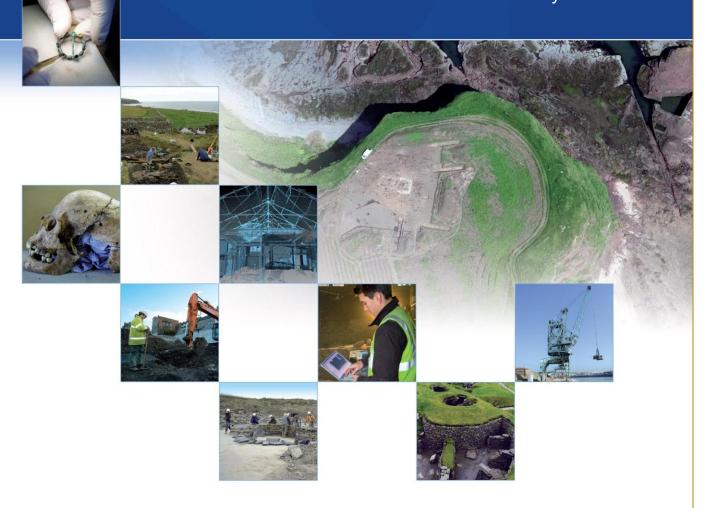
# West Barns Dunbar, East Lothian: Archaeological Evaluation Data Structure Report

AOC Project 23493 aocarcha1-08<sup>th</sup> July 2016





# West Barns, Dunbar, East Lothian Archaeological Evaluation Data Structure Report

On Behalf of: CALA Homes

**Cairnlee Houise** 

**Callendar Business Park** 

**Callendar Road** 

Falkirk FK1 1XE

National Grid Reference (NGR): NT 66352 78229 (centred)

AOC Project No: 23493

**OASIS ID:** 

Planning Application No: 12/00553/PPM

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Date of Fieldwork: 05<sup>th</sup> July 2016

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This document has been prepared in accordance with AOC standard operating procedures.

Author: Nicholas Johnstone Date: 8th July 2016

Approved by: Ross Murray Date: 12<sup>th</sup> July 2016

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#### **Summary**

AOC Archaeology Group were commissioned by CALA homes Ltd. to conduct and archaeological evaluation prior to the construction of a new residential development at West Barns, East Lothian (NT 66352 78229) (Planning Ref. No. 12/00553/PPM).

A 5% evaluation of the 5.7 ha site was undertaken comprising 1449 linear metres of trenching. The evaluation revealed a series of gullies and pools filled with decayed organics and peat in between higher sandy ridges were present beneath the topsoil. The archaeological remains consisted of a group of three pits of unknown date or function, located on a flatter area at the north end of the site.

#### 1 INTRODUCTION

#### 1.1 Background

- 1.1.1 AOC Archaeology Group was commissioned by CALA Homes LTD to undertake an archaeological evaluation prior to the construction of a proposed residential development of 90 houses on land adjacent to Beveridge Row, Belhaven, West Barns. (Planning Ref. No. 12/00553/PPM). The evaluation was undertaken in order to satisfy the requirements of the local planning authority, East Lothian Council (ELC) who are advised on archaeological matters by Mr. Andrew Robertson, Archaeology Officer, of East Lothian Council Archaeology Service (ELCAS).
- 1.1.2 The archaeological works were conducted in accordance with the principles set out in Scottish Planning Policy (2010) & Planning and Archaeology 2/2011 (2011).

#### 1.2 Location

1.2.1 The proposed development area is a plot of undeveloped agricultural land located just to the south of Edinburgh Road between West Barns and Dunbar centred on NGR: NT 66352 78229.

#### 1.3 Archaeological background

- 1.3.1 The development area lies adjacent to the Belhaven conservation area and to the west of the site of the second battle of Dunbar fought between English troops under Cromwell and Scottish loyalist troops fighting for Charles II. The development area also lies within the speculated path of the English army advance during the battle.
- 1.3.2 There are a number of listed buildings, predominantly 19<sup>th</sup>/ 20<sup>th</sup> century cottages, surrounding the development area, these are located mainly to the north-east and east of the site within the Belhaven conservation area. A single structure MEL4664 referred to as Sycamore Lodge, a 19<sup>th</sup> century single storey cottage, is located at the north-west corner of the site.
- 1.3.3 There are no known archaeological remains within the development area but, given the proximity of the development area to the site of the second battle of Dunbar 1650 and the Belhaven conservation area, the potential for archaeological remains were high.

