

Discovery and Excavation in Scotland

Updated on 15/06/2007

LOCAL AUTHORITY:	Moray
PROJECT TITLE/SITE NAME:	Duffus Castle
PROJECT CODE:	HSCO-90105-2014-01
PARISH:	Duffus
NAME OF CONTRIBUTOR:	Paul Fox
NAME OF ORGANISATION:	Kirkdale Archaeology
TYPE(S) OF PROJECT:	Watching brief
NMRS NO(S):	NJ16NE 4
SITE/MONUMENT TYPE(S):	Defence / Motte; Castle
SIGNIFICANT FINDS:	
NGR (2 letters, 8 or 10 figures)	NJ 1887 6725
START DATE (this season)	21 October 2014
END DATE (this season)	23 October 2014
PREVIOUS WORK (incl. <i>DES</i> ref.)	
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological watching brief was maintained during the excavation of two test trenches ahead of proposed pinning works to stabilise the eroding surface of the earthwork motte. The majority of material removed was imported soil from landscaping works carried out in the 1920s and subsequent remedial work in 2001. There were no finds or features of archaeological significance.
PROPOSED FUTURE WORK:	
CAPTION(S) FOR ILLUSTRS:	
SPONSOR OR FUNDING BODY:	Historic Environment Scotland
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ARCHIVE LOCATION (intended/deposited)	Archive to be deposited with Historic Environment Scotland

**HISTORIC SCOTLAND PROPERTIES IN CARE
MINOR ARCHAEOLOGICAL WORKS 2014/2015**

Duffus Castle • Excavation • October 2014

HS PIC Index Number: 90105

SITE: Duffus Castle, Morayshire

N.G.R.: NJ 1887 6725

DESCRIPTION: Archaeological investigation of the the make-up of the motte

PROJECT CODE: HSCO-90105-2014-01

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NOVEMBER 2014

INTRODUCTION

Under the terms of its PIC call-off contract with Historic Scotland, Kirkdale Archaeology was asked to undertake the excavation of two test trenches at Duffus Castle near Elgin, Morayshire ahead of proposed pinning works to stabilise the eroding surface of the earthwork motte (Fig.1).

