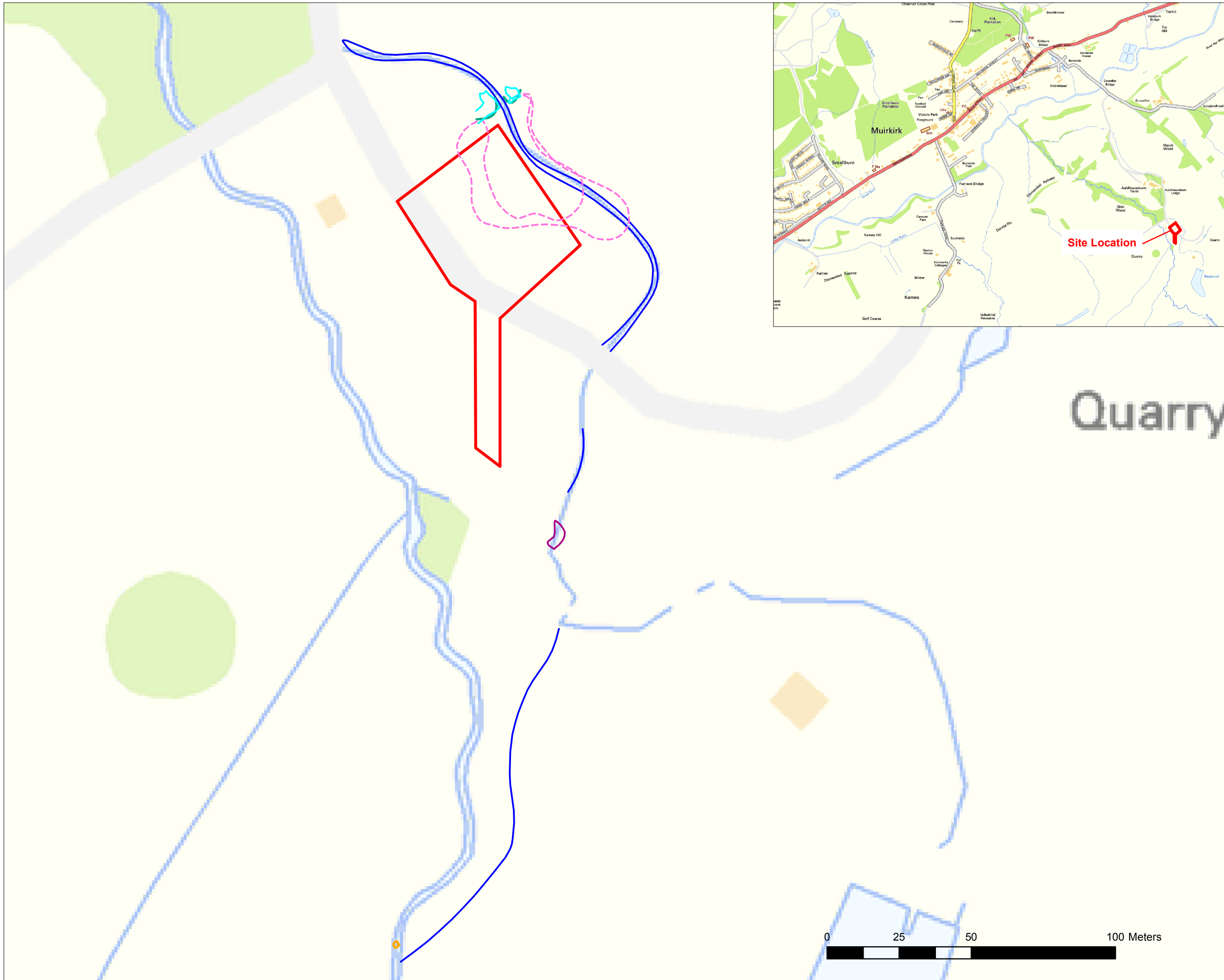
Ordnance Survey 25" Second Edition map *Ayrshire Sheet 031.05*