#### **2 OBJECTIVES**

- 2.1 The objectives of the archaeological evaluation were:
  - to determine and assess the character, extent, condition, quality, date and significance of any buried archaeological remains within the proposed development area through evaluation trenching;
  - ii) to advise and implement an appropriate form of archaeological mitigation, such as excavation, post-excavation analyses and publication, should significant archaeological remains be encountered that cannot be preserved *in situ*.

#### 3 METHODOLOGY

#### 3.1 Archaeological Evaluation

- 3.1.1 The evaluation consisted of machine trenching of a 5% sample of the 5.7 ha development area. This equated to 2850 m² or 1425 linear metres. This was undertaken with a tracked 360° excavator equipped with a 2m wide flat-bladed ditching bucket. A total of 1449 linear meters of evaluation trenching was opened with the trenches being positioned to provide even coverage across the development area. In addition, a 24m² extension was excavated around archaeological features present in Trench 1.
- 3.1.2 Excavation was undertaken in units/spits until the first significant archaeological horizon or natural subsoil was reached. All machine excavation was supervised by an experienced field archaeologist and according to AOC Archaeology Group's standard operating procedures, and as per the methodology within the Written Scheme of Investigation (AOC 2016). All trenches were backfilled with the removed material to the existing ground level..

#### 4 RESULTS

#### 4.1 Introduction

- 4.1.1 The archaeological works were conducted between the 5<sup>th</sup> and 7<sup>th</sup> July 2016. Weather conditions were mostly bright and dry with some light rain and the archaeological visibility remained good throughout. Archaeological features were only present in one trench (Trench 1).
- 4.1.2 The results of the evaluation are summarised below. A full description of the trenches and archaeological features can be found in Appendix 1-3.

#### 4.2 Archaeological Evaluation

- 4.2.1 A layer of agricultural topsoil, ranging from 0.3m to 0.5m deep, composed of grey/brown silt-sand and clay containing fragments of 19<sup>th</sup> and 20<sup>th</sup> century ceramics and glass was present across the whole development area. The underlying natural subsoil was found to consist of ridges of clay, sands, and gravels on either side of the field which stepped down to a flatter plateau of sand at the north. Between these ridges were a series of hollows and gullies filled with decayed organic material and peat accumulated over boulder clay (Plate 1). These varied in depth from around a metre to over two metres. In addition, these deeper areas were filled by a sterile subsoil (B-horizon) of medium brown sandy clay which varied in depth from a few centimetres to close to a metre.
- 4.2.2 Archaeological features were only present in Trench 1, which contained an oval pit [101] with concave sides and a flat base (1m long x 0.7m wide by 0.25m deep) (Plate 2). An extension to Trench 1 (Trench 10) uncovered two further pits to the south [1001], and [1003]. These were of similar shape and dimensions and contained a similar fill of grey/brown sandy clay. No artefact were recovered from the pits.

4.2.3 A variety of field drains were present across the development area including ceramic drains, rubble drains, plastic conduits and a stone lined culvert containing a large diameter ceramic drain.



Plate 1: Depth of peat in trench 9



Plate 2: Pits [101], [1001], [1003] in trench 1 and extension trench 10

#### 5 **CONCLUSION AND RECOMMENDATIONS**

5.1 The proposed development area was subject to a comprehensive archaeological evaluation and three features (pits) were present. The date and function of the pits could not be ascertained from the evidence gathered during the evaluation. The pits were confined to a flat area of the site and it is recommended that further excavation around their location may reveal further archaeological features. This is a recommendation pending approval by ELCAS on behalf of East Lothian Council.

#### 6 **BIBLIOGRAPHY**

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Scottish Government, 2011, Planning And Archaeology 2/2011.

