

**Land At Balmuirfield, Balmuir, Strathmartine,  
Angus, DD3 0NU  
Report on Level 1 Standing Building Survey**

**Angus Council planning application 21/00245/FULL**



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3 March 2022**



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## SUMMARY

A level 1 standing building survey was carried out on 25 January 2022. The mill is in a poor condition but the millwheel and some of the mechanism is visible and was recorded. There is a rubble built core probably dating to the early 19<sup>th</sup> century and a later 19<sup>th</sup>-century extension including cartshed and stables.

It is recommended that no further archaeological work is required during the current planning application.



# 1 INTRODUCTION

- 1.1 The site (Illus 1) is located on the on the N side of Dundee W of Balmuir. It is centred on NGR NO 39783408, at 65m OD (Illus 1) and in the parish of Mains and Strathmartine.
- 1.2 The work was commissioned by Chris Bird and Jo Chapman. A planning application 21/00245/FULL and Listed Building Consent 21/00244/LBC is a require this Level 1 standing building survey.
- 1.3 All the archaeological work was carried out in the context of Scottish Planning Policy (SPP) Planning Advice Note (PAN 2/2011) and Historic Environment Policy Scotland Statement (HEPS), which state that archaeological remains should be regarded as part of the environment to be protected and managed.



Illus 1 Location plan (Contains Ordnance Survey data © Crown copyright and database right 2022)



## 2 BACKGROUND

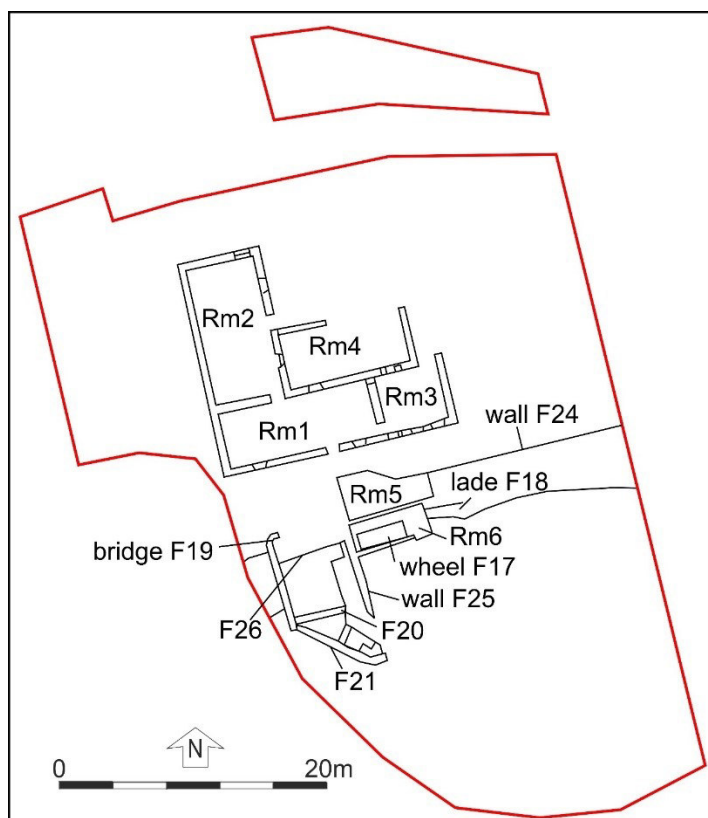
The former plash mill is category B-listed (LB19036) and is included in the Angus Historic Environment Record (NO33SE0009). The plash mill, which retains its mill wheel and sluice, dates to the early 19th century. It is shown on the 1st edition OS map as “West Balmuir Mill”, renamed “Balmuir” by the 2nd edition OS map at which time it is labelled as a Bleachfield and Mill. Plash mills were used in the bleaching process for textile production (linen, jute), major industry in the region in the 19th Century. As mentioned, the mill building at one time formed part of a much more extensive milling complex (Angus HER NO33SE0024), part of the textile industry but also with a flour and corn mill as part of the site at various times. Another plash mill and bleachfield (Harestone) stood to the west (now within Dundee City Council local authority area). In the OS Name Book for Forfar (vol 67, 1857-1861), the plash mill is described as being the property of ‘- Webster Esq’, worked by a Mr Murdoch. The flour mill is also shown owned by Webster Esq, as is Harestone mill (adjacent to the west) (OS Name Book for Forfar, 1857-61, vol 67).

Over 70 mills on the Dichty Water at one time (Anderson 2022) some dating back to the 16<sup>th</sup> century.

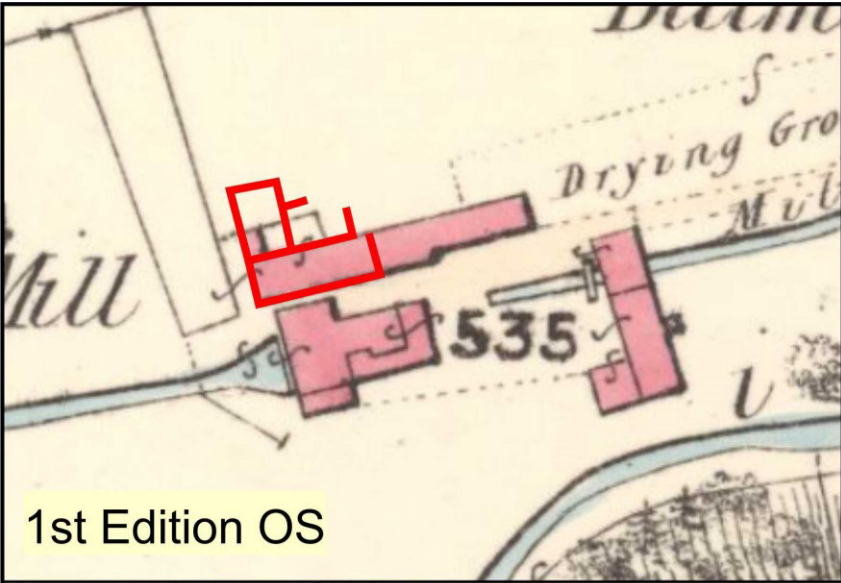
## 3 THE LEVEL 1 STANDING BUILDING SURVEY

A level 1 standing building survey was carried out on 25 January 2022. The day was bright and cold. Plan and elevations were supplied by Douglas Land Services Ltd (Illus 2, 4, 5) and these were checked and annotated. A full photographic record was carried out of all accessible areas (Illus 2). There are areas that are not accessible including Rooms 5 and 6 next to the lade and areas around lades F20 and F21.

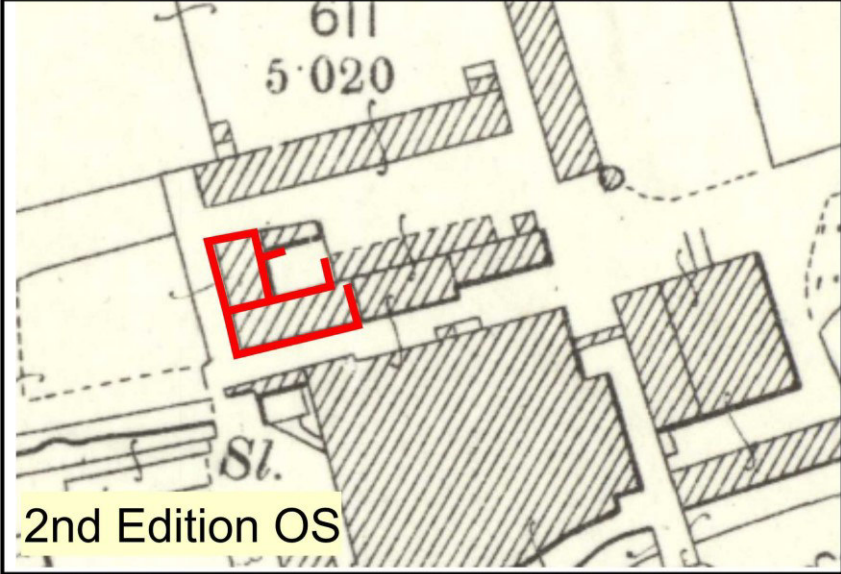
The mill building consists of four rooms and there are several rooms and lades to the south (Illus 2).