APPENDIX 1: Digital Photograph Register

Photo No.	Description	Taken From
1	Outlet channel from pond	East
2	Outlet channel from pond	West
3	Outlet channel from pond	East
4	Outlet channel looking towards dam	NW
5	Dam to east of outlet channel showing stone facing	SE
6	Dam on NE side of outlet channel	East
7	Dam on NE side of outlet channel	SW
8-9	General shot of dam	SW
10	General shot of dam	NE
11	General area shot showing dam and part of pond	East
12-18	General shots of pond	Various
19	General shot of dam	NE
20-21	Dam on NE side of outlet channel	SW
22-25	Channel along base of dried up pond	Various
26	Inlet channel	South
27-34	General shots of pond from southern side	Various
35	Aqueduct	North
36	Aqueduct	NW
37-38	Aqueduct	South
39	Aqueduct	SE
40	Aqueduct	West
41-44	Series of shots showing inlet channel to south of aqueduct	South
45-46	Weir on Auldhouse Burn	North

APPENDIX 2: Discovery and Excavation in Scotland Entry

LOCAL AUTHORITY:	East Ayrshire
PROJECT TITLE/SITE NAME:	Proposed Agricultural Building, Auldhouseburn Farm, Muirkirk, Cumnock, East Ayrshire
PROJECT CODE:	HEAP
PARISH:	Muirkirk
NAME OF CONTRIBUTOR:	Magnus Kirby
NAME OF ORGANISATION:	CFA Archaeology Ltd
TYPE(S) OF PROJECT:	Walkover Survey
NMRS NO(S):	N/A
SITE/MONUMENT TYPE(S):	Dam, Pond
SIGNIFICANT FINDS:	N/A
NGR (2 letters, 6 figures)	NS 7088 2669
START DATE (this season)	July 2016
END DATE (this season)	July 2016
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A survey was carried out by CFA Archaeology Ltd at Auldhouseburn Farm in advance of the construction of an agricultural building. Information from the 1896 Ordnance Survey map suggested that there was a pond, dam and sluice within the proposed development area. These features were a part of a system taking water from the Auldhouse Burn to Auldhouseburn Farm and Auldhouseburn Coal Pit, presumably to drive machinery such as a threshing mill at the farm or a water wheel for driving a pump at the mine. The survey recorded the remains of a stone-faced earth dam constructed across a natural gully with an inlet channel from the Auldhouse Burn and an outlet channel exiting to the north-west in the direction of Auldhouseburn Farm. The sluice was no longer present. A stone weir was identified where the inlet channel exited the Auldhouse Burn and an earth and stone aqueduct was identified where the outlet channel crossed an area of deep quarry workings but both of these features lay well outwith the proposed development area.
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	None
SPONSOR OR FUNDING BODY:	Alan Blackwood
ADDRESS OF MAIN CONTRIBUTOR:	CFA Archaeology Ltd, Old Engine House, Eskmills Park, Musselburgh, EH21 7PQ.
EMAIL ADDRESS:	cfa@cfa-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited with HES, Reports lodged with SMR.



- Key:**
- Site Boundary
 - Inlet/Outlet
 - Earth Bank
 - Pond
 - Aqueduct
 - Dam
 - Weir



Quarry

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Title:
Location map

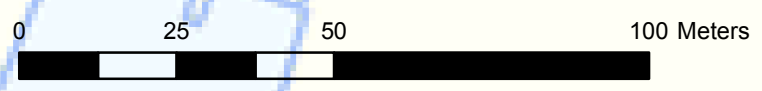
Project:
**Proposed Agricultural Building,
 Auldhouseburn Farm, Muirkirk,
 Cumnock, East Ayrshire**

