



Gatehouse Project, Pontefract Castle

Project Design for a Community Archaeology Project

Chris Casswell, Brendon Wilkins and Lisa Westcott Wilkins

Gatehouse Project, Pontefract Castle

Project Design for a Community Archaeology Project

Prepared on behalf of:

Wakefield Metropolitan District Council and Historic England

Compiled by:

Chris Casswell, Brendon Wilkins and Lisa Westcott Wilkins

With contributions by:

Manda Forster, Maiya Pina Dacier, Hannah Russ, Andrew Sage, Adam Stanford, Malin Holst, Joanne McKenzie and Rosalind McKenna

DigVentures

The Workshop Victoria Yard 26 Newgate Barnard Castle County Durham DL12 8NG

hello@digventures.com 0333 011 3990 @thedigventurers

Purpose of document

This document has been prepared as a Project Design for the 'Gatehouse Project, Pontefract Castle' Project Team, Historic England and other Stakeholders. The purpose of this document is to provide an outline of planned fieldwork, aims and objectives of the work, and methodology to be employed, describing how DigVentures proposes to exceed the quality expectations of Wakefield Metropolitan District Council and their archaeological advisors.

DigVentures has no liability regarding the use of this document except to the 'Gatehouse Project, Pontefract Castle' Project Team. DigVentures accepts no responsibility or liability for any use that is made of this document other than by the Project Team for the purposes for which it was originally commissioned and prepared.

Copyright

© DigVentures Limited 2019

Project summary

Project Name and HE	Gatehouse Project, Pontefract Castle
Reference:	Project Design for a Community Archaeology Project
DV project code and type	PON19 – Community excavation and engagement
OASIS ID	digventu1-347513
National Grid Reference	SE 46075 22320
Author(s)	Chris Casswell MCIfA
	Brendon Wilkins MCIfA
	Lisa Westcott Wilkins MCIfA
Origination date:	18/12/2018
Revisers:	Chris Casswell MCIfA
	Manda Forster MCIfA
Date of last revision:	09/08/2019
Version:	2.6
Summary of changes:	Amended following comments from HE and Gatehouse Project
	Team

Social Value Act

DigVentures is a Registered Organisation with the Chartered Institute for Archaeologists, dedicated to designing and delivering publicly focussed archaeology projects. We are constituted as a Social Enterprise, reflecting the wider social, economic and environmental benefits of the projects we deliver. DV will seek wherever possible to employ locally-based staff and contractors as part of this project, ensuring a positive impact on the local economy.

Carbon Footprint

A printed copy of the main text in this document will result in a carbon footprint of 99g if 100% post-consumer recycled paper is used and 126g if primary-source paper is used. These figures assume the report is printed in black and white on A4 paper and in duplex.

DigVentures is aiming to reduce its per capita carbon emissions.

Acknowledgements

We would like to offer a sincere thank you to Historic England, in particular Neil Redfern, for the such an exciting commission, to Zoe Robinson, Merrill Diplock, Vicky Sherman, Ian Downes and Kelly Powell at Wakefield Metropolitan District Council, Jenni Butterworth from Drakon Heritage and Conservation, Ian Sanderson from West Yorkshire Archaeology Advisory Services.

Executive Summary

This document is submitted in support of a research project and application for Scheduled Monument Consent at Pontefract Castle, to be carried out by DigVentures. The project fieldwork will take place between 30/09/2019 and 03/11/2019 and comprise a 5-week excavation with community engagement activities (Scheduled Ancient Monument Number: 1010127). The proposed work is supported by Historic England with funding allocated under the terms of the NPPF Emergency Investigation Assistance, and will take place as outlined in this document and as agreed with scheduled monument consent. On this basis, a MORPHE/PRINCE2 compliant document has been produced outlining key archaeological research questions, roles, procedures, stages and outputs. The overarching aim of this fieldwork is to provide baseline information to contribute to the future management, research and presentation of the site, creating multiple educational and participatory learning experiences for community participants. This will be achieved through a community-based archaeological research project designed to understand:

- the nature, date and survival of archaeology relating to the inner bailey gatehouse at Pontefract Castle
- the extent and significance of the surviving archaeological remains
- the potential of the archaeology to contribute to the story of Pontefract and its development

The results of an archaeological survey and desk-based assessment have been completed in advance of the archaeological excavation and are summarised in section 2 of this document. This Project Design provides an outline of methodology and planned intervention to complete:

- Excavation Excavation of one trench to assess the preservation, depth and nature of archaeology relating to the gatehouse and the survival of archaeological deposits relating to the earlier royal burh that is believed to have predated it. This trench lies within the area of the Scheduled Ancient Monument.
- Remote Sensing Remote sensing will comprise a high-resolution aerial photogrammetry survey to create a digital model of the site and its immediate townscape context. These results will be published online for all to access; enabling members of the public to view the site and castle interactively in 3D.
- Public Engagement The project is supported by a comprehensive learning, engagement and activity plan which aims to both raise awareness to the site and provide tangible learning outcomes. It includes online engagement through social media and DigVentures' innovative online recording system; activities specifically tailored to schools and young people, teaching them about life within the castle and the important role Pontefract played in the past, and; volunteers will be trained co-produce an archaeological archive under the supervision of trained heritage professionals, enabling to get hands-on with their past.

