

**EARTHWORK SURVEY OF ABBEY MILL FARM
ORCHARD, DUNKESWELL, EAST DEVON**
Discovering Dunkeswell Abbey
PROJECT REPORT

By Hazel Riley



EARTHWORK SURVEY OF ABBEY MILL FARM
ORCHARD, DUNKESWELL, EAST DEVON
Discovering Dunkeswell Abbey

PROJECT REPORT

By Hazel Riley

Date of report: July 2019
Copyright: © The author

Hazel Riley BA (Hons), ACIFA, FSA
Consultant in Landscape History, Management and Conservation Grazing
The Furley Herd of Dexter Cattle
New House Cottage
Furley
Axminster
Devon
EX13 7TR
01404 881330
hazelfurleydexter@btinternet.com

CONTENTS

ABBREVIATIONS

ACKNOWLEDGEMENTS

LIST OF FIGURES AND IMAGE ACKNOWLEDGEMENTS

1.0 EXECUTIVE SUMMARY

2.0 INTRODUCTION

3.0 HISTORY AND ARCHAEOLOGY

4.0 OBJECTIVES

5.0 METHODOLOGY

6.0 RESULTS AND INTERPRETATION

7.0 CONCLUSIONS AND RECOMMENDATIONS

8.0 REFERENCES

OASIS PROJECT NO 360347

ABBREVIATIONS

AIM Aerial Investigation and Mapping

AONB Area of Outstanding Natural Beauty

DDA Discovering Dunkeswell Abbey

DHC Devon Heritage Centre

ETRS89 European Terrestrial Reference System 1989

GPS Global Positioning System

HE Historic England

HER Historic Environment Record

OS Ordnance Survey

OSGB36(15) Ordnance Survey Great Britain 1936 (National Grid)

OSGM15 Ordnance Survey Geoid Model 2015

OSTN15 Ordnance Survey Mapping Transformation 2015

RICS Royal Institution of Chartered Surveyors

ACKNOWLEDGEMENTS

The owners of Abbey Mill Farm kindly allowed access to the orchard; Penny Lawrence shared the results of her research in the area. Thanks to the National Lottery Heritage Fund, Devon County Council and the Blackdown Hills Area of Outstanding Natural Beauty for funding the Discovering Dunkeswell Abbey project.

LIST OF FIGURES AND IMAGE ACKNOWLEDGEMENTS

Front cover The orchard at Abbey Mill Farm: the spire of the Church of Holy Trinity, on the site of the abbey church, can be seen above the trees, centre left. The building platform (4) lies in the centre (Hazel Riley)

Figure 1 Location map (Contains OS data © Crown copyright and database right 2019)

Figure 2 Location of the survey area (Contains OS data © Crown copyright and database right 2019)

Figure 3 Extract from the OS map Milverton 1802 (bl.uk)

Figure 4 Extract from Dunkeswell tithe map 1844 (Devon Heritage Centre DEX/4/a/TM/Dunkeswell) (Reproduced with the kind permission of the South West Heritage Trust)

Figure 5 Extract from Wolford Estate map 1869 (Devon Heritage Centre 337B/0/8/39a) (Reproduced with the kind permission of the South West Heritage Trust)

Figure 6 Extract from OS 1st edition map, 1889 (Ordnance Survey 1st edition 25" map Devon XLVII.11) (maps.nls.uk) (CC by 4.0)

Figure 7 Fragment of medieval tile found in the orchard (Hazel Riley)

Figure 8 Plan of the earthworks, Abbey Mill Farm orchard, 1:500 scale

Figure 9 Profiles of the earthworks, Abbey Mill Farm orchard (V x 2)

Figure 10 Looking north along the precinct boundary (1a) (Hazel Riley)

Figure 11 Looking SW along the precinct boundary (1b) (Hazel Riley)

Figure 12 The building platform (2) and track (3) (1m scale) (Hazel Riley)

Figure 13 Small paddocks or closes (5) in the SW side of the orchard (Hazel Riley)

Figure 14 Boundary earthworks and suggested extents of the outer and inner precincts, Dunkeswell Abbey (Ordnance Survey 1st edition 6" maps Devon XLVII NE & SE) (maps.nls.uk) (CC by 4.0)

Figure 15 Abbey Mill Farm orchard: interpretation plan



Fig 1 Location map

1.0 EXECUTIVE SUMMARY

1.1 A metric survey of an area of earthworks in an orchard at Abbey Mill Farm, south of the site of the Cistercian Abbey of Dunkeswell, was undertaken in order to record and interpret their probable date and function. The results suggest that the earthworks represent the remains of part of the inner precinct boundary of the abbey, with the remains of two building platforms which may be the sites of service buildings for the cloisters.

2.0 INTRODUCTION

2.1 This report sets out the results of an analytical earthwork survey of the orchard at Abbey Mill Farm, commissioned by the Discovering Dunkeswell Abbey Project (DDA) (Farnell 2019). The survey was required to accurately record and interpret an area of earthworks, south of the site of Dunkeswell Abbey, transcribed from Lidar images and suggested to be the remains of settlement features (3.6).