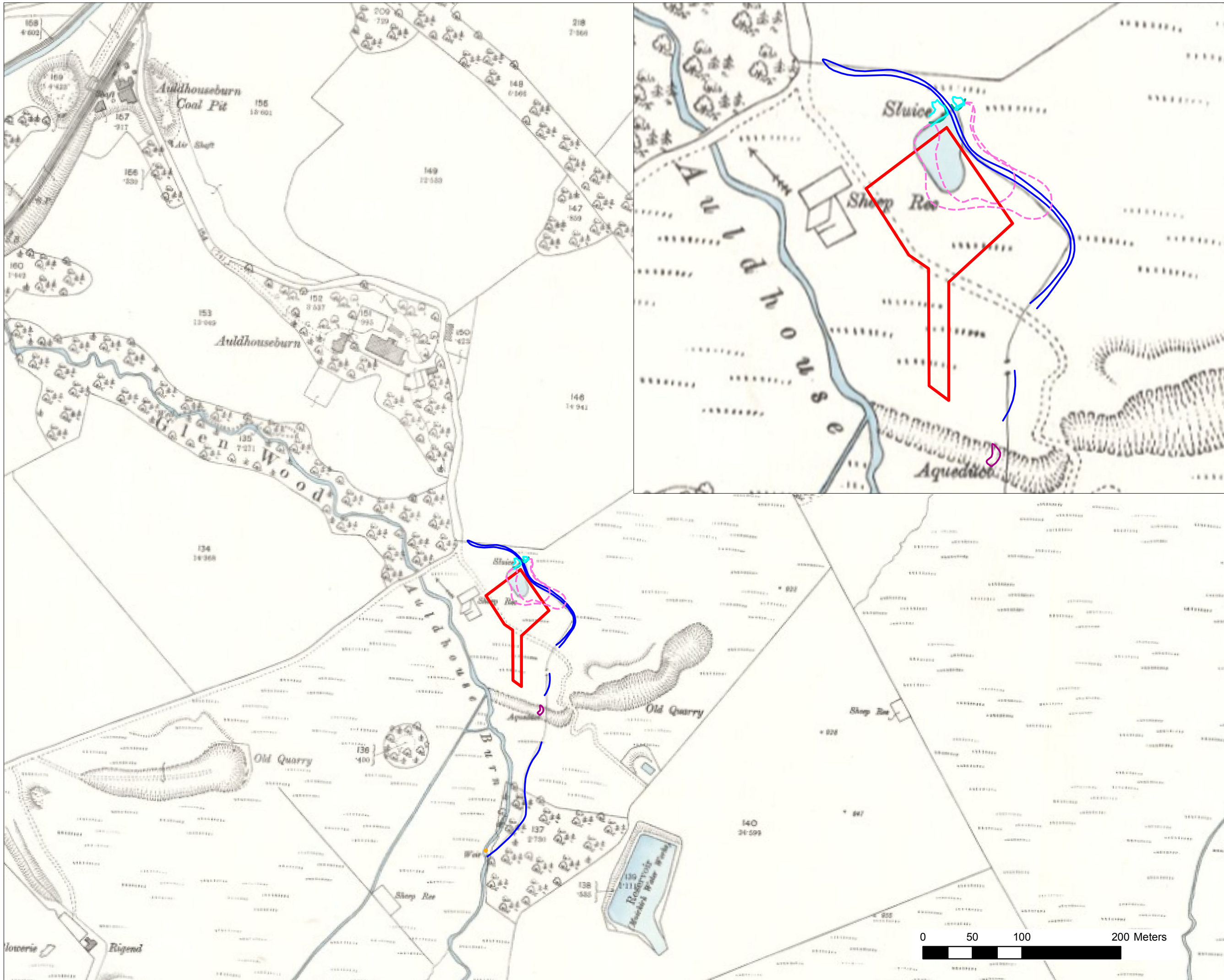
Client:
Alan Blackwood

Scale at A3:
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Drawn by: MP	Checked: SW	Date: 27/07/2016
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Report No: 3458	Fig. No: 1
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Key:

- Site Boundary
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- Dam
- Weir



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Title:
 Extract from 1896 Ordnance Survey map

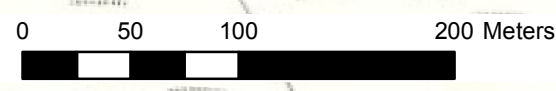
Project:
 Proposed Agricultural Building, Auldhouseburn Farm, Muirkirk, Cumnock, East Ayrshire

Client:
 Alan Blackwood

Scale at A3 (main plan):
 1:3,500

Drawn by: MP	Checked by: SW	Date: 27/07/2016
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Report No: 3458	Fig. No: 2
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Key:

- Site Boundary
- Inlet/Outlet
- Earth Bank
- - - Pond
- Aqueduct
- Dam
- Weir



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Title:
 Extract from 1860 Ordnance Survey map

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Client:
 Alan Blackwood

Scale at A3:
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Drawn by: MP	Checked by: SW	Date: 27/07/2016
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Report No: 3458	Fig. No: 3
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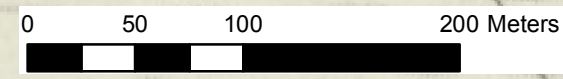




Fig. 4 - Location of dried up pond



Fig. 5 - General shot of dam

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Fig. 6 - Stone facing on dam



Fig. 7 - Outlet channel

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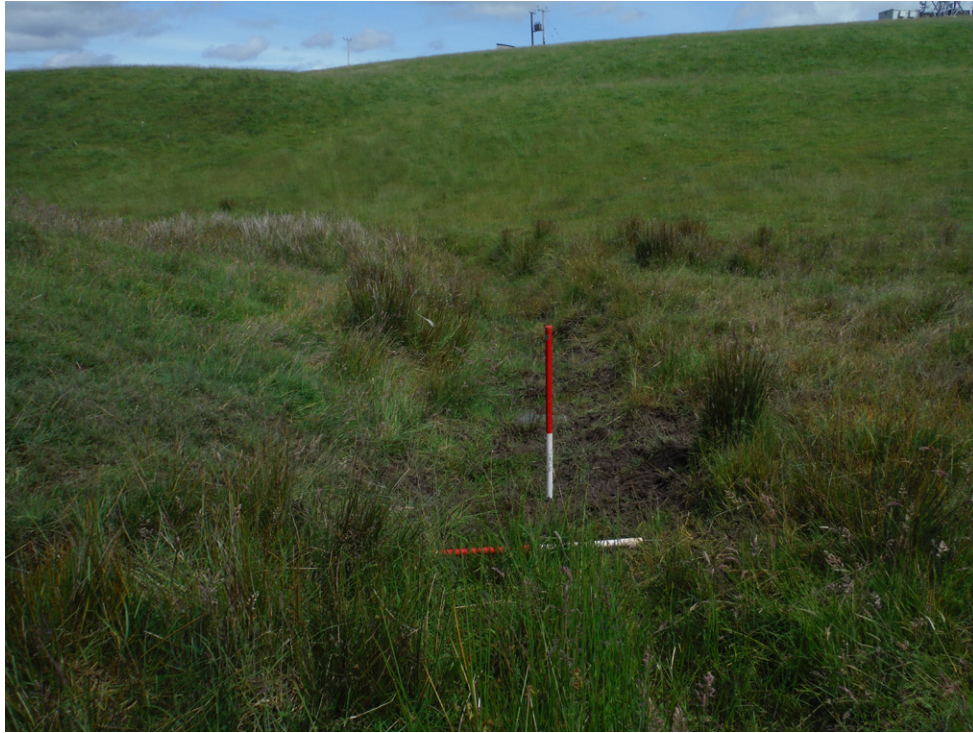


Fig. 8 - Inlet channel



Fig. 9 - Weir in Auldhouse Burn

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Fig. 10 - Aqueduct carrying inlet channel

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