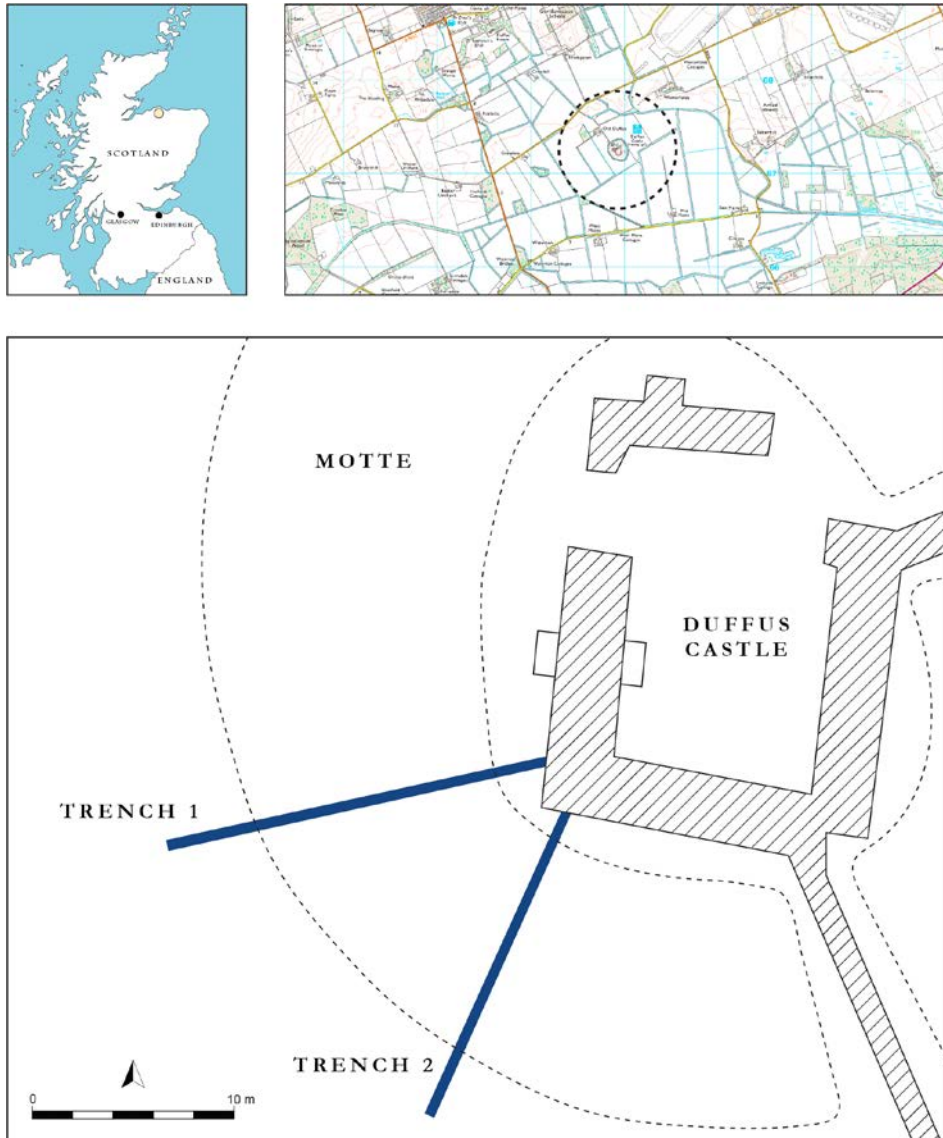


Figure 1: Plan showing the location of the trenches.

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The mid-12th century motte is an artificial gravel mound which originally carried a timber super-structure, succeeded in the 14th century by a two-storey rectangular masonry tower. The combination of the artificial mound and the immense weight of the masonry tower has led to subsidence over a considerable period of time, to the extent that the NW¹ corner is completely detached, having slipped down the motte scarp,

¹ Throughout this report, secondary-intercardinal directions - such as NNW - have been rationalized to either one of the four cardinal, or four inter-cardinal, directions (N, NE, E, SE, S, SW, W, or NW).

and there is considerable distortion and skewing within the walls and apertures of the remaining tower masonry.

Having passed into state care in 1926, the castle was subject to clearance and consolidation works designed to stabilise the structure. This work also appears to have included some dressing of the motte scarp, although the exact extent of such work is unclear. Photos of the 1920s consolidation work indicate that a sizeable portion of the projecting base course of the tower was exposed at this time – in its entirety along the S wall of the tower with around one third visible running from the SW corner along the W wall. The photos also show the motte scarp bulging-out and 'rolling' in places, and there is no flat platform on the W and S sides of the tower. This is a very different profile to that which can be seen today, where the diminutive rolling mound has been replaced with a flatter, taller, more severely inclined scarp with a flared top providing the missing platform on the W and S sides of the tower. It is therefore likely that the modern shape of the motte was created in the 1920s by a combination of scarping of the motte in some places, and the addition of soil in others. This provided further buttressing for the W and S portions of the tower and created a platform around these sides of the building.

In October 2001 an archaeological watching brief at the castle noted, 'A recently restored landslide on the W side of the mound indicates the still unstable nature of the site.'² The restoration consisted of topsoil stripping, the bolstering of the artificial summit platform, and the lower slope as seen in Trench 2 (with railway sleepers held in place by L-brackets), the insertion of layers of plastic mesh (held in place with metal hook pins), topsoil restoration and grass seeding. The current shape of the mound can therefore be seen to be derived from a combination of consolidation works in the early-20th and 21st centuries.

The remit ahead of further consolidation works included establishing the pre-consolidation profile of the motte in order to inform the methodology for further ground stabilisation works. The upper motte profile has been so severely modified that it was not practical or safe to fully expose the pre-1920s consolidation ground surface due to the potential de-stabilisation of the heavy wooden sleepers bolstering the upper corner of the scarp, which were already compromised by slippage and animal burrowing; instead it was noted via inspection that the area was substantially built-up.

The trenches were de-turfed by Historic Scotland staff and excavated manually by the archaeological team. All spoil was taken down the slope in buckets and stored in one ton bags in the fenced off enclosures provided at the base of the motte slope. It was agreed on site that backfilling would be carried out by Historic Scotland staff. The work was carried out from 21st - 23rd October, 2014.