2.2 Abbey Mill Farm lies on the south edge of the hamlet of Abbey, at the SW side of the Blackdown Hills Area of Outstanding Beauty (AONB), on the western edge of the valley of the Madford River, 2.5km south of Hemyock, at an altitude of 155m OD and at NGR ST 1425 1106 (Figs 1 and 2).

2.3 The survey area lies on the edge of alluvial deposits in the valley of the Madford River; the underlying geology comprises Triassic mudstones of the Mercia Mudstone Group (bgs.ac.uk).

2.4 The earthworks are in an orchard which contains both newly planted and long-established trees (Front cover).

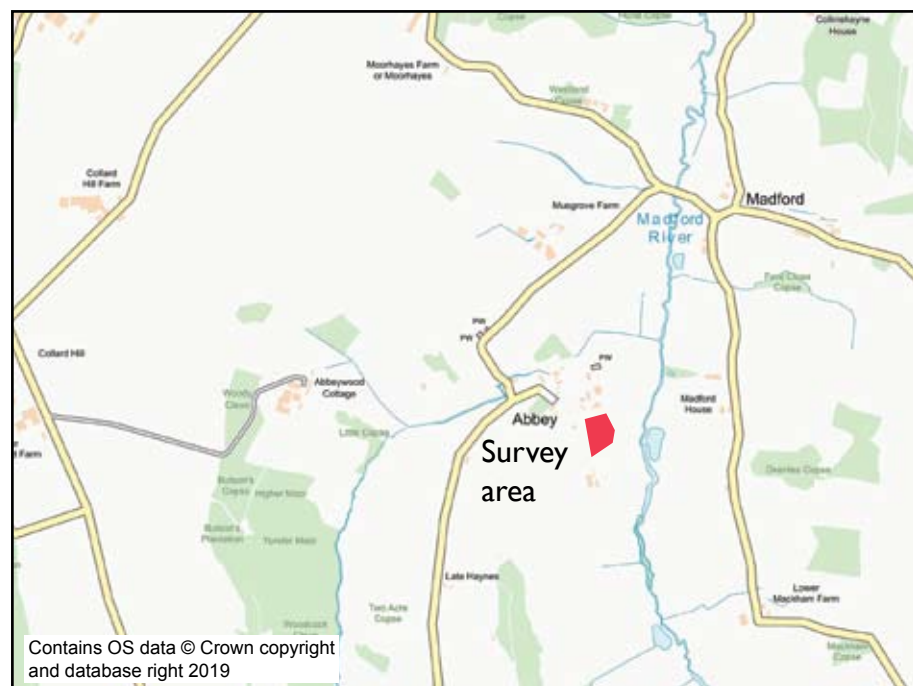


Fig 2 Survey area

3.0 HISTORY AND ARCHAEOLOGY

3.1 In 1201 William Brewer granted large endowments of land and property to the monks of the Cistercian Abbey of Forde to found a monastery by the Madford River to the north of the village of Dunkeswell on the edge of the Blackdown Hills. By the end of the 13th century, Dunkeswell Abbey owned large estates in east Devon, including the manors of Dunkeswell, Wolford and Broadhembury, and properties at Buckland Brewer and Lincombe in north Devon. A charter of 1290 granted permission for the monks at Dunkeswell Abbey to hold weekly markets and an annual fair at both Buckland Brewer and Broadhembury. The abbey's total income at the Dissolution was assessed at £295, when the abbot, and ten monks surrendered the abbey to the king (Coppack *et al* 1998, 107).

3.2 In 1539 the king granted John Lord Russell, the president of the King's Council of the West, the abbey's local possessions, an estimated 1600 acres: 'the house and site of the Abbey with the Church, Steeple and Churchyard, a water-mill, gardens, dwellings and woods in Dunkeswell and Old Dunkeswell, and the Granges and Bartons of Sheldon, Bowerhayes, Bywood, Broadhembury, land at Luppitt and the Parish Churches of Dunkeswell, Awliscombe and the free chapel there' (Sparks 1978, 111). John Russell sold the fabric of the church and all monastic buildings to John Heydon of Ottery St Mary in 1539, who was given ten years to pull down, sell and carry away as much of the buildings as he could. Russell's grant of the abbey lands was exchanged for land in Lincolnshire in 1551 and the land remaining in possession of the King after 1558

included: 'Farm of the Abbey site. The Grange of Bowerhayes, a water-mill and three parts of a meadow in Shabbcombe in the parish of Luppitt' (Sparks 1978, 113). The residue of Abbey land was administered from Bowerhayes Grange by a Crown Bailiff down to the late 18th century when it became part of the Simcoe's Wolford estate (Sparks 1978, 113).