Table of contents

1	INTRODUCTION	9
1.1	Project summary	9
1.2	Project overview	9
2	ARCHAEOLOGICAL BACKGROUND	10
2.1	Introduction	10
2.2	Pre-Norman Conquest	10
2.3	Norman	10
2.4	Later medieval	11
2.5	1/th century	11
2.6	Later use	11
2./	Gatenouse Provious archaeological work	12
2.0	2019 Fieldwork proposals	12
3	RESEARCH AIMS AND OBJECTIVES	13
- 21	Project model	13
3.2	Aim 1 – Identify the physical extent and character of the archaeological remains on	the
site	with a programme of remote sensing	14
3.3	Aim 2 – Characterise the results of non-invasive survey, refining the chronology and	
pha	asing of the site with a programme of trenching	14
3.4	Aim 3 – Understand the site's archaeological and palaeoenvironmental conditions	15
3.5	Aim 4 – Making recommendations, analysis and publication	15
3.6	Aim 5 – Public engagement	15
4	PUBLIC ENGAGEMENT	16
4.1	Public engagement and activities	16
4.2	Activities for schools and young people	17
4.3	Skills training for volunteers	17
4.4	Public engagement activities	19
4.5	Project legacy and evaluation	20
5	BUSINESS CASE	21
5.1	Historic England Research Agenda	21
5.2	Research frameworks	22
6	INTERFACES	22
7	COMMUNICATIONS	23
7.1	Project team	23
7.2	Project management	23
7.3	Site monitoring and progress meetings	24
7.4	Dissemination and reporting	24
7.5	Project archive	25

8 PROJECT	REVIEW	25
9 HEALTH A	AND SAFETY	26
10 PROJECT	TEAM STRUCTURE	27
10.1 Team ar	nd responsibilities	27
11 METHOD	OLOGY	28
 11.1 Introduct 11.2 Stage 1 11.3 Stage 2 11.4 Stages 3 11.5 Stage 5 	ction – Project set up and planning – Archive assessment, remote sensing and trench preparation 3 to 4 – Archaeological excavation and public participation – Specialist Assessment Report and Updated Project Design, Analysis and	28 28 28 28
Final Reporting 11.6 Stage 6	g – Project evaluation and legacy	29 30
12 STAGES, F	PRODUCTS AND TASKS	30
12.1 Method	ological linkages	30
13 OWNERS	HIP	33
14 RISK LOG		33
15 BIBLIOGR	APHY	34
APPENDIX 1	METHOD STATEMENTS	36
APPENDIX 2	PRODUCTS	44
APPENDIX 3	CONTENT AND COMMUNICATIONS PLAN	51
APPENDIX 4	FIELD SCHOOL CURRICULUM	54
APPENDIX 5	DATA MANAGEMENT PLAN	62
APPENDIX 6	CORE AND SPECIALIST STAFF CVS	68

List of tables

Table 1:	Project interfaces	23
Table 2:	Project review stages	26
Table 3:	Team and responsibilities	27
Table 4:	Methodological linkages	32
Table 5:	Risk log	34
Table 6:	Linking methods with objectives	36

Figures

Figure 1	Site Location
Figure 2	Pontefract Pre- and Post-Norman Conquest
Figure 3	The Siege of Pontefract Castle 1648, illustration from an undated engraving
Figure 4	Pontefract Castle, Ordnance Survey 1891
Figure 5	Pontefract Castle, views of the gatehouse

1 INTRODUCTION

1.1 Project summary

- 1.1.1 This document provides a costed proposal and project design for delivery of a community-based archaeology research project at Pontefract Castle, West Yorkshire (Tender Ref: DN379886). Its purpose is to define how DigVentures intends to deliver a project that exceeds the quality expectations of Wakefield Metropolitan District Council (WMDC) and Historic England (HE). DigVentures and the project are supported by Historic England, with funding allocated under the terms of the NPPF Emergency Investigation Assistance The document is divided into two related parts.
- 1.1.2 'Part 1: Description of The Project' provides the project context, including a brief summary of proposed methodology, key sources and activities required to support the delivery of the proposal's outcomes. 'Part 2: Resources and Programming' identifies responsibilities of individual project staff members, outlines completion dates for specific tasks, with all associated costs itemised for transparency.
- 1.1.3 All DigVentures projects are managed according to the Historic England MoRPHE project model (Management of Archaeological Research Projects in the Historic Environment) itself based on a PRINCE2 public sector project delivery framework. If, following further stakeholder consultation, WMDC requires aspects of this project plan and associated budget to be changed, the process detailed in this document is designed to be flexible and will be altered accordingly.