² Ewart, G. and Stewart, D. (2002) 'Duffus Castle, Moray (Duffus parish), watching brief', *Discovery Excav Scot*, vol.3 p.82

DESCRIPTION

Trench 1

Trench 1 was set back 1.5 - 2m to the N from the SW corner of the tower (the corner formed by the wall masonry, as the base course is missing here) and measured 0.5m wide. The trench measured 19.10m long, running from the NE where it abutted the tower, to the base of the motte slope to the SW. The turf and mid-brown silty topsoil **101** had been replaced during the works of 2001 for a total of 16.90m running SW from the tower. This layer was generally 10 - 15cm deep and contained modern detritus (pieces of crisp packets and cigarette butts). The topsoil **101** had been placed over a woven black plastic mesh **102** which was held in place by iron hook pins bedded to a depth of *c.*35cm through the layers below, including exposed areas of the motte scarp. The mesh had been placed over a further mid-brown silty topsoil **103** which had been added during the 1920s works; this survived as turf *and* topsoil in the non-truncated 2.4m of the SW end of the trench. This topsoil generally survived to a depth of 10 - 20cm and had in turn been truncated by the preparation scarping for the 2001 works. Towards the summit of the motte, this introduced material was deeper (up to 30cm as truncated), as the cut **104** for the 1920s work had included three 50cm wide x 10cm deep 'steps' which were presumably terraces formed to help hold the material being introduced at the apex of the motte slope. An area of introduced 1920s topsoil **103** was left unexcavated at the top of the slope due to concerns about slippage. The removal of 1920s topsoil **103** revealed something of the nature of the 1920s consolidation works. It was clear from pre-consolidation work photographs that the motte slope was grassed, as well as squatter and more undulating. The exposure of the surface below the topsoil introduced in the 1920s shows that a considerable amount of preparation work was carried out in order re-face the motte scarp. Rather than a buried turf/topsoil, there was a combination of exposed motte fabric **105** with traces of an introduced subsoil/capping **106** above, which had been severely truncated. The introduced subsoil **106** was a historic rather than a recent horizon and was composed of a mixed mottled light-brown silty clay; no artefacts were recovered which could have dated it. This layer intermittently covered the motte fabric **105** which was exposed in several places, and consisted of a light-brown gritty angular gravel. This clearly suggests that the 1920s work cut away (via **104**) the lumps and bumps in the motte (eating into the motte material and truncating the historic introduced sub-soil above) to create the more regular linear incline that we see today. At the base of the slope, an area of mottled re-deposited silty clay **107** was exposed at a depth of 10 - 15cm, which may represent the backfill of the motte ditch or possibly even material derived from the 1920s excavations spread along the down slope; it was not excavated as it could not be discounted as a modern infill. The spread extended for at least 3.4m from the SW edge of the trench.