Fig 3 (above left) Extract from OS map Milverton 1802 (bl.uk)



Fig 4 (left) Extract from Dunkeswell tithe map 1844 (Devon Heritage Centre DEX/4/a/TM/Dunkeswell) (Reproduced with the kind permission of the South West Heritage Trust)

3.3 Elizabeth Simcoe, widow of General John Graves Simcoe, lived at Dunkeswell Grange and became interested in the Abbey. She corresponded with Dr George Oliver, author of *Monasticon Dioecesis Exoniensis* (1846), who had researched much of the Abbey's history. Elizabeth Simcoe had the idea of building a new church on the site of the Abbey Church: in 1840 the ruins of the medieval church were excavated and Holy Trinity Church was built on the site of the nave of the Abbey Church and consecrated in 1842. J A Sparks used Elizabeth Simcoe's notebooks, pencil sketches and watercolours of the abbey remains in his book (1978); the original material is preserved in the Devon Heritage Centre (DHC), South West Heritage Trust (2331/Z Dunkeswell Abbey 1861-1975 Notes, plans and drawings).

3.4 The Ordnance Survey (OS) map of 1802 shows three buildings in an enclosure and called 'Abbey Mill;' the survey area lies in the large field to the south of this (Fig 3). The tithe map for the parish of Dunkeswell does not include Dunkeswell Abbey or Abbey Mill Farm (Dunkeswell tithe map 1844). Glebe or church land was exempt from paying tithes: the tithe map names the area as part of the Bowerhayes Estate, which was one of the abbey's grange farms (Fig 4). A map of the Wolford Estate dated 1869 shows a holding called The Abbey (Fig 5); the accompanying reference book names the buildings and fields (DHC 337B/0/8/39; 39a). The survey area lies on the south side of the holding and is not included in it. The field and building details are as follows:

The Abbey (tenant Thomas Durham)

1 Ham

2 Five Acres

3 Lower Kitchen Close

4 Higher Kitchen Close

5 Churchyard Meadow

6 Croft

7 Garden

8 Madford Hill: house, buildings, curtilage etc

Cottages

276 Schoolroom (tenant Thomas Moor)

284 Garden (tenant Thomas Moor)

272 Stable (Captain Simcoe)

278 Dwelling house and garden (tenant John Noble)

279 Dwelling house and garden (tenant John Noble)

280 Cottage (tenant William Noble)

282 Garden (tenant William Noble)

281 Cottage (tenant Thomas Richards)

283 Garden (tenant Thomas Richards)

285 Orchard spot (tenant Thomas Richards)

6a Abbey Church and Yard (Vicar and Churchwardens)

The OS 1st edition 25" map (Devon 47.11, surveyed 1888, published 1889) shows the survey area planted with orchard trees; the farm on the site of Dunkeswell Abbey is called 'Abbey Meadows' and Abbey Mill Farm is mapped (Fig 6). The land tax survey 1910-1915 shows that by this time the orchard was part of Abbey Mill Farm.

3.5 The earthworks in Abbey Mill Farm orchard were recorded from Lidar images during the course of Historic England's (HE) Blackdown Hills AONB and East Devon River catchments Aerial Investigation and Mapping survey (AIM), and interpreted as former building plots, perhaps part of Dunkeswell Abbey's estate (Hegarty *et al* 2018, 45, fig 27).

3.6 The HE AIM survey also recorded part of the east range of the abbey together with earthworks which were interpreted as part of the abbey precinct boundary; Abby Hunt carried out a survey of the earthworks in Abbey Meadows which included the probable precinct boundary (Hegarty *et al* 2018, 29, fig 14; Hunt 2000, fig 4).

3.7 A fragment of glazed tile of medieval date was found in the roots of a fallen tree on the north side of the site during a site visit by Bob Croft and is at Abbey Mill Farm (Fig 7).

3.8 Abbey Mill Farm orchard lies on the south side of the site of Dunkeswell Abbey which is a Scheduled Monument; the Church of Holy Trinity, Abbey Meadow Farm house, Abbey Cottage and the ruins of the Abbey gatehouse are Listed Buildings associated with Dunkeswell Abbey (Historic England List Entry numbers: 1009303; 1308999; 1098254; 1166318; 1098253).



Fig 5 (left) Extract from Woford Estate map 1869 (Devon Heritage Centre 337B/0/8/39a) (Reproduced with the kind permission of the South West Heritage Trust)

Fig 6 (below left) Extract from OS 1st edition map 1889

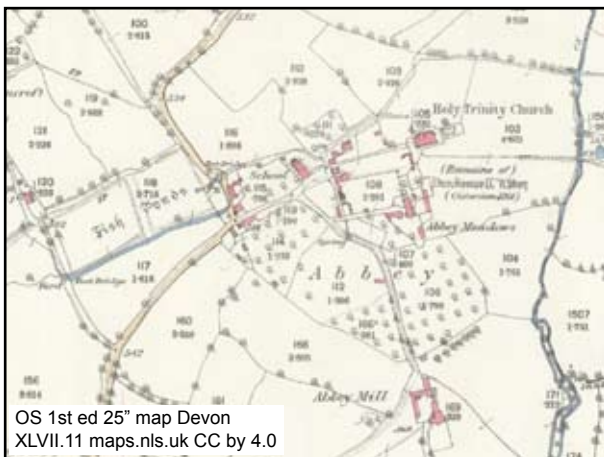


Fig 7 Fragment of medieval tile found in the orchard (c 5cm wide) (Hazel Riley)



4.0 OBJECTIVES

4.1 The principal objectives of the survey were to record the location and morphology of the earthworks in Abbey Mill Farm orchard, and to interpret their probable function and date.