1.2 Project overview

- 1.2.1 Led by Wakefield Metropolitan District Council, the 'Pontefract Castle: Key to the North' project is a Heritage Lottery Funded initiative celebrating the importance of Pontefract Castle and the key contribution of the town's citizens to our understanding of British history. A major capital investment scheme designed to enhance access and improve visitor experience has commenced, leading to the unexpected discovery of a previously unidentified gate house complex revealed during predevelopment works in 2016. Given the national significance of these remains, Historic England have agreed to fund a community-based archaeological research project, referred to in this document as the 'Gatehouse Project, Pontefract Castle'.
- 1.2.2 Today, Pontefract Castle is situated within an area of significant deprivation, with 18% of residents falling within the top 10% of most deprived in England (Source: Index of Multiple Deprivation based on 2011 census data). The 'Gatehouse Project, Pontefract Castle' therefore presents a major opportunity to stimulate the heritage-led regeneration of the site and its environs, engaging the local community in their heritage, providing skills training and practical experience to the public, and building an audience and local appreciation for the castle's instrumental contribution to regional and national history.

9

Part 1: Description of the project

2 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

- 2.1.1 Pontefract Castle is strategically situated on an outcrop which formerly commanded two of England's principal highways the north road and the route west over the River Aire and the Pennines. The site is located towards the north eastern extent of the historic core of modern Pontefract (Grid Ref: SE 46075 22320, Figure 1) on a promontory formed of Coal Measures sandstone (Pontefract Rock) at a height of c 50m AOD.
- 2.1.2 The castle was one of England's strongest fortresses throughout the medieval period and beyond. Its formidable defences sat atop a rocky outcrop made it almost impenetrable, while its strategic inland location meant it played a crucial role in politics and the balance of power in the North of England. So impressive was the castle that Oliver Cromwell, when besieging the castle, described it as 'one of the strongest inland garrisons in the kingdom'. A deposed Richard II is believed to have been imprisoned and died in the castle in 1400; mentioned in William Shakespeare's play Richard III, 'Pomfret, Pomfret! O thou bloody prison'. Other famous people of note known to have been imprisoned in the castle include James I of Scotland and Charles, Duc d'Orleans, captured after the battle of Agincourt.
- 2.1.3 Now owned by the Duchy of Lancaster and managed by Wakefield Metropolitan District Council, Pontefract Castle is now a Scheduled Monument (NHLE ref. no. 1010127) and one of Pontefract's most identifiable landmarks. However, much is still not known about the castle, made apparent by recent discoveries at the inner bailey gatehouse.

2.2 Pre-Norman Conquest

2.2.1 Before the Norman Conquest Pontefract consisted of two distinct townships, *Taddenesscylf* (*Tateshalle*) and *Kirkby* (Figure 2). *Taddenesscylf* is mentioned in the Anglo-Saxon Chronicles as place of importance where Archbishop Wulfstan and men of Northumbria pledged their allegiance to King Eadred of Wessex, and *Kirby* (translating from Scandinavian as 'church-settlement') a significant ecclesiastical establishment with at least three potential pre-Conquest churches. It has been suggested that there is strong circumstantial evidence for castle hill having been the site of the royal Anglo-Saxon burh, and *Kirkby* a minster (Roberts 2013). It is possible that the large ditch surrounding the motte of the Norman castle was originally part of the town ditch to the Anglo-Saxon settlement.

2.3 Norman

2.3.1 *Tateshalle-Kirkby* and the former royal manor were granted to Ilbert de Lacy by William the Conqueror following the Norman Conquest, and it was there that Pontefract Castle was constructed in c.1070. Although Pontefract is not referred to in the Domesday Book (1086), 'Ilbert's Castle' is, signifying that work on its

construction was well under way by this point. This first phase of construction likely consisted of an earthen motte and bailey enclosing timber buildings, including a wooden keep and Anglo-Saxon church, later refounded as St Clement's Norman chapel.

2.3.2 The castle was confiscated from the de Lacy family by Henry I during the 12th century, where it remained property of the Crown until King John gave it back in 1199, only for the King to take possession of it again in the early 13th century. It is during the 11th and 12th centuries that the Norman borough of Pontefract was created to the southwest of the castle along Micklegate, its limits defined by Northgate and Southgate (Figure 2). As the borough grew in importance, so too did the castle. The fortifications were gradually rebuilt in stone during the 12th century. Early work included the construction of the curtain wall, gatehouse into the inner bailey and conversion of the keep into stone, all by the end of the 13th century.

2.4 Later medieval

2.4.1 Although the King had taken possession of the castle in the early 13th century, the de Lacy family continued to live in it until the early 14th century when, in 1311 the castle passed by marriage to the House of Lancaster. By the late 14th century the castle was in the hands of Edward III's son, John of Gaunt, who commissioned several major rebuilding works. The gatehouse was strengthened and given polygonal buttresses, new towers – including Swillington, Constable, King's and Queen's Towers – were constructed around the curtain wall, the barbican was walled and the keep extended. The strategic military and administrative significance of Pontefract Castle is visible through its association with some of the leading families of the medieval period, and was remodelled throughout the Wars of the Roses before gradually falling into decay during the 16th century.

2.5 17th century

2.5.1 The castle was a major Royalist stronghold, having profited greatly from substantial repairs made by Charles I between 1618 and 1620. Parliamentary forces first sieged the castle in 1644 but, despite irreparably damaging the Piper Tower, were forced to retreat. A second siege began the following year where, upon hearing of Charles I's defeat at the Battle of Naseby, the castle garrison surrendered. However, in 1648 Royalists regained control of the castle. The final siege of Pontefract Castle began in November 1648, led by Oliver Cromwell himself (Figure 3). Charles I was executed in January 1649 and the garrison agreed terms to hand the castle over to Major General John Lambert. Soon after this event, at the request of the local townspeople, the fortifications were slighted leading to the site's eventual strategic decline.