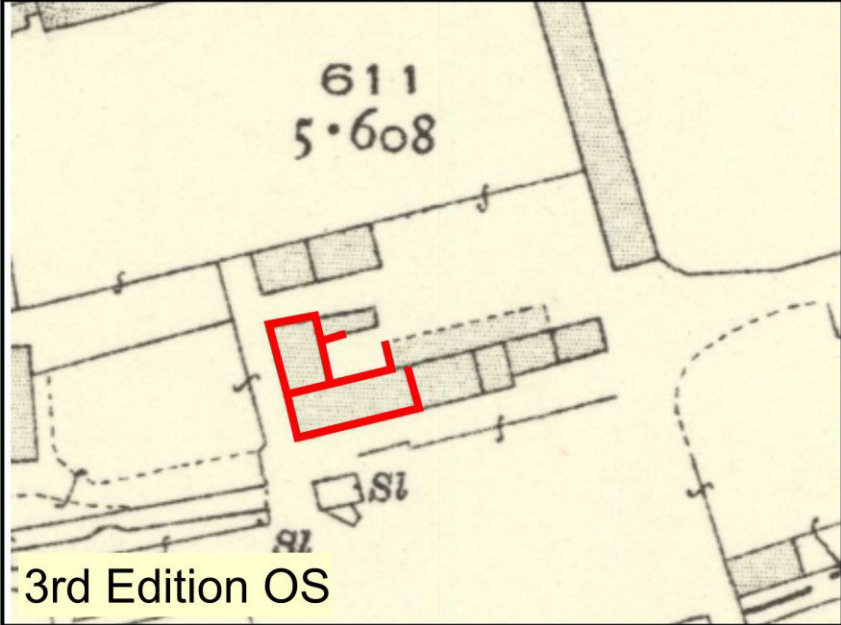
Illus 2 Plan of mill buildings surveyed (copyright Douglas Land Services Ltd)



1st Edition OS



2nd Edition OS



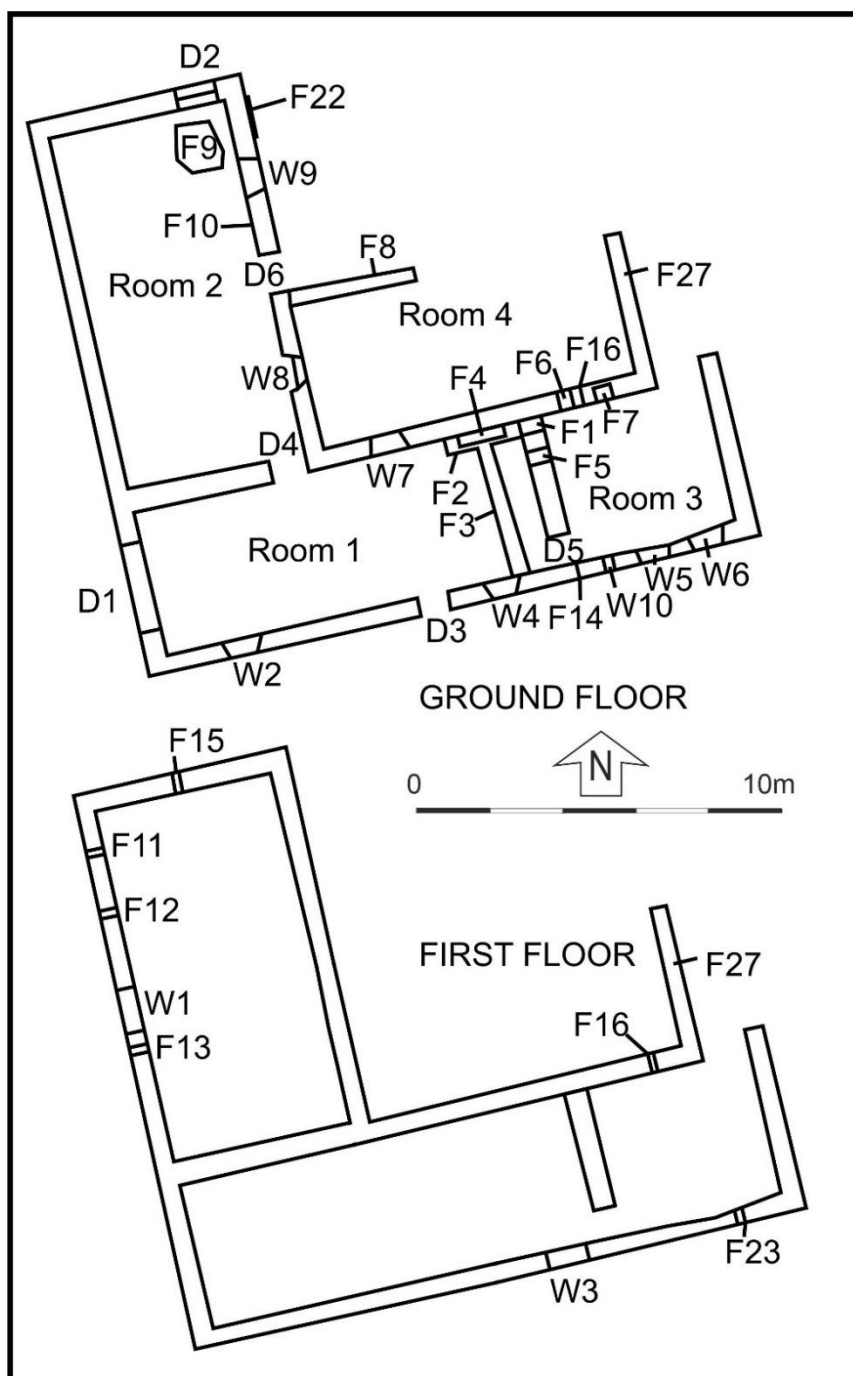
3rd Edition OS

Illus 3 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Edition OS maps with standing walls marked in red (copyright National Library of Scotland)