5.0 METHODOLOGY

5.1 A Level 3 analytical earthwork survey of the earthworks was undertaken at a scale of 1:500 on 4th and 6th June 2019 (Fig 8). The survey was carried out using survey grade differential Global Positioning System (GPS) equipment. The resulting ETRS89 data was transformed to OSGB36(15) using OSTN15 and OSGM15 (www.ordnancesurvey.co.uk/gps/transformation; Greaves *et al* 2016). Observation times were based on those recommended by the OS and the Royal Institution of Chartered Surveyors (RICS) in order to obtain accurate heighting information (OS 2010; RICS 2010). Profiles across the earthworks were surveyed using GPS (Fig 9).

5.2 Photographs of the earthworks were taken and form part of the project archive.

5.3 Survey constraints included the thick vegetation across the NW and SW parts of the orchard.

5.4 The survey archive has been deposited with the Devon HER.

6.0 RESULTS AND INTERPRETATION

6.1 The earthworks comprise six elements, marked on Figure 8 as numbers 1 - 6. A steep scarp (1a) runs N/S across the site for some 50m, then turns and becomes a ditch (1b) which runs for some 45m NE/SW (Figs 10, 11). The scarp is 1.8m high; the ditch is 8m – 10m wide and up to 1.75m deep. A level platform (2) lies in the NE side of the orchard, defined to the east by the scarp (1a), and to the south and west by a