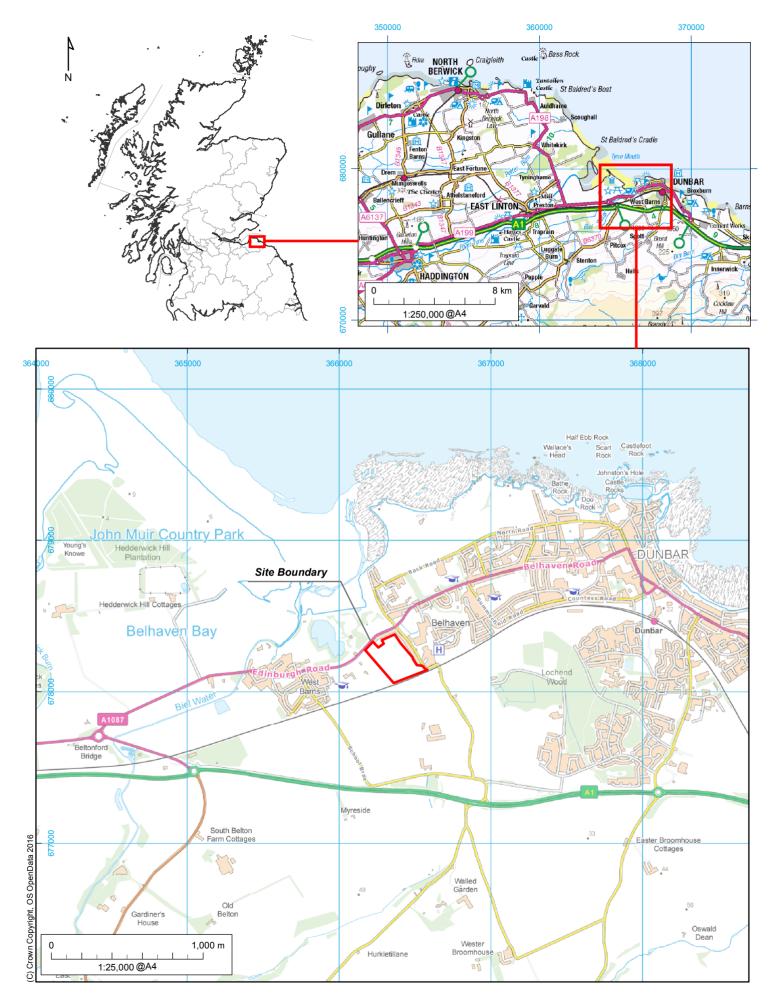
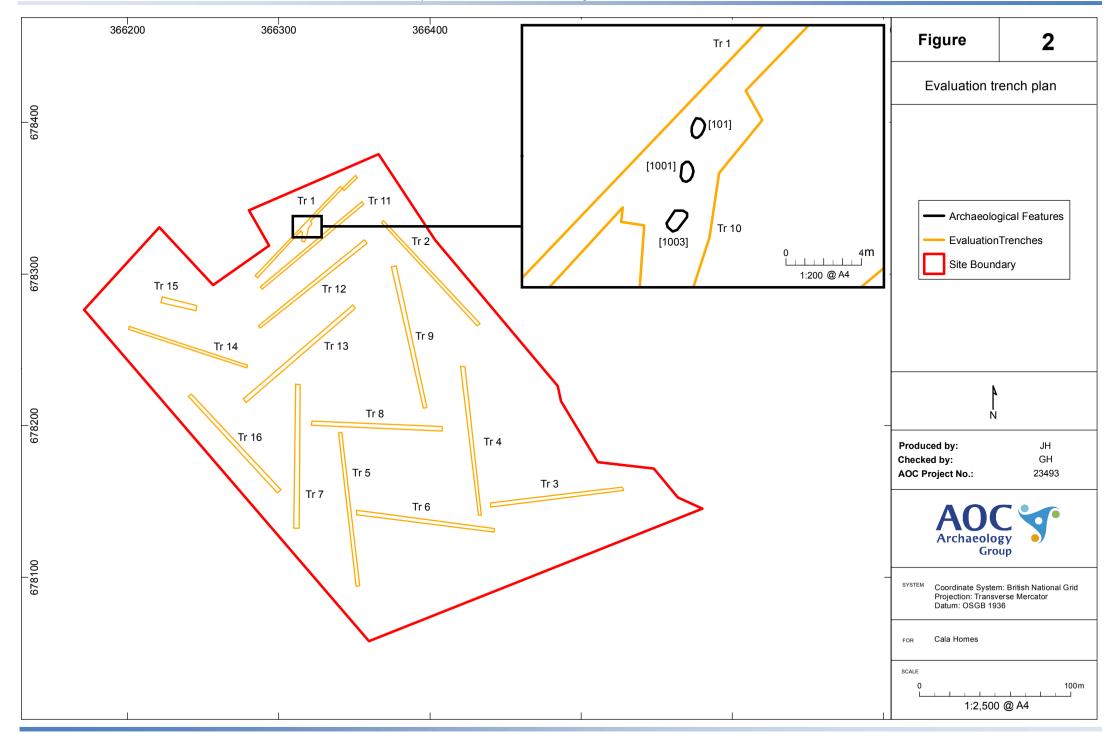