### 3.1 Phase 1

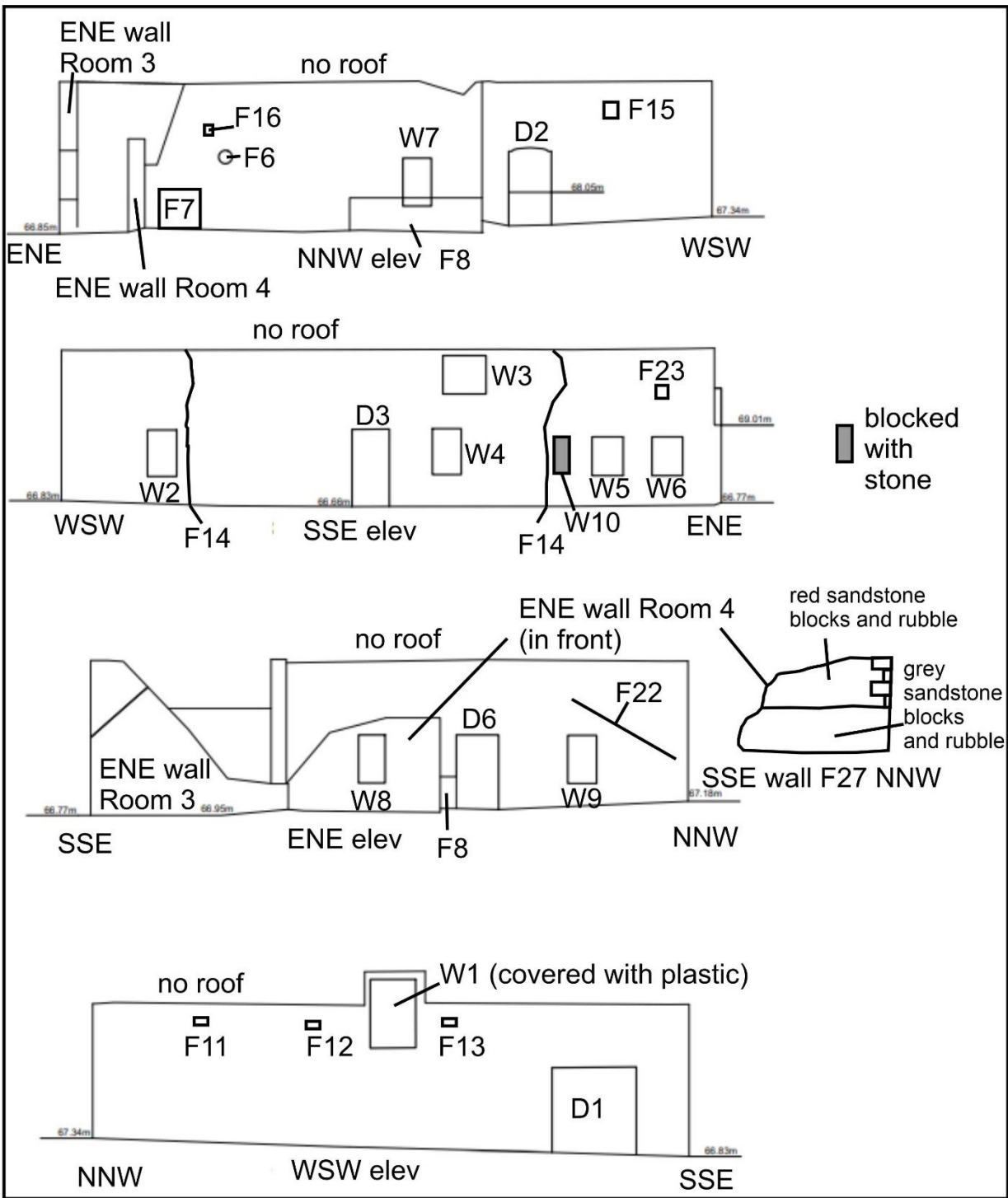
The first phase of building appears to be a grey rubble constructed building seen on the SSE wall of the mill (F14; Illus 6, 7); it was difficult to photograph because of the large holes adjacent caused by Rooms 5 and 6. The surviving wall forms the ENE end of the SE wall but is a little unclear due to variety of pointing and some possible repairs to the wall (see F14, Illus 11). There is also an earlier grey sandstone phase in Wall F27 (Illus 9, 10) and it is possible that this is the remains of a wall of an unroofed structure seen on the 1<sup>st</sup> Edition OS map (Illus 3) which was then heightened with red sandstone quoins (Illus 8) and rubble in Phase 2. Window W10 may date to this phase and was blocked with stone in Phase 2.

In Phase 1 the buildings were in use as a mill but many of the features have been altered and added to and so the mill is discussed in Phase 2.



Illus 4 Plan of mill annotated with numbers used in this survey (copyright Douglas Land Services Ltd)





Illus 5 Elevations of mill annotated with numbers used in this survey (copyright Douglas Land Services Ltd)



Illus 6 SSE façade showing grey fieldstone wall (F14; centre); facing NE



Illus 7 F14 scar with W3 (top left) and W4 (bottom left); facing NW

### 3.2 Phase 2

In Phase 2 the watermill had developed with buildings constructed to the N, E and S (see 2<sup>nd</sup> Edition OS (Illus 3). This area is difficult to access. A small T-shaped building is present in this area on the 1<sup>st</sup> Edition OS map, by the 2<sup>nd</sup> Edition there is a large complex of buildings to the S of the mill and these are largely gone by the 3<sup>rd</sup> Edition (Illus 3). Lade F18 (Illus 18, 19) runs from the Dichty Burn through a concrete culvert under bridge F19 ENE across the site through wheel pit (Room 6) and out the lade to the E. Wheel F17 is iron with wooden paddles (Illus 15, 16). It is 3.9m in diameter, 1.2m wide with central shaft 0.15m diameter. The wheel is breast shot and driven by water from the lade (HES Listed Buildings online); the driveshaft ran through Room 5 (where there is no access) and into Room 1 F3, driving wheel F4 (Illus 12, 14). Water from the lade also runs into a second stone-lined lade F21 (Illus 17, 18) which may have driven a mechanism which has since been removed – it appears to go through a building seen on the 2<sup>nd</sup> Edition OS map and a map seen by the client shows a sawmill in this location in 1862 (C Bird per comm).



The associated mill buildings to the NNW were developed with red sandstone quoins added at the corners and Rooms 1 and 2 increased in size using red sandstone. The surviving building is 17.15m NNW-SSE and 18.3m WSW-ENE; the ENE end of the mill was removed many years before this survey. Room 1 had a cart door in the WSW wall D1 (Illus 27), door on SSE wall D3 and windows W2, W3 and W4 in the SSE wall and W7 in the NNW wall. There are internal doors to Room 2 (D4) and Room 3 (D5; Illus 22) and two windows inserted into the SSE wall (W5, W6; Illus 14); W10 was blocked with stone. The driveshaft from waterwheel F17 ran under the floor (F2) into a wheel presumably linking it with flywheel F4 on the NNW wall. There is an aperture F1 (Illus 21) which presumably connected this mechanism with wheel F6 (Illus 22, 23) on the NNW wall of Room 3, a blocked aperture in the wall between Rooms 1 and 3 (F5, Illus 21), a vent F16 (Illus 20) through the NNW wall of Room 3 and an aperture in the same wall at ground level (F7; Illus 22) which was later blocked with red brick on the NNW side. There were wooden hoppers on the interior of the SSE wall at first floor level attached to these mechanisms (removed prior to this survey but photographed by Chris Bird). The NNW wall Room 2 and SSE wall of Room 1 are 0.54m thick and there is a small vent in the first floor SSE wall of Room 3 (F23). There is a wall dividing the mill buildings at the upper level with the area of the mill wheel (F24) but it is in poor condition and very overgrown. There are other overgrown walls near the wheel F17 which are not accessible (F25, F26).

In Phase 2 Room 2 was in use as stables. There is a door D6 and windows W8 and W9 on the ENE wall. The room has a stone and brick floor (photographed by Chris Bird included in archive) which is partially visible now (F9; Illus 26). There is a wooden saddle and tack rack (F10) on the ENE wall between W9 (Illus 25) and D6 (Illus 24) and there are small vents in the first floor walls (F11, F12, F13 and F15). There is an arched door in the NNW wall (D2; Illus 28) which was partially blocked in Phase 3 and a large first floor window on the WSW wall (W1) which is covered with plastic.

Room 4 may be partially an open courtyard and the area N of wall F8 was covered at one period as there is a roof scar (F22) on the ENE exterior wall of Room 2 above W9 (Illus 24).



Illus 8 Phase 2 quoins SE corner above Phase 1 grey sandstone rubble wall; facing NNW





Illus 9 Wall F27 (left) showing lower (earlier) half grey sandstone and upper half with quoins and red sandstone rubble; facing WSW



Illus 10 Wall F27 showing lower (earlier) half grey sandstone and upper half with quoins and red sandstone rubble; facing ENE





Illus 11 ENE wall Room 3 in poor condition, partially demolished, possible infill in Phase 2; facing WSW



Illus 12 Room 1 wheel F4 in wheel-pit F2; facing NNW





Illus 13 Concrete wheel-pit ENE of F4 within F1; facing NE



Illus 14 Interior SSE wall Room 3 W6 (left) W5 (right) with beam slots above; facing SSE





Illus 15 Mill wheel F17 in wheel pit Room 6; facing NNW



Illus 16 Mill wheel F17 in wheel pit Room 6; facing WSW





Illus 17 Lade F21 with bridge F19 (top) divided into lade to wheel (right) and overflow lade (left); facing NW



Illus 18 Detail of bridge F19 divided into lade to wheel (F18; right) and overflow lade (F21; left); facing WNW





Illus 19 Lade F18 infilled and no access; facing NE



Illus 20 NNW face of Room 1/Room3 wall with vent F16 (top left), F6 and W7 (right); facing SSE





Illus 21 Wall between Rooms 1 and 3 with D5 (left) and F1 (right) and blocked aperture F5 (centre); facing WSW



Illus 22 Room 3 NNW wall with wheel mechanism drive shaft F6 (top left) and aperture F7 (bottom right); facing NNW





Illus 23 F6 wheel mechanism NNW side of wall; facing SSE



Illus 24 ENE wall Room 2 former stables with W8 (left), D6 (centre) W9 (right with roof scar F22 above; facing WSW





Illus 25 ENE wall Room 2 with W9 (centre) with cupboard in situ below and wooden saddle and harness storage F10 (right); facing ENE



Illus 26 Room 2 former stables floor F9 granite cobbles (top) and hand-made bricks (bottom); facing ENE



### 3.3 Phase 3 early 20<sup>th</sup> century?

In Phase 3 the buildings were adapted slightly with the blocking of D1 on the WSW wall of Room 1, half blocking D2 (Illus 28) converting to a window in the NNW wall of Room 2. The exact phasing of Phases 2 and 3 may be overlapping.