2.6 Later use

2.6.1 The site was subsequently used for liquorice cultivation before being converted into a public park by the Victorians in 1883 (Figure 4), a move that has helped to preserve the buried remains of a wide range of structures and features relating to all phases of Pontefract's history.

2.7 Gatehouse

- 2.7.1 The original Norman gatehouse would have been of timber construction and its original location is not known; however, because of the nature of the local topology it is most likely to have been in approximately the same position as the stone one that followed. Its renovation to stone was, in all probability, made in the 12th or 13th century and consisted of a simple arched opening in the curtain wall, later converted to a simple rectangular gatehouse. A documentary reference form 1244-46 describes roofing '...the wooden tower in Pontefract Castle with lead' (Roberts 2001, 17). The site was developed further during the 13th century to include two drum towers, one either side of the gate. It is known that the gatehouse was then added to in the late 14th or early 15th century, although any attempt to phase its construction from the visible extant remains is problematic because of its state or disrepair. Later paintings and engravings from the 17th century onwards (Figure 5) depict how the structure may have looked before the fortifications were slighted. They show no ditch or drawbridge but do all identify flanking wall gate piers extending from the towers.
- 2.7.2 The presence of an additional tower between the two main drum towers has been suggested through a description of the site by Richard Holmes (1887), who apparently identified a small roundel projecting from the eastern drum tower at the gatehouse during excavations in the 19th century. This does not appear on any other illustrations and is at odds to what is currently understood to constitute the gatehouse. A large ditch is known to have passed the front of the gatehouse, which was filled by the time of the Civil War, and it is possible that there exist the remains of a drawbridge structure, at least one additional tower, and part of barbican dating from the 14th century between the Victorian steps and the Visitor Centre.

2.8 Previous archaeological work

- 2.8.1 Early investigations at the Castle appear to have taken place in the 1880s, with excavations referred to by Richard Holmes as taking place around the Great Gateway or Porter's Lodge (Holmes 1887, 403). Between 1982 and 1986 a major programme of work was carried out by the West Yorkshire Archaeology Service (WYAS Roberts 2002). This work identified evidence of a Christian cemetery belonging to the 10th century royal town of Tanshelf underlying the inner bailey of the castle near the 11th century St Clements's Chapel. WYAS also conducted a geophysical resistance survey conducted in 2002, and together these reports have provided an archaeological framework for the 'Gatehouse Project' motivated by the discovery of previously unidentified buildings associated with a gatehouse complex, revealed during predevelopment works in 2016. In advance of the investigations, a HER visit will be undertaken to further inform our understanding of previous works and explore available historic documents and archive images.
- 2.8.2 Preliminary assessment during the 2016 watching brief (Wessex Archaeology Unpublished) would suggest that the 13th century gatehouse was re-fronted by the construction of a third tower set between the drum towers articulating with a drawbridge pit. The remains of this third tower consist of a substantial curved masonry structure which appears to incorporate an internal room. These structures appear to represent a barbican, a further line of defence, added to the existing

gatehouse and which appears to be illustrated in the 1560 survey drawing. The associated drawbridge pit measured c.2m wide; the length and depth is not known, although similar examples suggest that this could transpire to be 5m in length and 2m in depth. This was likely to have been constructed within a pre-existing ditch, necessitating high retaining walls articulating with a bridge structure. The WYAS geophysical survey identified a substantial 10m wide ditch in this locality, though results were constrained due the upstanding Victorian tea house, lodge and access road, meaning that the survey could not extend beyond the gatehouse.

2.8.3 The results of the 2016 watching brief have not been fully assessed at the time of writing this document. It is proposed that before the fieldwork stage of this project begins a full appraisal will be made of the archive so that an assessment of the results and their significance can be made (Aim 1, Q1).

2.9 2019 Fieldwork proposals

- 2.9.1 The 2019 fieldwork proposed in this document has been designed to assess the nature, extent and character of the archaeological deposits identified in front of the inner bailey gatehouse; programmed to take place between 30th September and 1st November.
 - Remote sensing: High-resolution aerial photogrammetry survey to create a digital model of the site and its immediate townscape context (Aim 1, Q2 and 3).
 - Targeted excavation: Excavation of an archaeological trench, approximately 15/13m x 8/12m (Figure 1), to investigate the development and constructional history of the Inner Bailey gatehouse at Pontefract Castle, and to inform its interpretation and display (Aims 2 and 3).
 - Public engagement: The project is supported by a comprehensive learning, engagement and activity plan which aims to both raise awareness to the site and provide tangible learning outcomes. It includes online engagement through social media and DigVentures' innovative online recording system; activities specifically tailored to schools and young people, teaching them about life within the castle and the important role Pontefract played in the past, and; volunteers will be trained co-produce an archaeological archive under the supervision of trained heritage professionals, enabling to get hands-on with their past. A full account of the public engagement planned is outlined in Section 4 and Appendix 3.