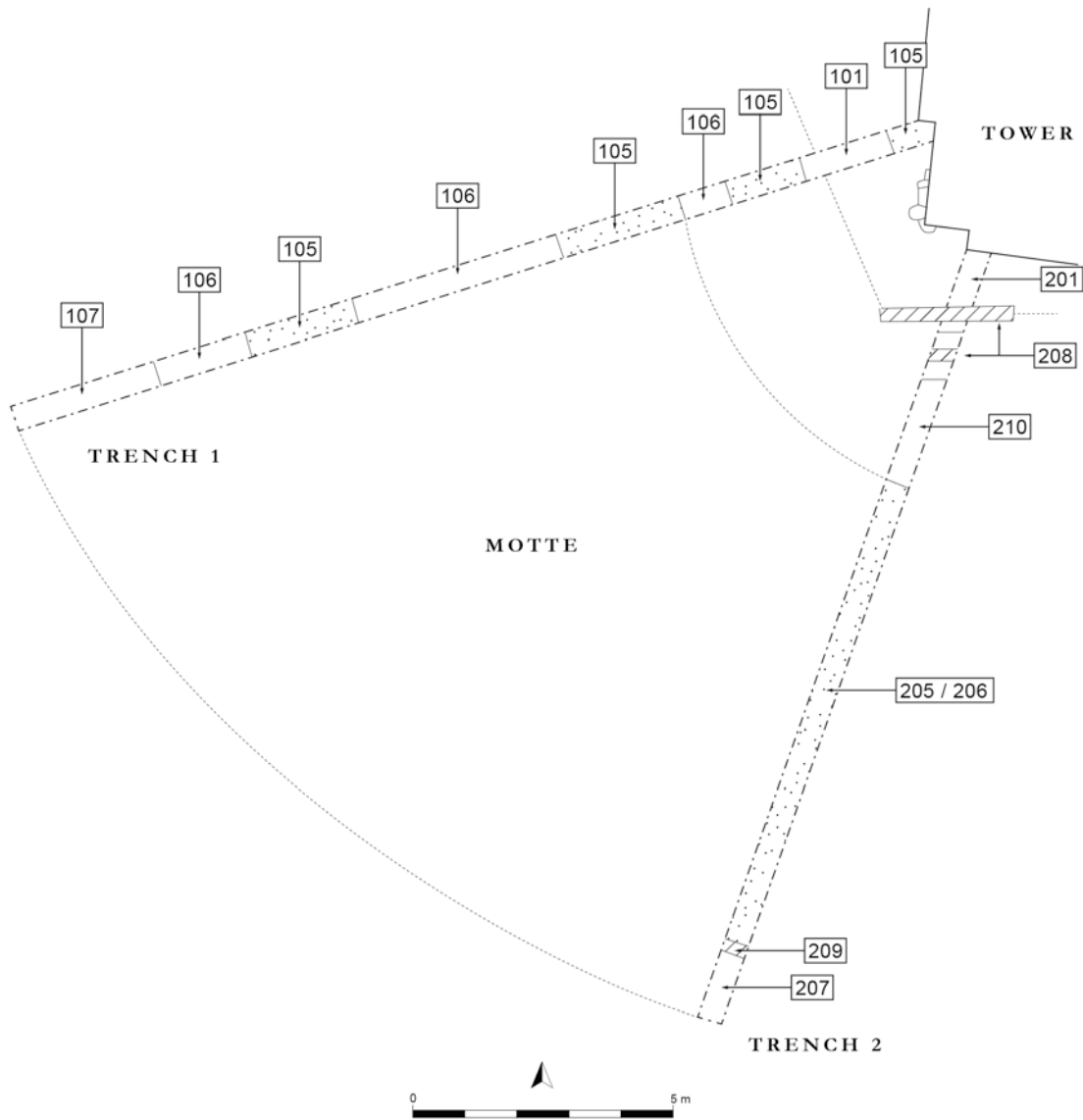


Figure 2: Post-excavation trench plan

Trench 2

Trench 2 was set back 0.9m - 1.4m E from the SW corner of the tower (the corner again formed by the wall masonry, as the base course is missing here) and was 0.5m wide. The trench measured 16.10m long running from the NE where it abutted the tower to the base of the motte slope to the SW. The turf and mid-brown silty topsoil **201** had been replaced during the works of 2001 for a total of 15m running SW from the tower. This layer was generally 8 - 14cm deep and contained pieces of modern plastic debris.

The topsoil **201** had been placed over a woven black plastic mesh **202** which was held in place by iron hook pins which were bedded to a depth of ≈ 35 cm through the layers below, again including exposed areas of the motte scarp. The mesh had been placed over a further mid-brown silty topsoil **203** which had been added during the 1920s works; this survived as turf *and* topsoil in the non-truncated 1.5m of the SW

end of the trench. This topsoil **203** generally survived to a depth of 5 - 10cm and had in turn been truncated by the preparation scarping for the 2001 works. The cut **204** for the 1920s work was concentrated on the scarp slope. The apex of the slope had to be substantially made-up as so much material had slipped away exposing a large amount of the base course at the SW angle of the tower. A compact mid-brown silty clay layer **210** was added above the motte fabric to create the artificial summit and three 50cm wide x 10cm deep steps were created to form terraces to help hold the topsoil introduced at the apex of the motte slope. The 2001 works then further introduced a two-tier revetment **208** (through the steps created as part of the 1920s cut) composed of railway sleepers kept in place by L-brackets driven into the mound (to what depth was not clear).