Wall F8 (Illus 29) may have been part of a building seen on the 2<sup>nd</sup> and 3<sup>rd</sup> Edition OS maps which has been reduced in height in Phase 3.



Illus 27 D1 blocked cart door WSW wall Room 1; facing ENE



Illus 28 NNW wall Room 2 D2 with arched sandstone lintel and lower half blocked; facing SSE



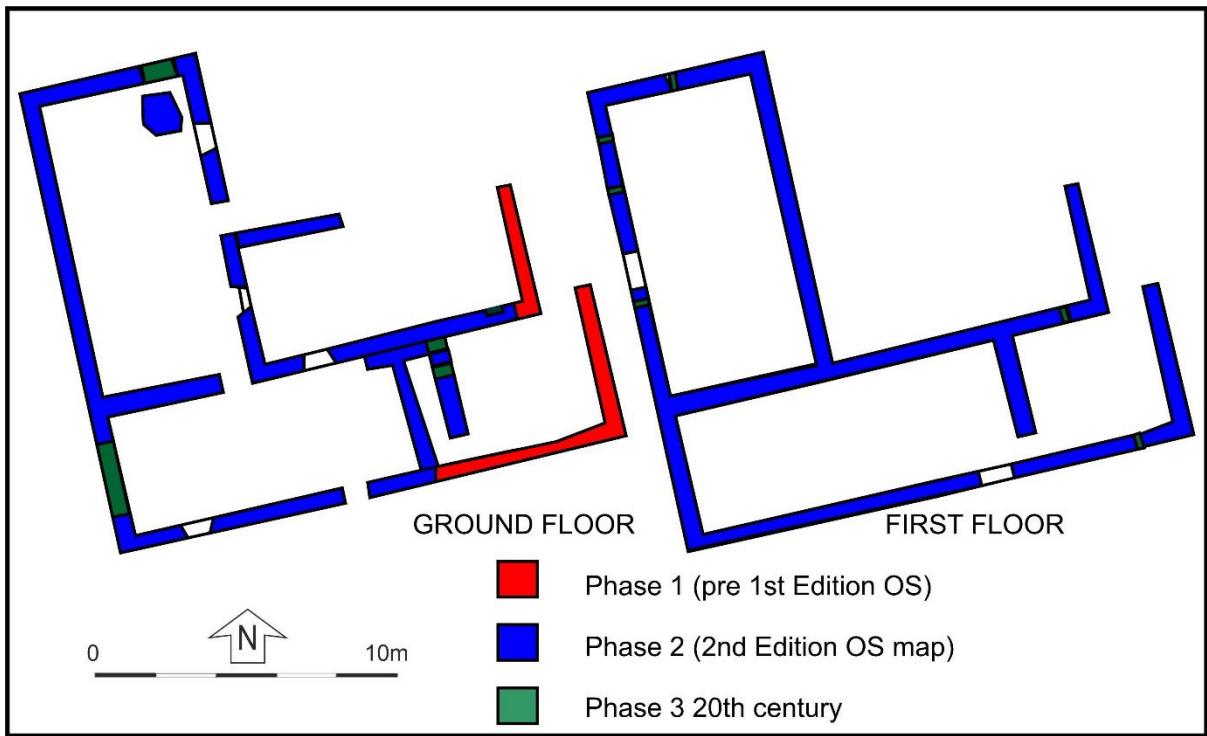


Illus 29 Wall F8; facing NNW

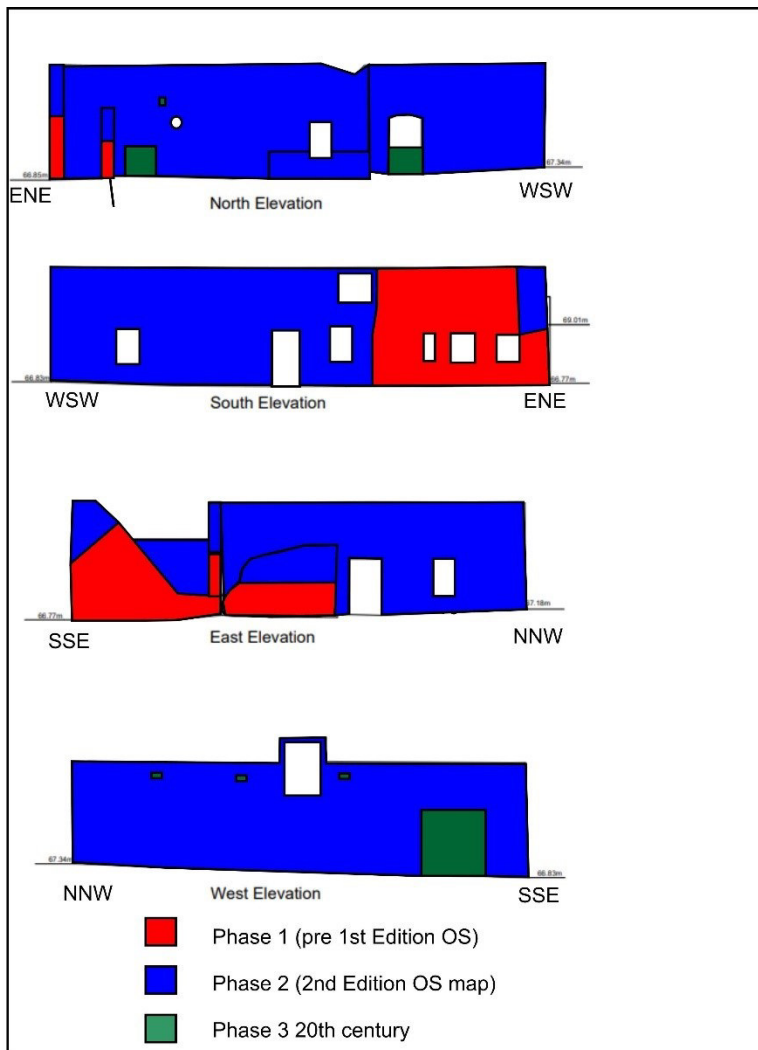
#### **4 CONCLUSIONS AND RECOMMENDATIONS**

A level 1 standing building survey was carried out on 25 January 2022. The mill is in a poor condition but the millwheel and some of the mechanism is visible and was recorded. There is a rubble-built core probably dating to the early 19<sup>th</sup> century and a later 19<sup>th</sup>-century extension including cartshed and stables (Illus 30, 31).

It is recommended that no further archaeological work is required during the current planning application.



Illus 30 Phase plans



Illus 31 Phase elevations



## 5 REFERENCES

Anderson, G 2022 A-Z of secret Dundee: Dichty Connect. The Scots Magazine accessed online 12.2.22. <https://www.scotsmagazine.com/articles/z-secret-dundee-dichty-connect/>

HES Listed Buildings Online accessed 3.3.22  
<http://portal.historicenvironment.scot/designation/LB19036>

OS Name Book for Forfar (vol 67, 1857-1861), accessible through the Scotland's Places webpage (<https://scotlandsplaces.gov.uk/places>)

## 6 ACKNOWLEDGEMENTS

Thanks to Chris Bird and Jo Chapman for commissioning this project and to Claire Herbert, Aberdeenshire Council Archaeology Service (Advisor to Angus Council) for her advice during the work.