3 RESEARCH AIMS AND OBJECTIVES

3.1 Project model

3.1.1 The overarching aim of the archaeological excavation is to define and characterise the physical extent of the Site through a programme of non-intrusive investigations and intrusive excavation, obtaining baseline data that will facilitate its future management, research, presentation and enjoyment. As highlighted in the Brief (WYAAS 2018, Section 5), the goal of this work is to fully record, analyse and report all archaeological remains within the area of interest ('preservation by record'); to place the results of this work in the public domain by publishing the results in an appropriate format as agreed by Historic England; and to inform how the Gatehouse might be presented to the public. The project model is framed as overarching aims and key questions/objectives that provide a framework for the methods, stages, products and tasks set out in Part 2 of the Project Design below.

3.2 Aim 1 – Identify the physical extent and character of the archaeological remains on the site with a programme of remote sensing

- 3.2.1 This aim will build on previous work with a review of the unpublished 2016 field archive, alongside additional non-intrusive remote sensing (low-level aerial photography and photogrammetry) seeking to define and establish the physical extent and condition of the site. A HER visit will collate information available through previous work, archive images and historic documents. Topographic survey will be undertaken across the area using a dGPS to further characterise the site, re-surveying previous interventions into a site-wide GIS, in addition to a photogrammetry survey of the key built heritage components to build a metrically accurate 3D model. These low impact tools will add further to our understanding of the monument by addressing the following questions:
 - Q1: In light of current findings from projects at similar Castle sites, do any outstanding research objectives from the earlier unpublished 2016 watching brief still remain to be addressed?
 - Q2: Can the layout of the gatehouse and associated sub-surface archaeology be established by remote survey?
 - Q3: Can we identify any phasing in the topographic or remote sensing anomalies indicative of an extended period of use?
- 3.3 Aim 2 Characterise the results of non-invasive survey, refining the chronology and phasing of the site with a programme of trenching
- 3.3.1 In the light of the evidence base collated for Aim 1, this aim will be addressed with targeted trenches to addressing the following questions:
 - Q4: What evidence is there for the use of the site pre-Norman Conquest, and how does this compare with remains recovered through recent archaeological investigations within the castle and the surrounding area?
 - Q5: Can we elucidate the plan, character, function, phasing, contemporary significance and chronological development of the gatehouse structures, with the aim of establishing the possible presence of bridge structures and / or a barbican in front of the gatehouse?
 - Q6: What are the specific characteristics of the apparent ditch / drawbridge pit, including its width and depth?
 - Q7: What is the date of the features original construction, and the date of its infilling?

- Q8: Can we identify and date, sequence and morphological development of archaeological remains encountered from the ditch through environmental sampling and scientific dating?
- Q9: Is it possible for a comparison to be made between masonry styles / techniques found during excavation with those identified from other dated structural elements of the castle?

3.4 Aim 3 – Understand the site's archaeological and palaeoenvironmental conditions

- 3.4.1 This aim will be achieved with an assessment of the samples as defined and recovered in Aim 2, using appropriate palaeoenvironmental and archaeological techniques to establish preservation and significance.
 - Q10: What is the current state of the archaeological and palaeoenvironmental material across the site?
 - Q11: How well do deposits and artefacts survive, and how deeply are they buried?
 - Q12: Can the palaeoenvironmental data recovered from sampling in the excavation inform us about the provision of consumable goods to a high-status residence, and any specialised food processing or industrial activities that may have taken place at the site?
 - Q13: Can we increase our understanding of the local environment during the multi-period occupation of the site and the process by which the ditch was filled?

3.5 Aim 4 – Making recommendations, analysis and publication

- 3.5.1 This aim will require all data from Aims 1-3 to be collated, with an integrated analysis of the archaeological and palaeoenvironmental resource at the site, making recommendations to conserve, enhance and interpret the heritage significance of the site.
 - Q14: Following a comprehensive assessment of all archaeological material, how can the results of this work aid in our interpretation of contemporary regional sites?
 - Q15: In light of the evidence recovered from this and previous work, can we articulate a link between the multi-phased use of the site and its different areas?
 - Q16: Can we highlight any particular themes within the complete and stable archaeological archive that would benefit archives, local museums and education, improving regional accessibility?

3.6 Aim 5 – Public engagement

3.6.1 This aim is integral to the proceeding research aims and is described in detail in the Section 4 and Appendix 3 of this document. In summary, the project will offer a range of opportunities for local community members, school children and visitors to the area to get involved and learn more about the archaeology of Pontefract Castle. Working closely with the wider project team and other local stakeholders,

participation opportunities will include excavation, finds processing, photogrammetry and guided visits.