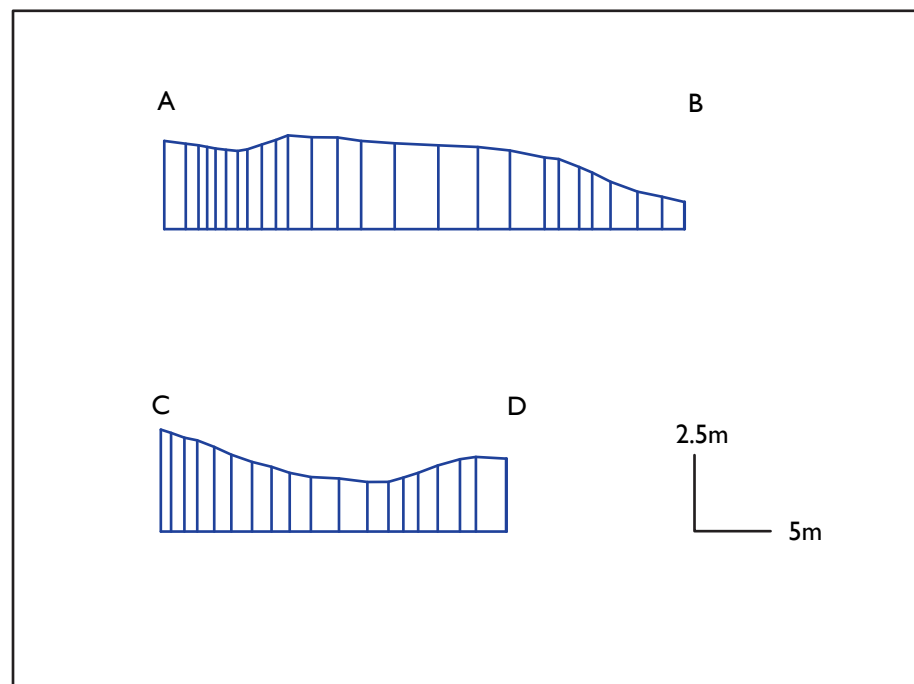


Fig 9 Profiles

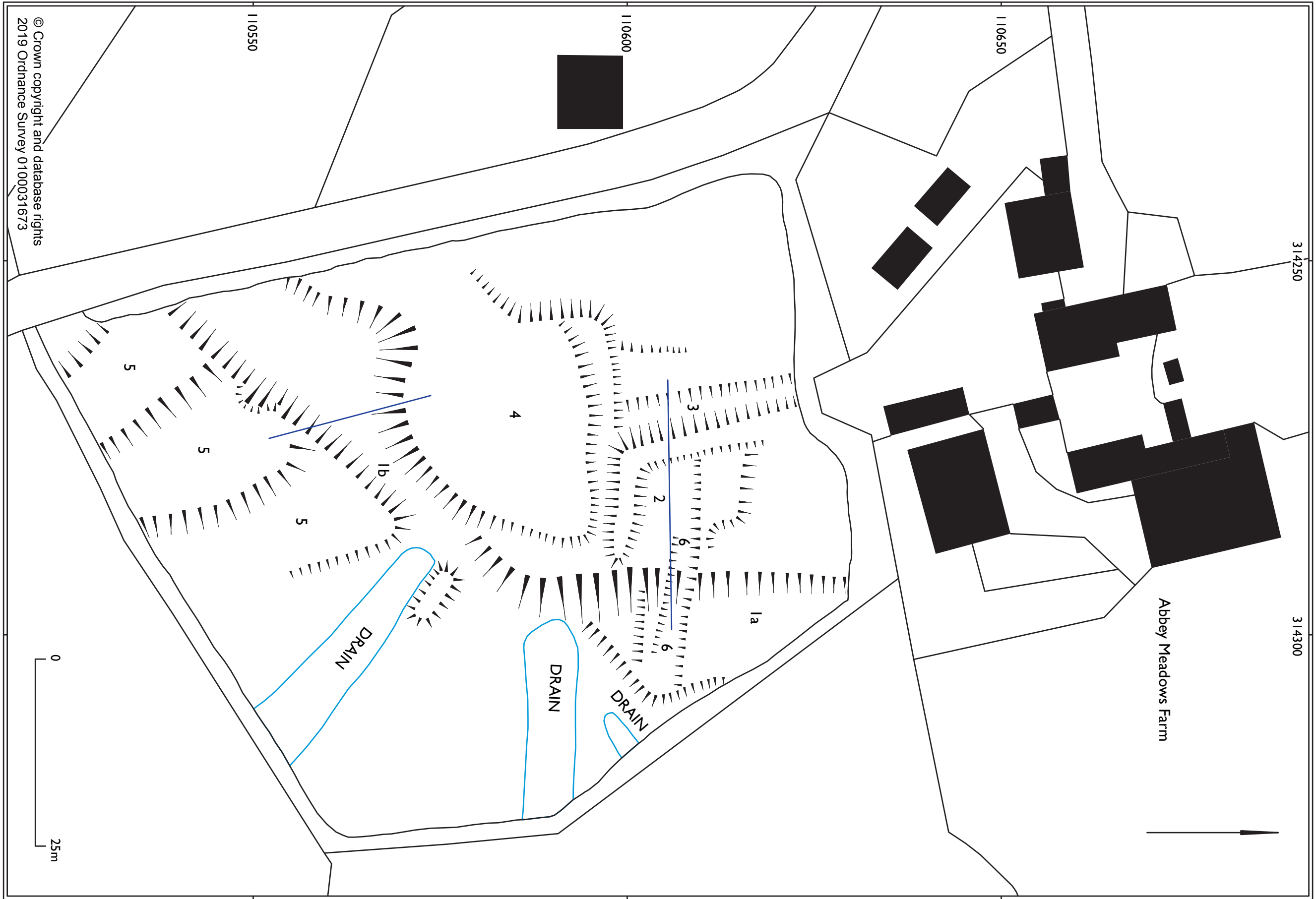


Fig 8 Abbey Mill Farm orchard earthwork survey 1:500

bank, 5m wide, 0.4m high (Fig 12). The northern side of the platform is probably defined by a scarp up to 0.6m high. The platform measures 20m N/S and 20m E/W. Immediately to the west of the platform is a ditch (3), 4.5 - 6m wide, 0.6m deep, which runs N/S for some 24m (Fig 12). A large rather irregular platform (4) lies in the centre of the orchard (Front cover). This is defined to the east and south by the scarp and ditch (1a; 1b) and to the west and north by scarps up to 1.2m high. The platform measures 34m N/S and 33m E/W. To the SW side of the orchard four scarps, up to 1m high, define three rectangular paddocks or closes, up to 26m NW/SE by up to 12m SW/NE (5) (Fig 13). Several narrow ridges (6) run over the scarp (1a) and platform (2). Three drains of recent origin lie in the SE side of the orchard.

6.2 The layout of Dunkeswell Abbey is still poorly understood. The claustral ranges and church plans rely on work carried out in the 19th and early 20th centuries (Sparks 1978). An earthwork to the east of the abbey site has been identified as the inner precinct boundary (Hunt 2000, fig 3; Hegarty *et al* 2018, fig 14) and the extent of the outer precinct boundary has also been suggested although this seems to underestimate the extent of the site (Hunt 2000, fig 3). No detailed work on the analysis of the wider landscape to suggest the extent of the outer precinct at Dunkeswell Abbey, which would include the fishponds, has been carried out. Figure 14 shows a suggested outer precinct based on landscape evidence and the Wulford estate reference book and map (Devon Archives 337B/83/1a-b; 1xref) and this survey work. Where earthwork and documentary sources exist, it is clear that Cistercian Abbeys were extensive, complex



Fig 10 (left) Looking north along the precinct boundary (1a) (Hazel Riley)

Fig 11 (below left) Looking SW along the precinct boundary (1b) (Hazel Riley)

Fig 12 (below) The building platform (2) and track (3) (Hazel Riley)



sites which developed over several centuries. The inner precinct (or court) was the area outside the cloister to which access was strictly controlled from the inner or great gatehouse. In this area were buildings for visitors to the monastery: guest houses, the guest hall and guest kitchen, stables for the guests' horses and a lay infirmary. Other buildings were service buildings for the cloister, such as the bake house, brew house, kiln house, and granaries. The outer precinct at Rievaulx Abbey contained 'houses for the convent plumber and blacksmith, the house of the porter at the parlour door, the common stable, the workshops, mills, orchards, and small closes of pasture' (Coppack 1998, 108-111).