Figure 1: Site location



West Barns, **East Lothian: Archaeological Evaluation Data Structure Report** 

**Section 2: Appendices** 

#### **APPENDIX 1: Trench Descriptions**

#### Trench 1

**Dimensions** 100 m by 2 m Total Area 200 m<sup>2</sup> **Excavated Orientation** NE to SW

Topsoil - grey/brown sandy clay + silt + roots + vegetation + occasional 19<sup>th</sup>/20<sup>th</sup> century Soil Make-up

ceramics - 0.3-0.5 m

Lighter brown sandy clay + broken red field drain fragments - 0.3-0.4 m B-Horizon Make-up

Significant Features Pit [101] at 45m from NE end filled by deposit (102)

Other Features Rubble and ceramic drains orientated N-S and E-W at 2 m intervals

Natural Subsoil Pale orange/brown + grey sandy clay > pale brown/orange sand > red/orange gravel + sand +

rocks

Finds None

#### Trench 2

**Dimensions** 100 m by 2 m Total Area 200 m<sup>2</sup> **Excavated Orientation** NW to SE

Topsoil – grey/brown sandy silt + clay, occasional 19<sup>th</sup>/20<sup>th</sup> century ceramics and glass Soil Make-up

fragments - 0.2-0.5 m

B-Horizon Make-up Lighter brown sandy clay + broken red field drain fragments - 0.5-0.8 m

Significant Features

Other Features Rubble and ceramic drains (0.6 m wide) orientated NE-SW at SE end of trench and a buried

service cut at NW end

Natural Subsoil Pale orange/brown + grey sandy clay > pale brown/orange sand > red/orange gravel + sand +

rocks

Finds None

#### Trench 3

**Dimensions** 100 m by 2 m Total Area 200 m<sup>2</sup> **Excavated Orientation** E to W

Topsoil - grey/brown sandy clay + silt - 0.2-0.4 m Soil Make-up

None B-Horizon Make-up Significant Features None

Other Features Rubble drains orientated N-S in W half of trench

Natural Subsoil Red/pink sandy clay + gravel + rounded rocks + brown clay + pink sand + lots of organic

material

Finds None

#### Trench 4

**Dimensions** 100 m by 2 m Total Area 200 m<sup>2</sup> **Excavated Orientation** N to S

Soil Make-up Topsoil – grey/brown sandy clay + silt - 0.3-0.5 m

Upper mid brown sandy clay - 0.1-0.5 m + Lower black organic over pale grey/blue clay - 0.2-B-Horizon Make-up

0.4 m

Significant Features None

Other Features Rubble field drains of varying orientation throughout trench ranging between NW-SE and NE-

SW

Natural Subsoil Pink/brown sandy clay **Finds** None

Trench 5

**Dimensions** 100 m by 2 m Total Area 200 m<sup>2</sup> N to S **Excavated Orientation** 

Soil Make-up Topsoil – grey/brown sandy clay + silt - 0.3-0.4 m

Mid brown sandy clay - 0.2-0.4 m B-Horizon Make-up

Significant Features None

Other Features Ceramic drains at S and N ends orientated E-W and NW-SE respectively > natural hollow 0-

10 m from S end filled with peaty organic deposit over blue/green clay up to 1.2 m deep as

seen in Trench 4

Natural Subsoil Grey/brown sandy clay + rocks > red/pink clay/sand gravel + rocks > red/pink sandy clay

Finds None

Trench 6

**Dimensions** 100 m by 2 m 200 m<sup>2</sup> Total Area Excavated Orientation F to W

Soil Make-up Topsoil – grey/brown sandy clay + silt - 0.3-0.5 m

B-Horizon Make-up Upper mid brown sandy clay > Lower black organic over pale grey/blue clay - 0.1-1.1 m

Significant Features None

Other Features Two rubble drains orientated NW-SE at E end of trench > natural hollow at base of hill

between 40-85 m from W end with peat + clay deposit fill up to 1.6 m deep (natural water

filled bowl/hollow between two natural hills)