4 PUBLIC ENGAGEMENT

4.1 Public engagement and activities

- 4.1.1 The public engagement programme will provide a schedule of activities to facilitate the involvement of the local community in the project, including schools, visitors and volunteers. The range of activities includes the following key areas;
 - Online engagement will begin in advance of the excavation programme and incorporate development of the project specific website. Online information will introduce a wide and diverse community to Pontefract Castle, the medieval town and what this project means for those living in the town today. It will facilitate access to the project and raise awareness to engagement activities delivered during the dig. A social media campaign will highlight the research context for the site, with a series of Pontefract Stories delivered in the run up to the dig.
 - Activities for schools and young people, will bring the Castle to life and explore its role within the town with hands-on learning such as solving the 'Mystery at the Castle' – a bespoke game, designed for the project, to help kids and grown-ups learn about the people who lived and worked in Pontefract Castle through examining archaeological content. Schools sessions will be planned in collaboration with the education team at Pontefract Castle, and will be tailored specifically around the dig in order to maximise the short-term special opportunity and avoid overlap or clash with any existing educational offer. If required, the onsite programme can be supplemented with 'Skype the Site' sessions offering a site tour and chats with our archaeologists on-site to classes unable to visit the dig.
 - Skills training for volunteers, to support project participants in the co-production of the archaeological archive, the investigation of the Gatehouse and post excavation processing of artefacts and environmental samples. This will include pre-excavation access to DigVentures' How To Do Archaeology online training course, Open Dig Days where visitors can book to join the team to get hands-on with the archaeology, photogrammetry workshops to record the site and objects recovered, and the Finds Lab, looking at everything from first aid for finds to environmental sample sorting and work alongside expert archaeologists to explore the archive.
 - Public engagement activities, to include daily tours of the archaeological discoveries, a trench-side chat with archaeologists and pop-up display in the Visitor centre. The excavation will be framed by public talks which tell the tale of one of Yorkshire's most important medieval towns and conclude with an open exhibition of the finds from the dig. During the excavation, the site team will provide real time updates on the dig, with a video diary, Facebook live events and profiles on our dig participants. Experts visiting the site will provide toolbox talks for participants and the wider public as they look at the finds recovered and learn about what they are.

- Project legacy and evaluation, will be assured with a qualitative and quantitative assessment of DV's activity, co-produced interpretation materials, and the creation of our Dig Documentary: featuring schools, stakeholders, dig participants and our archaeological team, the documentary will tell the story of the dig and what we uncovered. The full project archive will be accessible and remain part of DigVentures project pages for a minimum of five years, and physical and digital archive materials will be deposited with the appropriate bodies once the project closes. As well our technical report on the archaeological research, we will publish an accessible summary leaflet and a full evaluation report.
- 4.1.2 Over the course of the project, our expectations around engagement would be to:
 - train a minimum of 160 community volunteers in excavation and post excavation tasks
 - engage 500+ school children with our education sessions
 - deliver a programme of 10 public events and 20 skills-based workshops
 - provide access to Castle volunteers to our online course, How To Do Archaeology, for around 50 workshop participants
 - produce and provide a digital archive and exhibition resource for the project website, with an expected audience of 7,000 individuals
 - host daily site tours, including an exhibition of finds and Q&A sessions with the project team, reaching an expected 300 individuals
 - produce a video documentary of the dig, involving (where possible) local schools, participants and visitors to the site, with an estimated online viewing figures of 4,000

4.2 Activities for schools and young people

4.2.1 Our programme of activities for schools and young people aims to bring the Castle to life and explore its role within the town with a visit to the dig site to meet the archaeologists, and hands-on activities such as our Junior Finds Lab and How To Make a 3D Artefact. The project will benefit from the support of our educational specialist and Community Archaeologist, Harriet Tatton, who will liaise with the education team at Pontefract Castle. Schools visits will be held within the second and third weeks of excavation (weeks beginning 7 and 14 October 2019), and our timetable will plan to accommodate 20 class visits reaching between 500 and 600 pupils. For those schools unable to visit the dig, we are able to include 'Skype the Site' sessions, including a tour of the site, a Q&A session with archaeologists and a look at some of the finds recovered.

4.3 Skills training for volunteers

4.3.1 DigVentures specialises in delivering hands-on archaeology opportunities, combining the wonder of discovering your first archaeological find with the development of new skills and knowledge. Those who volunteer with us quickly become part of the team, getting hands on with every aspect of the archaeological

project. We recognise how daunting an archaeological trench can be, so have developed an accessible online course to introduce the nuts-and-bolts of archaeology and give people a behind the scenes tour of the archaeological project. This can be delivered to Castle Volunteers as well as those participants who have signed up for some hands on learning. Our training is based on the ClfA-endorsed DV Field School Curriculum (Appendix 4) and Venturers are encouraged to use the Archaeology Skills Passport to record new skills.