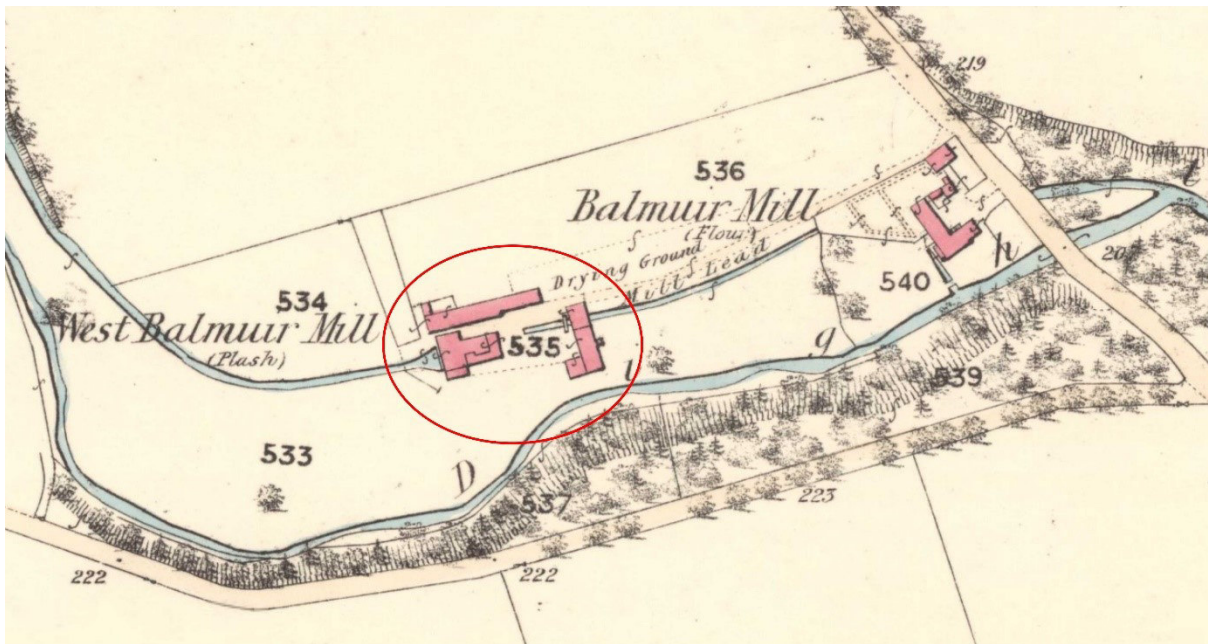
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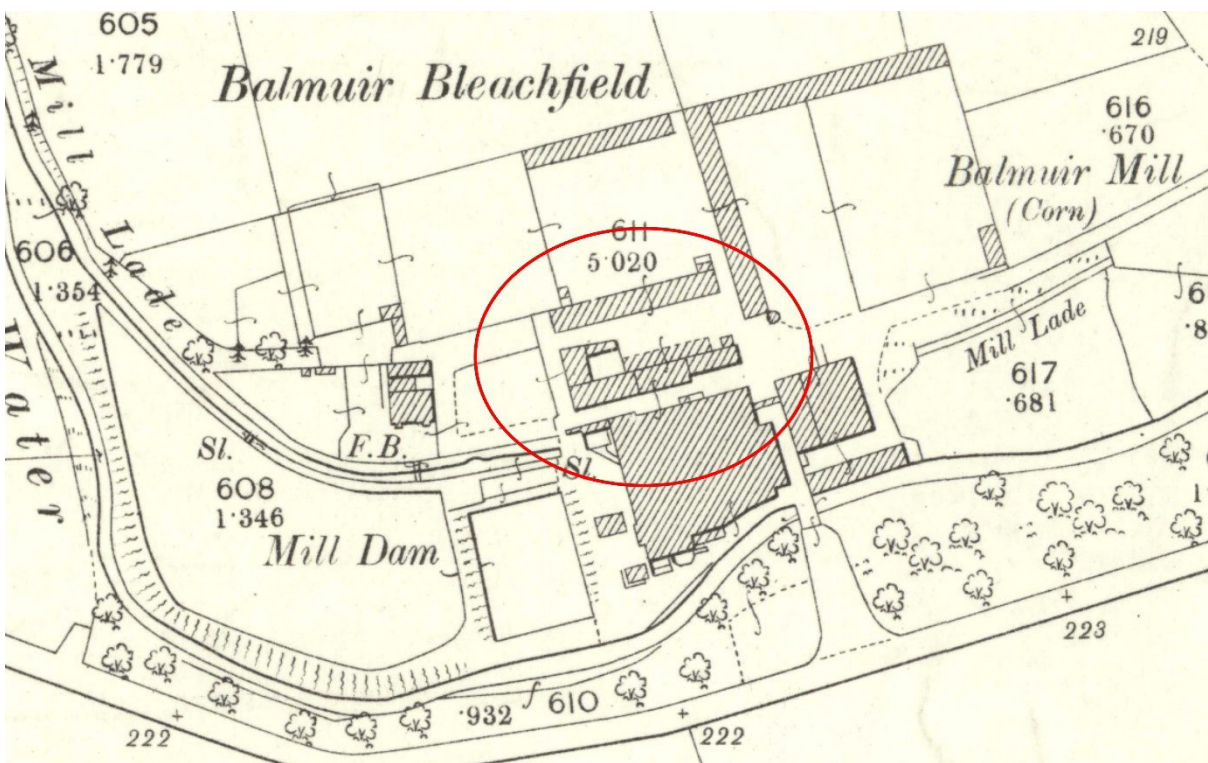
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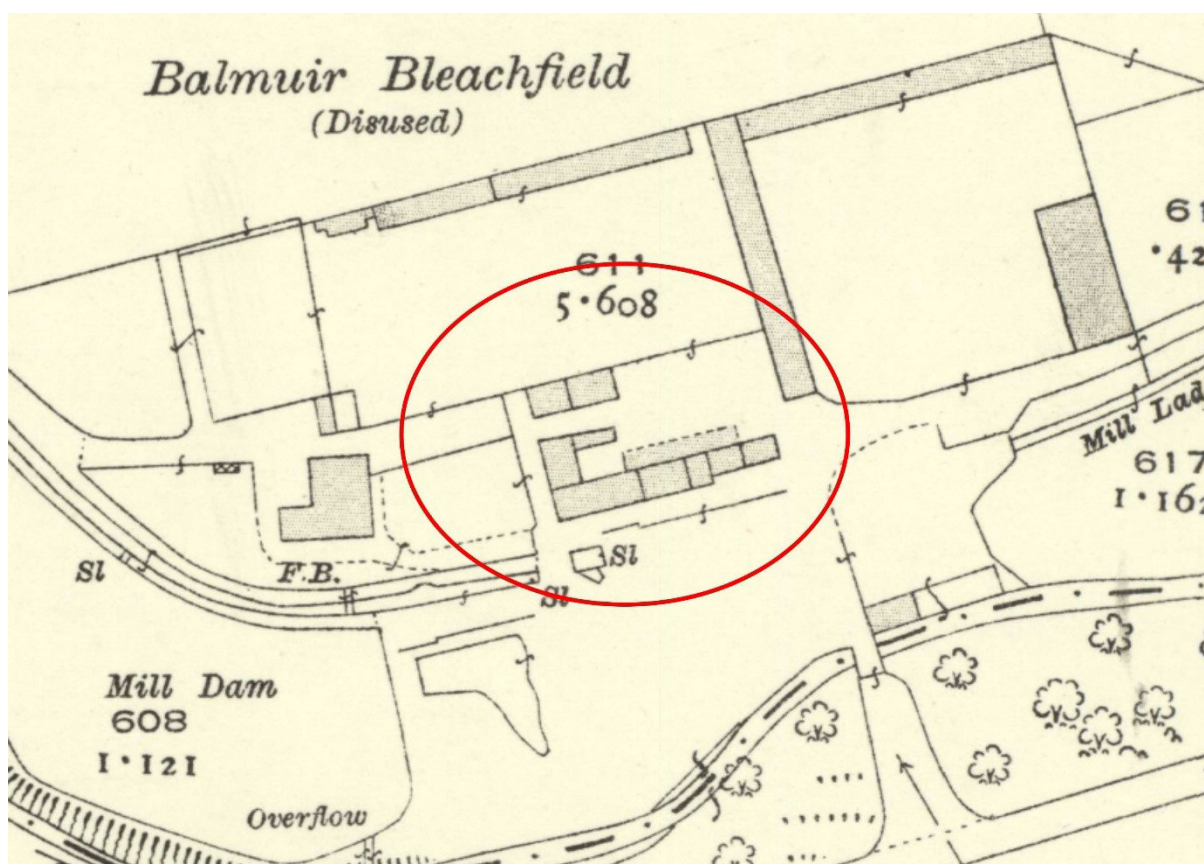
**APPENDIX 1 MAPS**