Natural Subsoil Red/pink sandy clay

Finds None

Trench 7

**Dimensions** 100 m by 2 m Total Area 200 m<sup>2</sup> **Excavated Orientation** N to S

Soil Make-up Topsoil - grey/brown sandy clay + silt - 0.2-0.4 m

B-Horizon Make-up Upper mid brown sandy clay > Lower black organic over pale grey/blue clay - 0.3-1.2 m

Significant Features None

Other Features Numerous rubble drains in N half of trench orientated between NW-SE and NE-SW > at 58 m

from N end natural drop filled with B-Horizon makeup

Natural Subsoil Pink/brown sandy clay

Finds None

Notes Due to depth and flooding this trench was not all fully excavated to natural subsoil

Trench 8

**Dimensions** 100 m by 2 m Total Area 200 m<sup>2</sup> **Excavated Orientation** E to W

Soil Make-up Topsoil - grey/brown sandy clay + silt - 0.4 m

Upper mid brown sandy clay > Lower black organic over pale grey/blue clay - 0.4-1.2 m B-Horizon Make-up

Significant Features None

Rubble field drains at E end of trench orientated NEE-SWW > ceramic drains orientated N-S Other Features

> every 2 m from 10-60 m with occasional plastic field drains > W of trench within waterlogged/peat filled hollow found in T7 - hollow continues till 60 m where the natural rises

up the hillside

Natural Subsoil Pale yellow/white clay + peat > pink/brown clay > pink/brown sandy clay

Finds None

#### Trench 9

**Dimensions** 100 m by 2 m Total Area 200 m<sup>2</sup> **Excavated Orientation** N to S

Soil Make-up Topsoil - grey/brown sandy clay + silt - 0.2-0.4 m

B-Horizon Make-up Upper mid brown sandy clay > Lower black organic over pale grey/blue clay - 0.6 m

None Significant Features

Other Features Possible paleochannel 38-52 m from S end to a depth of 2.2 m

Natural Subsoil Brown/orange sandy clay + gravel + rocks > red/pink sand + clay > orange/brown sand +

gravel + patches of grey boulder clay

Finds None

#### **Trench 10 (Extension of Trench 1)**

**Dimensions** 12 m by 2 m Total Area 24 m<sup>2</sup> Excavated Orientation NE to SW

Soil Make-up Topsoil - grey/brown sandy clay + silt - 0.4 m

Lighter brown sandy clay + broken red field drain fragments - 0.4 m B-Horizon Make-up

Oval cut feature [1001] filled by deposit (1002) and oval cut feature [1003] filled by deposit Significant Features

(1004) - both in line with Trench 1's pit [101]

Other Features None

Natural Subsoil Yellow/orange sand + iron panning

Finds None

Notes Extension trench to Trench 1 next to possible cut feature

#### Trench 11

Dimensions 100 m by 2 m Total Area 200 m<sup>2</sup> **Excavated Orientation** NE to SW

Soil Make-up Topsoil - grey/brown sandy clay + silt - 0.35-0.4 m

B-Horizon Make-up Light brown sandy clay - 0.2 m

Significant Features None

Other Features Modern drains in NE half of trench orientated NW-SE > ceramic drains in SW half of trench

orientated NW-SE

Natural Subsoil Pale brown/yellow sand > orange/red sandy clay + gravel + iron panning +white sand > pale

brown sand

Finds None

#### Trench 12

**Dimensions** 100 m by 2 m 200 m<sup>2</sup> Total Area Excavated Orientation NE to SW

Soil Make-up Topsoil - grey/brown sandy clay + silt - 0.4 m

Light brown sandy clay - 0.2 m B-Horizon Make-up

Significant Features

Other Features Mix of modern/rubble/ceramic field drains throughout trench orientated NW-SE Natural Subsoil Pale brown/yellow sand - patches of blue grey clay and red/orange gravel

Finds None

#### Trench 13

**Dimensions** 100 m by 2 m Total Area 200 m<sup>2</sup> NE to SW **Excavated Orientation** 

Soil Make-up Topsoil - grey/brown sandy clay + silt - 0.4 m

Upper mid brown sandy clay > Lower black organic over pale grey/blue clay - 0.4 m B-Horizon Make-up