6.2.1 The scarp and ditch (1a, 1b) in Abbey Mill Farm could be part of the boundary previously interpreted as the inner precinct boundary in Abbey Meadows to the north, or it may be part of the outer precinct boundary (Figs 14 and 15).

6.2.2 The most striking feature of the earthworks in Abbey Mill Farm orchard is the orientation of the building platforms (2,4) and the ditch (3). The platforms are oriented N/S - E/W and echo the abbey building ranges set around their cloister; the ditch runs towards the SW side of the abbey, which housed the kitchen (south) and lay brothers accommodation (west) (Fig 15). The location of these features, bounded to the east and south by the scarp and ditch (1a, 1b) is also significant. If these are part of the inner precinct boundary, then the building platforms may have housed service buildings for the cloister, such as the bake house, brew house or granary, connected to the claustral range by a well used path or track, now visible as a straight ditch (3).

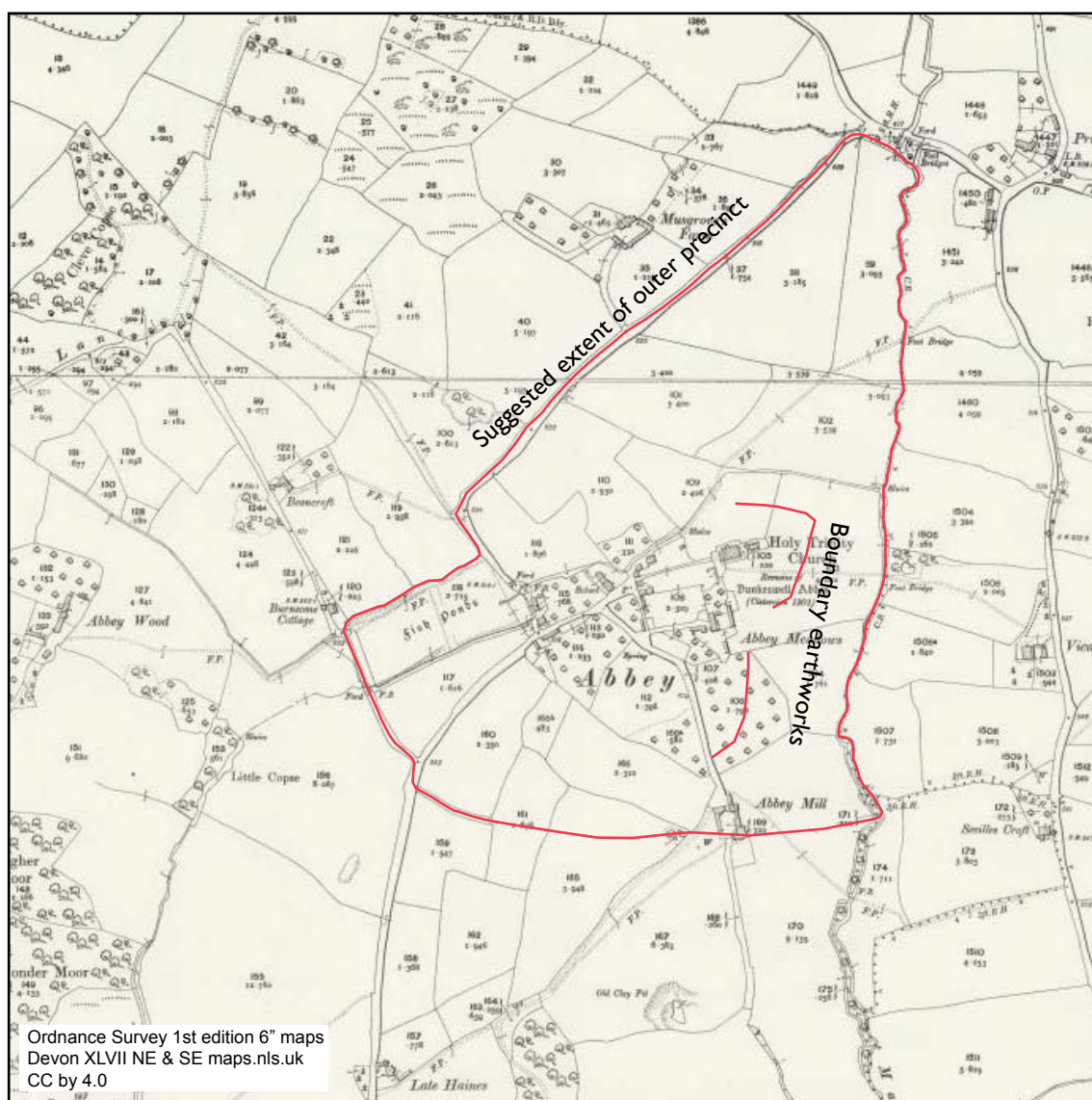
6.2.3 The buildings may have been associated with industrial activities. There is evidence for significant iron smelting both in the immediate vicinity of Dunkeswell Abbey and at least one of the Abbey's grange farms. At Burnsome Cottage, to the NE of the Abbey's fishponds, are the earthwork remains of slag heaps and a possible working area, possibly of medieval date (Devon HER MDV56373; 54143). An iron-smelting site to the north of Bywood Farm, a grange farm of Dunkeswell Abbey, has been dated to the Roman-early Medieval period (Devon HER MDV1842; 67545). Although industrial activities were often carried out on monastic granges, the Cistercian Abbeys at Rievaulx, Merevale and Bordesley had ironworks within their precincts in the early 16th century (Coppack 1998, 117; 107). Such activities would have been carried out in the outer precinct.