Illus 32 First Edition Ordnance Survey map Forfarshire L.13 (Mains & Strathmartine)  
 Survey date: 1858 to 1859, Publication date: 1861 (copyright National Library of Scotland)



Illus 33 Second Edition Ordnance Survey map Forfarshire L.13  
 Revised: 1900, Published: 1902 (copyright National Library of Scotland)



Illus 34 Third Edition Ordnance Survey map Forfarshire L.13 Revised: 1921, Published: 1923 (copyright National Library of Scotland)

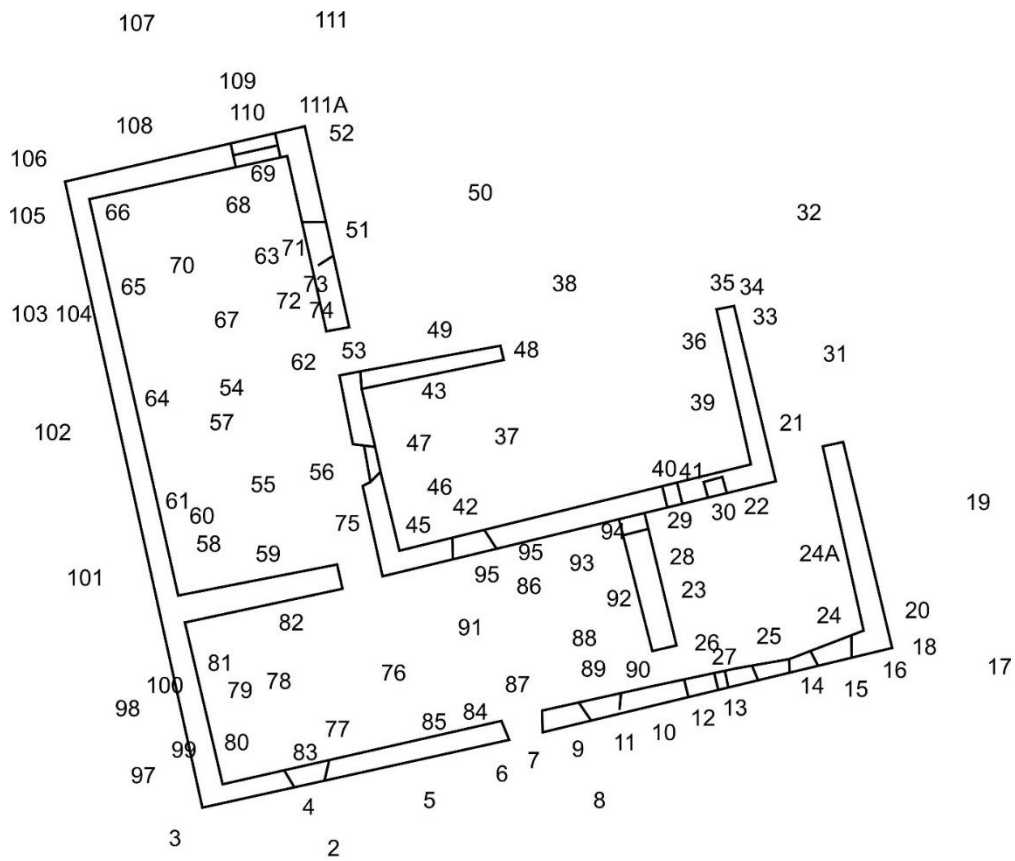
## APPENDIX 2 TABLE OF FEATURES RECORDED IN THIS SURVEY

No	Description	Size cm
W1	First floor window WSW wall Room 2 (not accessible)	-
W2	SSE wall Room 1	80x135
W3	SSE wall Room 3	110 wide
W4	SSE wall Room 3	134 H 82 (ext) 125 (int) W
W5	SSE wall Room 3	120 H 92 (ext) 115 (int) W
W6	SSE wall Room 3	118H 85 (ext) 110 (int) W
W7	NNW wall Room 1	144 H 80 (ext) 115 (int) W
W8	ENE wall Room 1	136H 124 (int) 80 (ext) H
W9	ENE wall Room 1	138H 124 (int) 83 (ext) H
W10	Small window blocked with stone SSE wall Room 3	C80x50
D1	Cart door WSW wall Room 1	245x245
D2	NNW wall Room 2 arched stone lintel, lower half blocked with stone	125x220
D3	SSE wall Room 1	110x215