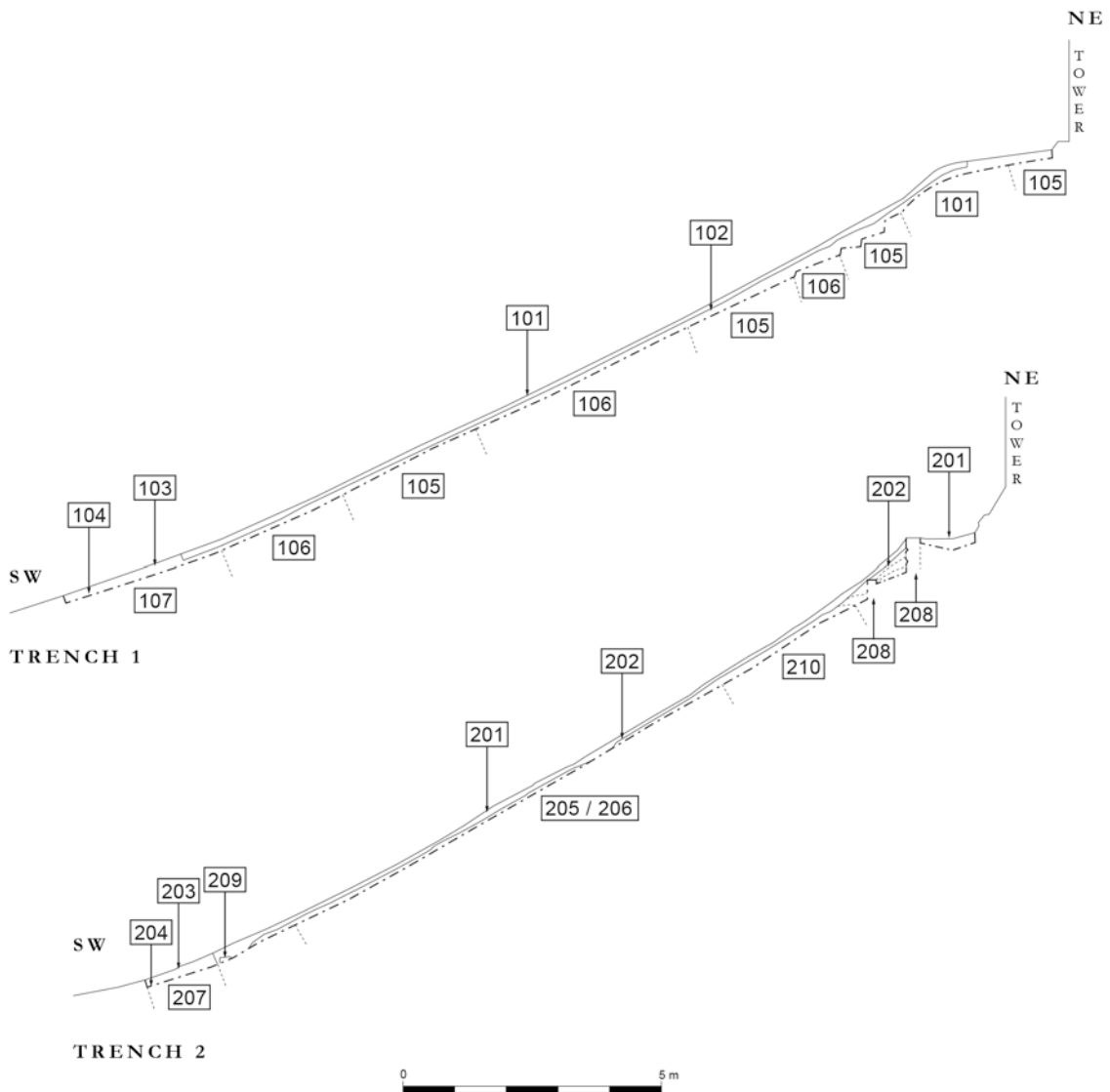


Figure 3: SE-facing sections from both trenches

The upper revetment was composed of at least three sleepers stacked vertically, while the lower revetment had only one. An area of introduced 1920s topsoil **203** was left unexcavated at the top of the slope due to concerns about slippage. The removal of 1920s topsoil **203** again showed that a considerable amount of preparation work had been carried out in order re-face the motte scarp. Rather than a buried turf/topsoil there was a combination of exposed motte fabric **205** with traces of an introduced subsoil/capping **206** above, which had been severely truncated. The introduced subsoil **206** was a historic rather than a recent horizon, and was composed of a mixed mottled light-brown silty clay; no artefacts were recovered which could have dated it. This layer intermittently covered the motte fabric **205** which was exposed mainly on the lower slope, consisting of a light-brown gritty angular gravel. This again suggests that the 1920s work cut away (via **204**) the 'lumps and bumps' in the motte (eating into the motte material and truncating the historic introduced sub-soil above) in order to create the more regular linear incline that we see today.