Fig 13 Small paddocks or closes (5) in the SW side of the orchard (Hazel Riley)

6.2.4 The evidence for a monastic mill at Dunkeswell Abbey is equivocal. Abbey Mill Farm is a 19th-century building and there is apparently no evidence for a mill at the farm (information from the owners). There are several references to mills in the grants of land and property to the abbey. Charters from 1227 confirm the gifts of William Brewer of the manor of Broadhembury, which included a mill, and land in the manor of Uffculme, with the mill, to the abbey (Sparks 1978, 22). The reference to the 'Farm of the Abbey site. The Grange of Bowerhayes, a water-mill and three parts of of a meadow in Shabbcombe in the parish of Luppitt' in possession of the king after 1558 (Sparks 1978, 113) refers to the mill in Luppitt - a corn mill in the 19th century. Tenancy leases granted by the Abbots of Dunkeswell include, under the heading 'Parish of Dunkeswell, Olde Dunkeswell: Phillips Robert and 2 of his family 1538 The Corn Mill and appurtenances.' In 1539 the King granted to John Lord Russell: 'the house and site of the Abbey with the Church, Steeple and Churchyard', a water-mill, gardens, dwellings and woods (400 acres) in Dunkeswell and Olde Dunkeswell' (Sparks 1978, 124, 111). Olde Dunkeswell refers to the village of Dunkeswell, which was an established settlement by

Fig 14 Boundary earthworks and suggested extent of outer precinct, Dunkeswell Abbey



the early 13th century when the abbey was founded. A lease from the mill in Dunkeswell village shows that it was in existence by 1692 (Paterson 1992) and this is most likely the mill referred to in the 16th century lease granted by the abbey. The lay subsidy of 1332 lists Richard the Miller from Dunkeswell (Erskine 1969, 38); he was probably the miller at Olde Dunkeswell as the abbey would not be liable for such a tax and the Cistercian statutes forbade the possession of mills that might be used as a source of revenue (Coppack 1998, 114). Other evidence for a mill at the abbey is from 19th-century place names: the name Abbey Mill on the 1802 map is placed to the south of the abbey site (Fig 3) and Abbey Mill is given to the 19th-century farm on the OS 1st edition map (Fig 6). If the earthworks do represent the remains of a monastic mill it may have been associated with iron working, as at Bordesley Abbey (Coppack 1998, 107).

6.2.5 The small rectangular enclosures (5) at the SW of the orchard are the remains of small paddocks or closes. They could be associated with the monastic layout or the post-medieval use of the site.