- 4.3.2 Investigation of the Inner Bailey Gatehouse at Pontefract Castle presents a number of exciting opportunities for the public to get involved. Although the trenches may not be the most appropriate for hands-on digging from the start, participants will join the team to help dig, record and interpret the archaeology during the final week of the dig. Bookable workshops will be held throughout the dig, training local people in post excavation processing of artefacts and environmental samples. We'll invite regional experts to help identify finds with participants during our Finds Lab session. This will include Dig Sessions where volunteers can book to join the team to get hands-on with the archaeology, photogrammetry workshops to record the site and objects recovered, and the Finds Lab, looking at everything from first aid for finds to environmental sample sorting.
 - How To Do Archaeology, (pre dig) Castle Volunteers and dig session participants will be given free access to our online course, introducing archaeology in six Chapters. The course will invite participants to explore their local area through historic maps, squeeze the garden soil and plan the kitchen table – all to get an insight into what archaeologists do onsite.
 - Finds Lab Workshops, Week 4 during our fourth week on site, we will open up the Finds Lab for people to join our Community Archaeologists and learn about post excavation processing, helping the team sort the artefacts and environmental samples recovered the dig. Archaeology Finds Labs sessions will include artefact processing, introducing different archaeological materials, First Aid for Finds and basic processing and quantification techniques. Once participants have got used to handling finds, onsite specialists will introduce our Venturers to archaeozoology, pottery analysis and small finds analysis.
 - Dig Camp, Week 5 from the 26th October and throughout half-term week, the team will run family-orientated sessions at the site, where parents, guardians and kids aged from 6 to 11 can learn together about archaeology and explore the Gatehouse at Pontefract Castle from the ground up. After an hour exploring the trenches, we'll head back to the lab to explore the finds and learn about the people of Pontefract Castle.
 - Dig Experience, Week 5 During the last week of the dig we will be running sessions for volunteers to roll up their sleeves and jump in the trench. Our professional archaeologists will deliver a series of half day sessions, each hosting ten volunteers, kicking off with a site induction, tour and Troweling 101. Volunteer participants will learn about archaeological contexts, how to dig them and how to record them. As participants learn more, they will use our online recording system, Digital Dig Team, buddy up with an archaeologist to plan and photograph archaeological features. Participants will be able to book for one or more of the

sessions, and we can adapt the curriculum to include more skills the longer people can stay.

 Photogrammetry workshops, Week 5 – Where possible, our participants will also learn how archaeologists use photogrammetry for finds, trenches and landscapes with our site-based workshop. DV's Head of Fieldwork, Chris Casswell will be joined by aerial photography specialist Adam Stanford (Aerial-Cam) to introduce Venturers to innovative techniques in recording and presenting archaeological sites. The models produced by Venturers will be incorporated into the archaeological record, featuring on our Trench Profiles on Digital Dig Team and hosted on Sketchfab.

4.4 Public engagement activities

- 4.4.1 A public programme of events will be timetabled to run throughout the dig, with a number of specific activities directed at families taking place in the final week (Week 5, half term week). Our working week will be staggered to cover both week days and weekends, to enable people to visit at a time that suits them. Site tours will run throughout the excavation, offered daily at lunchtimes and over weekends. During the final week of the dig, timetabled to coincide with half term week for schools, the team will host guided walks of the Castle, a trench-side chat with archaeologists and a pop-up display in the Visitor centre. The excavation will be framed by public talks which tell the tale of one of Yorkshire's most important medieval towns, present the findings of the excavations and conclude with an open exhibition of the finds from the dig.
- 4.4.2 The online public programme will also be varied, with the project microsite hosting background information about the site and the dig, and broadcasting daily updates such as video content, blogs from the finds room and profiles of our participating Venturers. Social content is supported by Digital Dig Team, the online record and archive of the archaeological finds, features and trenches. A global community is able to take part in the dig, following the team as the excavation unfolds. This not only raises awareness to the site to a far larger audience but builds a community who will remain engaged and will continue to learn from and benefit from the excavations.
 - Project website the project microsite will include background information about the site and the excavations and will invite people to explore the material record at the site. Our project timeline will broadcast daily content, with blogs, videos and profiles of our Pontefract Castle Venturers. In the run up to the dig, our series of Pontefract Stories will introduce the background to the dig and the town.
 - A Day at the Castle using an early tourist cartoon as inspiration, we'll ask our online community to think about what a day at the castle might look like today. Coupled with our own version of what people will find when they come to explore the Castle and the dig, we will also use this idea to inform our evaluation strategy tracking how visitors experience might change from a before and after view.
 - People of the Castle we'll use key aspects of the Castle to link characters to place with background research helping to define the story of structure, the town and the people from the Castle's history. This might include a 'Blue Plates Tour' to find

key characters around the Castle and the Pontefract 'Sorting Hat' where visitors can choose which Castle House they might be a member of...

- Daily site tours Site Tours will be billed daily to encourage visitors to come along, have a look at finds from the dig and ask any questions. Visitors will also be encouraged to visit the Castle grounds.
- Learn about the Dig The dig will be framed by two public events, including a Dig Launch event during the first weekend (Saturday 5th October) and a Dig Update (Saturday 26th October). The DV team will provide talks, introducing the background to the site and plans for the dig, followed by an update on what we have found towards the end.
- Digital Dig Team our online site database is co-produced by professionals and volunteers as we excavate and record the site and provides a further focus for our online visitors. A global audience will be able to follow the dig, and look in detail at the contexts, finds, 3D models and photographs as they are logged.
- Public lecture series throughout the excavation of the site, the dig will host a series of public talks held at lunchtime or early evening and covering a range of topics. These will be delivered by local experts, members of the Project Team and visiting specialists, and include historical, archaeological and method-based talks.