At the base of the slope, an area of mottled silty clay **207** was exposed at a depth of 10 - 20cm, which may represent the backfill of the motte ditch or possibly even material derived from the 1920s excavations spread along the down slope; it was not excavated so it cannot be discounted as a modern infill. The spread extended for at least 1.6m from the SW edge of the trench. This spread and its interface with the motte material **205** to the NE had been truncated by the insertion of a further single railway sleeper **209** kept in place by L-brackets, again driven into the mound as part of the 2001 works.



Plate 1: The wooden sleepers at the summit of Trench 2

CONCLUSIONS



Plate 2: The motte and tower in the 1920s prior to the dressing of the motte



Plate 3: The motte and tower today

Plates 2 and 3 show the contrasting motte profiles between the 1920s pre-consolidation phase with exposed tower base course (Plate 2) and the current heavily-altered configuration (Plate 3). Considerable effort has clearly gone into not only attempting to recreate a more 'authentic' motte profile, but to create a motte profile that structurally helps to bolster and support the stone tower above. The proposed works to prevent further slippage will see the removal of the sleepers and support stakes, some of which are currently exposed, to 300mm below the proposed finished ground level. Introduced top soil will then be spread over the area. As the summit at the SW angle is largely an artificial creation deriving from the 1920s consolidation works, there is no concern from an archaeological perspective regarding their removal. It may be more problematic if the sleeper **209** noted at the base of the motte scarp in Trench 2

is one of a series extending along the lower slope to the S (there was no lower sleeper in Trench 1). If this is the case and there is a requirement for them to be removed, the associated work may require archaeological monitoring since they are cut into the fabric of the motte itself (context **205**).

LIST OF CONTEXTS

Trench	Context	Description
1	101	Reinstated topsoil from the 2001 work
1	102	Plastic mesh with iron hook pins
1	103	1920s consolidation work introduced mid-brown silty topsoil
1	104	Cut for the 1920s consolidation work through 105, filled by 103
1	105	Motte fabric of light-brown gritty angular gravel
1	106	Relict traces of a historic introduced subsoil/capping over 105. Mixed, mottled light-brown silty clay
1	107	Mottled silty clay at the SW end of the trench, possible historic infilling of the motte ditch
2	201	Reinstated topsoil from the 2001 work
2	202	Plastic mesh with iron hook pins
2	203	1920s consolidation introduced mid-brown silty topsoil
2	204	Cut for the 1920s consolidation work through 205, filled by 203
2	205	Motte fabric of light-brown gritty angular gravel
2	206	Relict traces of a historic introduced subsoil/capping over 205, composed of mixed mottled light-brown silty clay
2	207	Mottled silty clay at the SW end of the trench; possible historic infilling of the motte ditch
2	208	Two-tier revetment composed of railway sleepers kept in place by L-brackets
2	209	Lower railway sleeper kept in place by L-brackets
2	210	1920s consolidation work introduced mid-brown silty clay used to form the artificial motte summit

LIST OF DRAWINGS

No.	Trench	Type	Description	Scale
1	1 and 2	Plan	Post-excavation	1:50
2	1	Section	SE-facing	1:50
3	2	Section	SE-facing	1:50

LIST OF DIGITAL PHOTOGRAPHS

No.	Description	From	Date
1	Trench 1, de-turfing in progress	SW	21/10/2014
2	Trench 2, set out	SW	21/10/2014
3	General view of castle and motte	NW	21/10/2014
4	Trench 1, work in progress	SW	21/10/2014
5	General view of Trenches 1 and 2	SW	21/10/2014
6	W façade of castle and motte	W	21/10/2014
7	General view of castle and motte	NW	21/10/2014
8	Trench 1, work in progress	SW	21/10/2014
9	Post-excavation shot of Trench 1	SW	21/10/2014
10	Post-excavation shot of Trench 1	SW	21/10/2014
11	Post-excavation shot of Trench 1	SW	21/10/2014
12	Post-excavation shot of Trench 1	SW	21/10/2014
13	Post-excavation shot of Trench 1	SW	21/10/2014
14	Post-excavation shot of Trench 1 (upper portion)	SW	21/10/2014
15	General shot of motte and Trench 1	W	21/10/2014
16	Post-excavation shot of Trench 2	SW	22/10/2014