Significant Features None

Other Features Occasional deep channels interspersed throughout trench with B-horizon make-up > Ceramic

field drains at SW end of trench orientated NW-SE

Natural Subsoil Pale brown sandy clay + grey clay + rocks + patches of red gravel

Finds None

#### Trench 14

**Dimensions** 100 m by 2 m 200 m<sup>2</sup> Total Area **Excavated Orientation** NW to SE

Soil Make-up Topsoil - grey/brown sandy clay + silt - 0.4 m

B-Horizon Make-up Upper mid brown sandy clay 0.4 m > Lower black organic over pale grey/blue clay - 0.4 m

Significant Features None

Other Features Frequent rubble and ceramic drains throughout trench at varying orientations from N-S to E-

W

Natural Subsoil Pale brown/grey sandy clay

Finds None

#### Trench 15

**Dimensions** 100 m by 2 m 200 m<sup>2</sup> Total Area **Excavated Orientation** NW to SE

Topsoil - grey/brown sandy clay + silt - 0.4 m Soil Make-up

B-Horizon Make-up None Significant Features None

Other Features Frequent rubble and ceramic drains from 0-25 m from SE of trench orientated both N-S and

E.W

Natural Subsoil Pale brown/grey sandy clay

Finds None

#### Trench 16

**Dimensions** 100 m by 2 m Total Area 200 m<sup>2</sup> NW to SE **Excavated Orientation** 

Soil Make-up Topsoil - grey/brown sandy clay + silt - 0.4 m

Mid brown sandy clay - 0.2-0.4 m B-Horizon Make-up

Significant Features None

Other Features Thin horizon of peat at SE end > plastic drain orientated E-W 0-10 m from SE end > large

rubble drain containing lots of broken ceramic fragments orientated NWW-SEE from 69-90 m

> stone lined culvert containing a large diameter ceramic pipe in slot extension

Orange/brown sandy clay > pale brown/white clay/sand > grey/brown boulder clay Natural Subsoil

Finds None

# **APPENDIX 2: Photographic Register**

# Colour Digital:

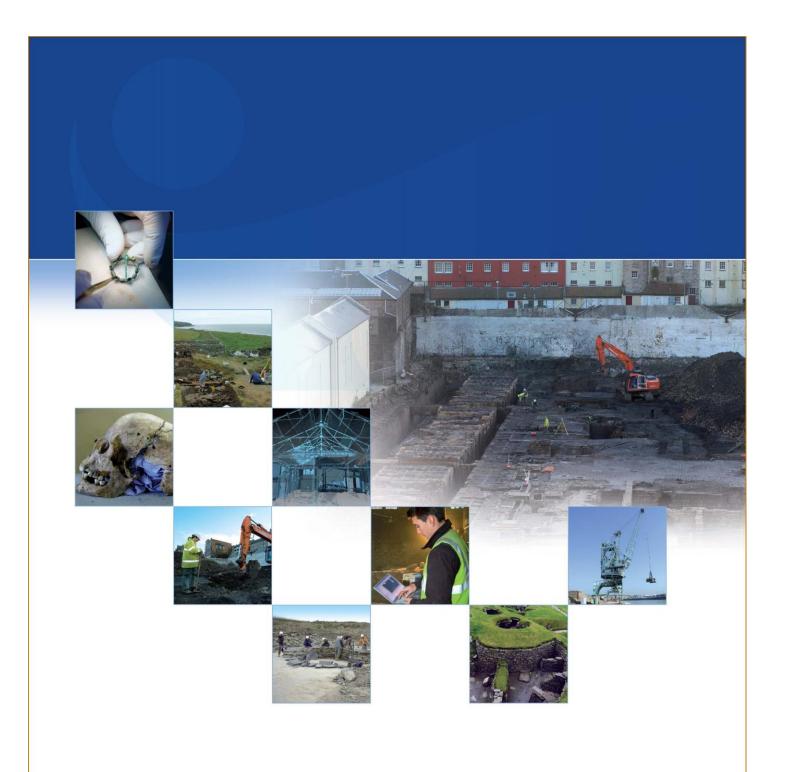
No.	Trench	Description	Taken
			From
1		Registration Shot	
2	T1	Ceramic drains – closely spaced at NE. end of T1	N
3	T1	Post excavation T1	SW
4	T2	Deep deposits in T2	SW
5	T2	Post excavation T2	SE
6	T2	Natural depression – willed with filed drain – T2	SE
7	T3	Post excavation T3	W
8	T3	Rubble drain orientated N-S in T3	N
9-10	T4	Deep deposits T4	Var.
11	T4	Post excavation T4	N
12-13	T2	Buried service in T2	W
14-16	T1	Possible pit in T1	W
17	T5	Post excavation T5	N
18-20	T6	Deep deposits in T6	Var.
21	T6	Post excavation T6	Е
22-25	T7	Deep deposits and peat in T7	Var.
26	T7	Post excavation T7	N
27	T8	Post excavation T8	E
28-30	Т9	Gully/paleochannel full of peat in T9	Var.
31	Т9	Post excavation T9	N
32-33	Т9	Possible paleochannel in T9	NW
34-35	T1+T10	Possible pits in T1 and extension T10	N
36-38	T10	Possible pit (1001) half sectioned	N
39-40	T1+T10	Possible pits	N
41	T11	Post excavation T11	SW
42	T12	Post excavation T12	NE
43-44	T13	Peat filled gully in T13	S
45	T13	Post excavation T13	SW
46	T14	Dense patch of inter-cutting drains, all ceramic in T14	SW
47	T14	Post excavation T14	NW
48	T15	Post excavation T15	NW
49	T16	Post excavation T16	NW
50-53	T16	Stone culvert containing ceramic pipe T16	SE
54-58	T10	3 pits in T1 and T10	Var.