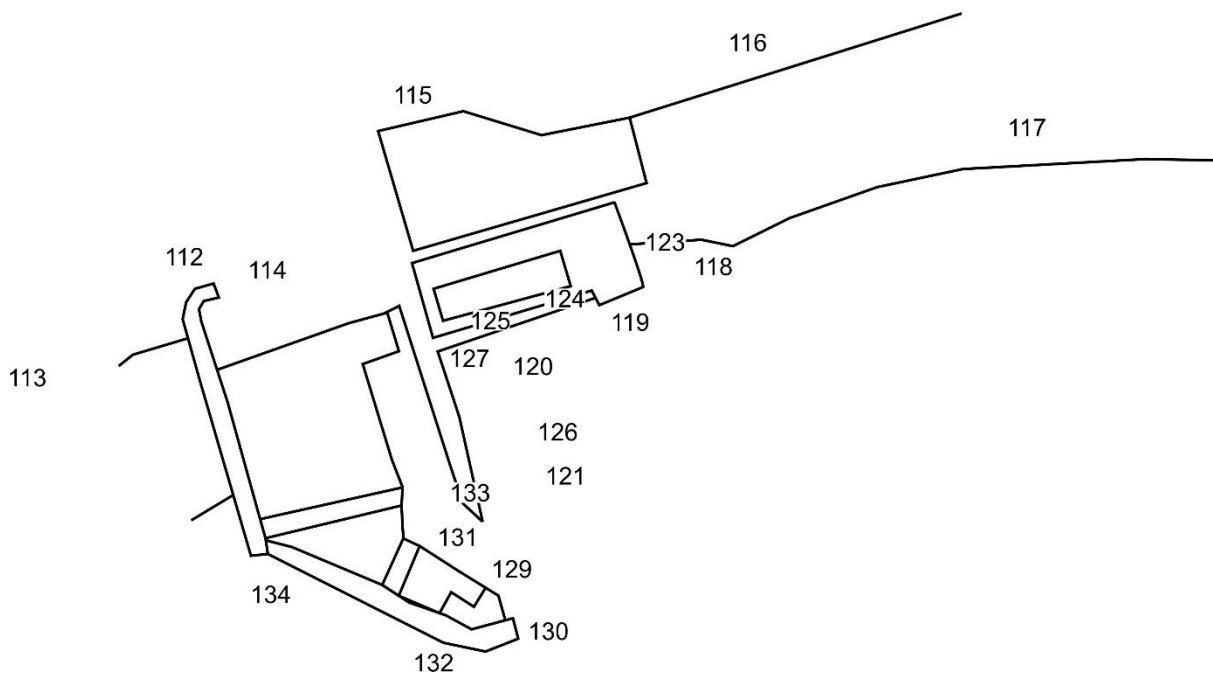


D4	Door between Rooms 1 and 2	108x205
D5	Door between Rooms 1 and 3	91x200
D6	ENE wall Room 1	122x210
F1	Aperture between Rooms 1 and 3 adjacent to wheel F4, concrete base, wood lintel	200H 35W
F2	Wheel pit Room 1	46 W 350 long
F3	Driveshaft pit in floor of Room 1	43x410
F4	Internal iron wheel NNW wall Room 1	120 diam, 25 wide
F5	Aperture between Rooms 1 and 3 blocked with stone	66x28
F6	Aperture for drive shaft NNW wall Room 3	30x42, shaft 7cm diam
F7	Aperture NNW wall Room 3	49Wx61H
F8	Wall NNW wall Room 2	
F9	Granite cobbles and hand made brick floor Room 2, stables	Whole room
F10	Wooden saddle rack between W9 and D6 ENE wall Room 2	-
F11	Vent WSW wall Room 2	30H 20W int
F12	Vent WSW wall Room 2	30H 20W int
F13	Vent WSW wall Room 2	30H 20W int
F14	Scar SSE wall Room 3, possibly representing earlier wall	-
F15	Vent NNW wall Room 2	10x10
F16	Vent SSE wall Room 4	10x10
F17	Breast shot waterwheel iron with wooden paddles	390 diameter
F18	Lade ENE of waterwheel, infilled no access	130 wide
F19	Bridge parapet (taking road over lades) with lade F18 under NNW half and overflow lade F21 on SSE half	-
F20	Wall of infilled room WSW of waterwheel F17– no access	-
F21	Overflow lade on S side of wheel and lades F17 and F18 infilled and poorly accessible	C130 wide
F22	Roof scar exterior ENE wall Room 2	-
F23	Vent SSE wall Room 3	10x10
F24	Wall running WSW-ENE SSE of mill at upper level – overgrown and poor condition	-
F25	Wall WSW of wheel with lade F24 feeding wheel	
F26	Wall WSW wheel F17 – may be NNW wall of lade F18 but no access	-

# APPENDIX 3 PHOTOGRAPHS



1  
Illus 35 Camera points used in this survey (mill)



Illus 36 Camera points used in this survey (wheel and lades)



<b>Photo no</b>	<b>Description</b>	<b>Facing</b>	<b>Camera point</b>
9059	Mill from SW	NE	1
9060	SSE wall W2	NNW	2
9061-3	SW corner quoins	NE	3
9064-5	W2	NNW	4
9066	W2 (left) D3 (right)	NNW	5
9067	D3	N	6
9068-9	D3	NNW	7
9070-2	Room 5 underground and no access	SSE	8
9073	W4	NE	9
9074	W4	NW	10
9075	W4	NNW	11
9076	W4	NW	11
9077	W4	NNW	11
9078-9	W4	NE	11
9080	W3 above W4	NNW	11
9081-5	Junction of two phases of wall F14	NW	12
9086	W10	NNW	13
9087	Wall above W5	NNW	14
9088-9	W5	NNW	14
9090	Wall above W6	NNW	15
9091-2	W6	NNW	15
9093	SE corner quoins on first floor level	NNW	16
9094	W6	NNW	15
9095	F15	NNW	15
9096-7	Mill from SE	NW	17
9098	Mill from SE	NW	18
9099	ENE wall	WSW	19
9100-1	ENE wall Sse end quoins on first floor level	WSW	20
9102	Room 4 ENE wall (right) Room 3 ENE wall (left)	SSE	21
9103	Room 3 SSE wall W6, W5	SSE	22
9104	Room 3 ENE wall	ENE	23
9105-6	SE corner Room 3	SE	24
9107	W6	SSE	24
9108	W5	SSE	25
9109	Joist holes above W5	SSE	25
9110	Room 3 WSW wall D5 (left) F5 (centre) F1 (right)	WSW	24A
9111-2	Door lying ENE side of D5	SSE	26
9113-4	D5	SSE	26
9115	F5	SSE	28
9116-18	F1	SSE	29
9119	Room 3 NNW wall F6 (top left) F7 (bottom right)	NNW	28
9120-1	F6	NNW	29
9122-3	F7	NNW	30
9124	Room 4 ENE wall exterior	WSW	31

9125	ENE walls	SW	32
9126	ENE walls	WSW	32
9127-8	Room 4 ENE wall exterior NNW end quoins	WSW	33
9129-30	Room 4 ENE wall end	SW	34
9131-33	Room 4 ENE wall end	SSE	35
9134-6	Room 4 ENE wall interior	ENE	36
9137	Room 4 ENE wall interior	ENE	37
9138	Room 4	SE	38
9139	Room 4 SSE wall F16 (top left), F6, W7	SSE	38
9140	Room 4 SSE wall F16 (top left), F6, W7	SSE	39
9141	F6	SSE	40
9142-3	F6	WSW	41
9144	W7	SSE	46
9145	W7	SSE	46
9146	W7	SSE	42
9147-50	SW junction Room 4	SW	45
9151	Room 2 ENE wall W8, D6, W9	WSW	38
9152-4	W8	WSW	37
9155	Wall F8 (NNW wall Room 4)	NNW	47
9156-7	Wall F8 (NNW wall Room 4)	WSW	48
9158	D6	WSW	49
9159-60	D6 (left) W9 (right)	WSW	50
9161-2	W9	WSW	51
9163-5	NE corner Room 2 quoins	WSW	52
9166	Room 2 ENE wall W8, D6, W9	SE	50
9167	Room 4 SSE wall F16 (top left), F6, W7	SSE	50
9168-9	D6	SE	53
9170	D6	ENE	54
9171	Room 2 ENE wall D6, W8	ENE	55
9172-4	W8	ENE	56
9175	Room 2 SSE wall D4	SSE	57
9176-8	Room 2 SE corner junction	SE	58
9179	Room 2 WSW wall	WSW	59
9180	Room 2	NNW	59
9181	Room 2 WSW wall beam slots	WSW	60
9182	F13 (window W1 covered with plastic)	WSW	61
9183	Room 2 WSW wall	WSW	62
9184	Room 2 WSW wall	WSW	63
9185-6	F12	WSW	64
9187	F11	WSW	65
9188-90	Room 2 NW corner	NW	66
9191	Room 2 NNW wall D2 (right)	NNW	54
9192	F9	ENE	68
9193	Room 2 NNW wall	NNW	68
9194-6	D2	NNW	69
9197-8	Room 2 ENE wall W9 with wooden cupboard in situ	ENE	70



9199	W9	ENE	63
9200-1	W9	ENE	71
9201	Wooden cupboard under W9	ENE	71
9202	Wooden tackle and saddle rack F10	ENE	67
9203-4	Wooden tackle and saddle rack F10	ENE	72
9205-6	Wooden tackle and saddle rack F10	SE	63
9207	D4	SSE	75
9208	D4	NNW	76
9209	Wall between Rooms 1 and 2 D4 (right)	NNW	77
9210	WSW wall Room 1 with blocked door D1	WSW	78
9211-12	WSW wall Room 1 with blocked door D1	WSW	79
9213-14	WSW wall Room 1 with blocked door D1	WSW	81
9215-16	Room 1 SSE wall W2 with roof joist holes above	SSE	78
9217	Room 1	ENE	78
9218-19	Room 1 SSE wall W2 with roof joist holes above	SSE	83
9220-1	W2	SW	83
9222	W2	SE	83
9223-4	Room 1 SSE wall W2 (right) D3 (left)	SSE	76
9227-30	D3 with W4 (left)	SSE	86
9231	D3	SSE	87
9232-3	W4	SSE	88
9234	W4	SSE	89
9235	D5	ENE	90
9236	Wall between Rooms 1 and 3 D5 (right) F1 (left)	ENE	91
9237-9	F5 blocked and repointed	ENE	92
9240-1	Room 1 NNW wall with wheel mechanism F4 and pit F2	NNW	88
9242	Wheel F4	NNW	92
9243-4	F1	NE	93
9245	F4 in pit F2	WSW	94
9246	Wheel F4	NNW	93
9247	F4 in pit F2	WSW	94
9248	Room 1	WSW	92
9249-50	Room 1 NNW wall D4 (left) W7 (right)	NNW	87
9251	W7	NNW	96
9252-3	wheel F4 in pit F2 with F1 (top)	ENE	95
9254	Mill from SW	NE	1
9255	Mill from SW	NNE	1
9256	D1 (left)	ENE	97
9257-8	SW corner quoins	NE	3
9259-61	D1	ENE	98
9262-3	D1 SSE jamb	ENE	99
9264-5	D1 NNW jamb	ENE	100
9266-7	Wall NNW of D1	ENE	101
9268-9	W1 covered with plastic	ENE	102
9270-1	Wall NNW of W1	ENE	103
9271-3	Wall NNW of W1	ENE	103