No.	Description	From	Date
17	Post-excavation shot of Trench 2	SW	22/10/2014
18	Post-excavation shot of Trench 2	SW	22/10/2014
19	Post-excavation shot of Trench 2	SW	22/10/2014
20	Post-excavation shot of Trench 2	SW	22/10/2014
21	Post-excavation shot of Trench 2 (upper portion)	SW	22/10/2014
22	Post-excavation shot of Trench 2	NE	22/10/2014
23	Post-excavation shot of Trench 2	NE	22/10/2014
24	Post-excavation shot of Trench 2	S	22/10/2014
25	Post-excavation shot of Trench 2	S	22/10/2014
26	Post-excavation shot of Trenches 1 and 2	SW	22/10/2014
27	Post-excavation shot of Trenches 1 and 2	SW	22/10/2014
28	Rubber netting and hooked pin	N/A	22/10/2014
29	Trench 1, upper portion	SE	22/10/2014
30	General view of Trench 1 during cleaning	E	22/10/2014
31	Chamfered base course in Trench 2	NW	22/10/2014
32	SE-facing section of Trench 2	SE	22/10/2014
33	SE-facing section of Trench 2	SE	22/10/2014
34	SE-facing section of Trench 2	SE	22/10/2014
35	SE-facing section of Trench 2	SE	22/10/2014
36	SE-facing section of Trench 2	SE	22/10/2014
37	SE-facing section of Trench 2	SE	22/10/2014
38	SE-facing section of Trench 2	SE	22/10/2014
39	SE-facing section of Trench 2	SE	22/10/2014
40	SE-facing section of Trench 2	SE	22/10/2014
41	SE-facing section of Trench 2	SE	22/10/2014
42	SE-facing section of Trench 2	SE	22/10/2014
43	SE-facing section of Trench 2	SE	22/10/2014
44	SE-facing section of Trench 2	SE	22/10/2014
45	SE-facing section of Trench 2	SE	22/10/2014
46	SE-facing section of Trench 2	SE	22/10/2014
47	SE-facing section of Trench 2	SE	22/10/2014
48	SE-facing section of Trench 2	SE	22/10/2014
49	Inserted sleeper at SW end of Trench 2	SW	22/10/2014
50	Inserted sleeper at SW end of Trench 2	SW	22/10/2014
51	Trench 2, motte material and added top	SW	22/10/2014
52	Trench 2, motte material and added top	SW	22/10/2014
53	Trench 2, wooden sleepers at summit	SW	22/10/2014
54	SE-facing section of Trench 1	SE	22/10/2014
55	SE-facing section of Trench 1	SE	22/10/2014
56	SE-facing section of Trench 1	SE	22/10/2014
57	SE-facing section of Trench 1	SE	22/10/2014
58	SE-facing section of Trench 1	SE	22/10/2014
59	SE-facing section of Trench 1	SE	22/10/2014
60	SE-facing section of Trench 1	SE	22/10/2014
61	SE-facing section of Trench 1	SE	22/10/2014
62	SE-facing section of Trench 1	SE	22/10/2014
63	SE-facing section of Trench 1	SE	22/10/2014
64	SE-facing section of Trench 1	SE	22/10/2014

No.	Description	From	Date
65	SE-facing section of Trench 1	SE	22/10/2014
66	SE-facing section of Trench 1	SE	22/10/2014
67	SE-facing section of Trench 1	SE	22/10/2014
68	SE-facing section of Trench 1	SE	22/10/2014
69	SE-facing section of Trench 1	SE	22/10/2014
70	SE-facing section of Trench 1	SE	22/10/2014
71	SE-facing section of Trench 1	SE	22/10/2014
72	Concrete pad on NW side of access bridge (used as a back-site)	NW	23/10/2014