# **APPENDIX 3: Context Register**

Context No.	Description and Interpretation
101	Sub-oval pit cut with gradually sloping sides onto a flat base. Measures 1 m by 0.7 m by
	0.2 m in depth.
	Pit cut
102	Grey/brown silty clay with some sand, infrequent medium sized rounded rocks and
	some re-deposited natural sand. 0.2 m in depth.
	Fill of [101]
1001	Oval pit cut with gradually sloping sides, a very slight stepped N side onto a rounded
	base. Measures 1.2 m by 0.8 m by 0.28 m in depth.
	Pit cut
1002	Grey/brown clay/sand and silt with lots of medium and small rocks. 0.28 m in depth.
	Fill of [1001]
1003	Sub-oval pit cut in plan. Measures 1.3 m by 0.75 m. Not excavated.
	Pit cut
1004	Grey/brown clay/sand and silt with lots of medium and small rocks. Not excavated.
	Fill of [1003]

# APPENDIX 4: 'Discovery and Excavation in Scotland' Report

LOCAL AUTHORITY:	East Lothian Council
PROJECT TITLE/SITE NAME:	West Barns
PROJECT CODE:	23493
PARISH:	Dunbar
NAME OF CONTRIBUTOR:	Nicholas Johnstone
NAME OF ORGANISATION:	AOC Archaeology Group
TYPE(S) OF PROJECT:	Evaluation
NMRS NO(S):	N/A
SITE/MONUMENT TYPE(S):	None
SIGNIFICANT FINDS:	None
NGR (2 letters, 6 figures)	NT 66352 78229
START DATE (this season)	05 <sup>th</sup> July 2016
END DATE (this season)	07 <sup>th</sup> July 2016
PREVIOUS WORK (inc DES)	None
MAIN (NARRATIVE)	AOC Archaeology Group were commissioned by CALA homes Ltd. to
DESCRIPTION:	conduct and archaeological evaluation prior to the construction of a new
(May include information from	residential development at West Barns, East Lothian (NT 66352 78229)
other fields)	(Planning Ref. No. 12/00553/PPM).
	(
	A 5% evaluation of the 5.7 ha site was conducted comprising of 1449
	linear metres of trenching. The evaluation revealed a complex sub-
	surface geology of gulleys and pools filled with decayed organics and
	peat in between higher sandy ridges. On a flatter area of sand at the
	north of site a group of three pits of unknown date and function were
	discovered.
PROPOSED FUTURE WORK:	Further archaeological monitoring
CAPTION(S) FOR	N/A
ILLUSTRATIONS:	TW/ V
SPONSOR OR FUNDING	CALA homes Ltd.
BODY:	
ADDRESS OF MAIN	AOC Archaeology Group, Edgefield Road Industrial Estate, Loanhead,
CONTRIBUTOR:	Midlothian, EH20 9SY
EMAIL ADDRESS:	1 . 6
ARCHIVE LOCATION	admin@aocarchaeology.com Archive to be deposited in NMRS





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