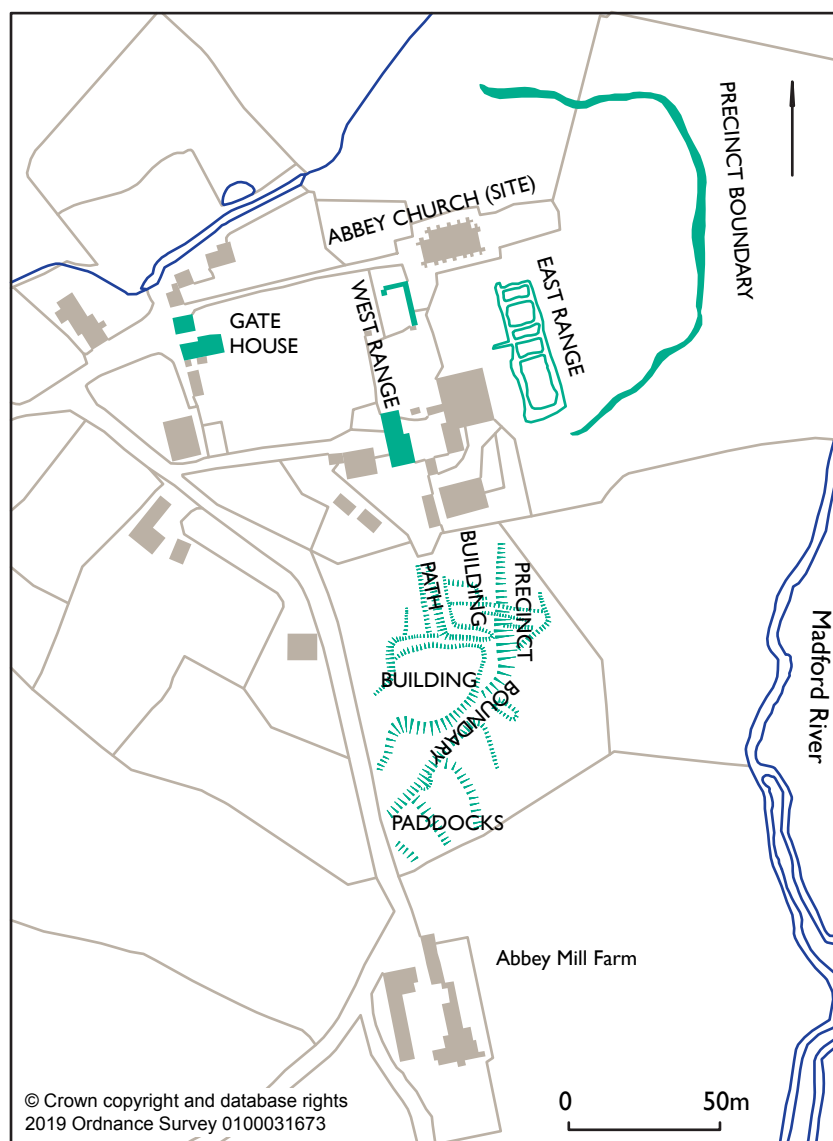


Fig 15 Abbey Mill Farm orchard earthworks interpretation plan (includes information from Hunt 2000, fig 3 and Hegarty et al 2018, fig 14)

6.2.6 The scarp (1a) and building platform (2) are overlain by orchard ridges (6) which probably date to the 19th century; the boundary (1a,1b) and track (3) are overlain by the current field boundaries which were in existence by the early 19th century (3.4). The medieval tile fragment (3.7), while indicative of a building, is abraded and could have been brought to the site by spreading of midden material in the post-medieval period.

6.2.7 The building platforms may be associated with the post-dissolution agricultural use of the area, although their orientation and association with a probable monastic precinct boundary suggest that the earthworks are medieval in origin and associated with Dunkeswell Abbey.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Dunkeswell Abbey was clearly a wealthy foundation with several large grange farms and extensive properties both locally in the Blackdown Hills and in north Devon. Its precinct would have contained a range of buildings and areas associated with the activities concerned with managing this complex estate. The date and function of the earthworks recorded during this survey could be clarified by further work on the following:

7.1.1 Detailed work on understanding Dunkeswell Abbey's claustral ranges and the extent of the inner and outer precincts.

7.1.2 Resistivity survey of the building platforms in Abbey Mill Farm orchard as ground conditions allow.

7.1.3 Detailed work on understanding the local grange farms, particularly Dunkeswell Abbey's home farm of Bowerhayes.

8.0 REFERENCES

Coppack, G 1998 *The White Monks. The Cistercians in Britain 1128-1540*

Coppack, G, Fawcett, R and Robinson, D 1998 'A Gazetteer of Cistercian Abbeys in Britain' in G Coppack (ed), *The Cistercian Abbeys of Britain. Far from the Concourse of Men*, 63-205

Erskine, A M 1969 *The Devonshire Lay Subsidy of 1332* Devon and Cornwall Record Society 14

Farnell, C 2019 *Discovering Dunkeswell Abbey Brief for Earthwork Survey of Orchard Area of Abbey Mill Farm*

Greaves, M, Downie, P, Fitzpatrick, K 2016 'OSGM15 and OSTN15: Updated transformations for UK and Ireland' *Geomatics World* July/August 2016

Hegarty, C, Knight, S and Sims, R 2018 *The Blackdown Hills Area of Outstanding Natural Beauty and East Devon River Catchments Aerial Investigation and Mapping Survey*

Hunt, A 2000 'An earthwork survey of Dunkeswell Abbey' *Proc Devon Archaeol Soc* 58, 215-226

Ordnance Survey 2010 *A guide to coordinate systems in Great Britain. An introduction to mapping coordinate systems and the use of GPS datasets with Ordnance Survey mapping*

Paterson, D S 1992 *Dunkeswell Mill. A Preliminary Report*

Royal Institution of Chartered Surveyors 2010 *Guidelines for the use of GNSS in land surveying and mapping* 2nd edn

Sparks, J A 1978 *In the Shadow of the Blackdowns. Life at the Cistercian Abbey of Dunkeswell and its Manors and Estates 1209-1531*