9274	F11	ENE	104
9275	F13	ENE	102
9276	NW quoins	ENE	105
9277-9	NW quoins	SE	106
9280	NNW wall	SSE	107
9281	Large block in NNW wall	SSE	108
9282-3	D2	SSE	109
9284-6	D2	SSE	110
9287	From NE	SW	111
9288	Mill from N	SSE	111
9289-90	NE quoins	SW	111A
9291	Bridge parapet F19	SSE	112
9292	Bridge parapet F19	ESE	113
9293	Bridge parapet F19	SSW	114
9294	Room 5 underground and no access	SSE	115
9295	Wall F24	SSE	116
9296	Wall F24	S	116
9297-8	Mill from level of lades	NW	117
9299	Mill from level of lades	NNW	117
9300	Wheel F17	WSW	118
9301	Room 6 wheel pit	NNW	119
9302-3	Room 6 wheel pit with Room 5 (top)	NNW	119
9304	Wheel F17	NNW	120
9305	Wheel F17	NNW	121
9306-7	Lade F18	ENE	122
9308	Wheel F17	WSW	123
9309	Wheel pit and lade F19	WSW	123
9310-11	Wheel F17	WSW	123
9312-14	Wheel F17 details of mechanism, cogs, struts	NNW	125
9315	Wall F25	WSW	126
9316	Wall F25 N end	NW	126
9317-19	Wheel F17 details of mechanism, cogs, struts	NNW	125
9320-1	Lade F18 WSW end at wheel pit	W	125
9322-3	Lade F18 WSW end at wheel pit	NW	125
9324-6	Wheel F17 details of mechanism, cogs, struts	NNW	127
9327-8	Wheel F17 details of mechanism, cogs, struts	NW	127
9329-30	Wheel F17 details of mechanism, cogs, struts	NE	127
9331	Lade F21	SW	129
9332-4	Lade F21	NW	130
9335	Lade F21	SSW	131
9336	Lade F21	SW	131
9337-9	Lade F21	ENE	132
9340	Lade F21	NE	132
9341-4	Lade F21	NNE	132
9345-6	Wheel F17 with mill in background	NNE	131
9347-8	Wall F26	NNW	133



9349	Bridge F19 with lade to wheel (right) and overflow lade (left)	W	133
9350	Lade F21 SW wall	SW	133
9352	Bridge F19 with lade to wheel (right) and overflow lade (left)	NW	132
9353	Mill	NNE	134



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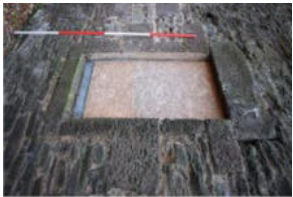
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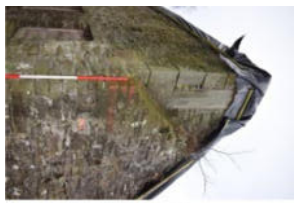
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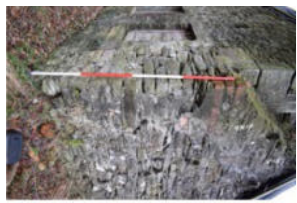
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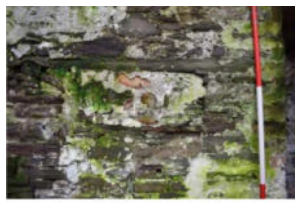
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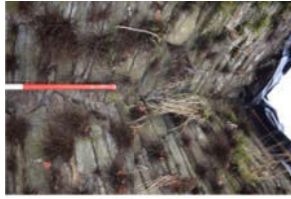
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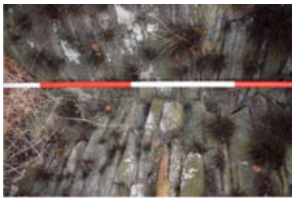
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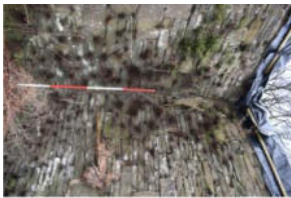
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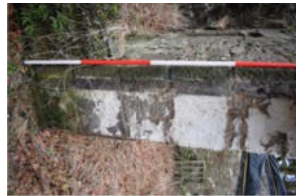
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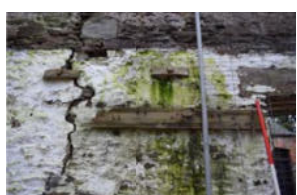
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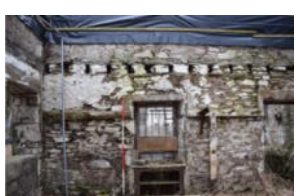
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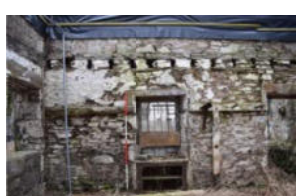
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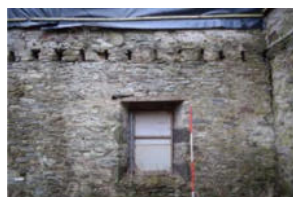
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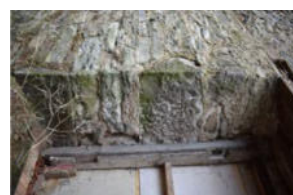
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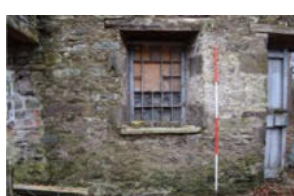
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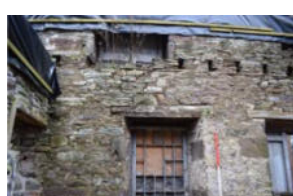
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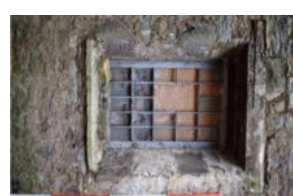
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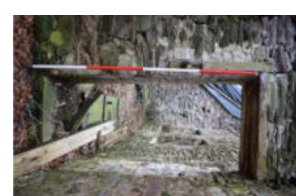
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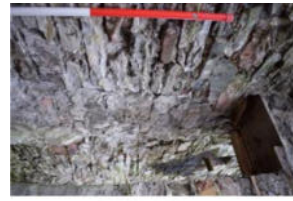
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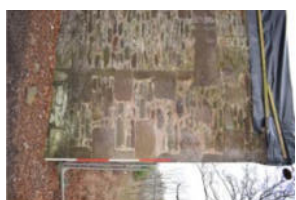
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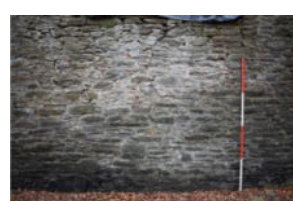
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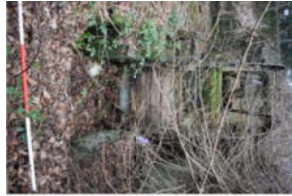
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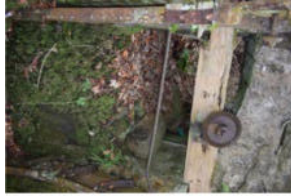
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