4.5 Project legacy and evaluation

- 4.5.1 Creating a lasting legacy for the site and the project should be an important aspect of any archaeological venture and is central to our ethos at DigVentures. With a robust Theory of Change in place, our projects are designed to provide benefit for local communities, for individual participants and for our clients and stakeholders. We deliver projects which provide positive benefits and value for participants and clients and are able to demonstrate impact through feedback and evaluation. Our evaluation report will provide your team with a detailed assessment of what was delivered, who took part and how they benefitted. We will provide the facts and figures with both qualitative and quantitative data collected from dig participants and pubic visitors to the site.
- 4.5.2 In addition to the evaluation of the project, a number of products are proposed which will underpin the longer term impact of the excavation. Our technical report will provide detailed analysis of the archaeological site and finds, with specialist reporting, scientific analysis and interpretation linking directly to the evidence presented online (such as 3D models, context descriptions and finds profiles). The archaeological report will be supplemented by an accessible summary of the dig presented as a leaflet which can be designed either as a digital only product or as artwork for a printed A3 to A5 folded leaflet. The online archive, including both the microsite and Digital Dig Team will be maintained for five years beyond the close of the excavation, and a stable and comprehensive archive will be prepared and deposited with the appropriate body.
 - Technical report our archaeological reports are prepared in line with CIfA Standards and guidance and presented an illustrated and detailed analysis of the

archaeology recorded. Reports are made available on the project website and attached the OASIS record of the site.

- Summary leaflet preparation of artwork for an accessible guide to the main findings of the dig, the leaflet can act as both an accessible summary of the excavation and a signpost to finding out more. This can be designed as a digital only product to be hosted on a webpage and/or artwork for a printed leaflet.
- Research archive the project will result in the co-production of an accessible and usable research archive, maintained for 5 years post project. Digital Dig Team will house all site archive information, readily accessible to both the interested public and researchers. In addition to the online archive, a stable and comprehensive archive will also be prepared and deposited with the appropriate bodies.
- Documentary video with Community Archaeologist Maggie Eno, our in-house videographer available on-site throughout the project, we will continually collect video content for a longer format documentary film about the project. Our aim would be to produce a film about the dig, lasting between 10 and 20 minutes, introducing the site, the team and project participants. We will include post excavation findings to produce a product which can be hosted online, presented in a visitor centre or viewed online via YouTube. In addition, shorter bite-sized videos will be broadcast as the project progresses via the project timeline.
- Evaluation report separate to the archaeological reporting, our ongoing evaluation of participants and visitors will provide the data for a detailed assessment of what was delivered, who took part and how they benefitted. The report will present qualitative and quantitative data collected from dig participants and public visitors to the site, linked to our Theory of Change.

5 BUSINESS CASE

5.1 Historic England Research Agenda

The project has been designed in accordance with priorities articulated in the 5.1.1 Historic England Research Strategy (2017) and Historic England Corporate Plan (2018-21). The Research Strategy defines nine broad themes that describe Historic England's research interests to ensure that any proposed work is aligned with HE's mission. The Gatehouse Project drivers can therefore be articulated within the fundamental theme to #understand (urban and public realm; military and defence) in addition to other research outcomes that will address other Historic England and sector priorities, delivering significant value added benefit. As a consequence of the innovative digital and multi-partner collaborative approach, there is a significant 'value added' dimension to this project, encompassing research themes including #adapt (local planning, societal change); #conserve (buildings and landscapes, collections and archives; preserving archaeological remains); #inform (information systems and services); #skill (developing the workforce; working more effectively); #inspire (audience research, research media); #innovate (materials; human environment; dating and chronology; measuring and sensing).

5.2 Research frameworks

5.2.1 The curatorial branch of the West Yorkshire Archaeology Advisory Service (WYAAS) have issued a brief for the proposed work (Sanderson 2018) outlining how the investigation corresponds with regional policy frameworks. In addition to the directives in the brief, the excavation will be undertaken with regard to current resource assessments identified in Regional and National Research frameworks. The key research agenda relating to the 'Gatehouse Project' is the 'Yorkshire Archaeological Research Framework: Research Agenda' (Roskams and Wyman 2005) particularly appendix 3.3 (Medieval Towns Assessment: Pontefract - R. Finlayson 2005). In addition to elucidating the 13th and 14th century development of the castle itself, the project also presents an opportunity to clarify the relationship between the pre-Conquest borough and the later Norman town. Roberts and Whittick (Yorkshire Archaeological Journal 2013) pursue this theme in a more recent overview of the excavated evidence from Pontefract, outlining 'a compelling case for Pontefract having been not only the site of the documented royal vill, but also that of an Anglo-Saxon minster.'

6 INTERFACES

6.1.1 This project will interface with a series of other projects, stakeholders, and initiatives, summarised in the table below:

Interfaces	Description
Remote sensing team	An aerial photogrammetry survey by Adam Stanford (Easter Island Project; Stonehenge Riverside Project; Marden Henge Project) ensuring that this multidisciplinary approach remains at the forefront of current remote sensing research.
Advisory Group	An advisory group will include subject area experts Professor John Moreland (University of Sheffield) and Gillian Eadie (Chair, Castle Studies Group) to ensure that the project remains pertinent to relevant research questions and agendas, interfacing with other teams working on similar sites in the UK.
Core Project Team	The core project team and specialist staff have consulted widely during the project planning and will continue to build on this as the project develops, forging strong links with local, national and international professionals and institutions actively engaged in a broad range of multi-period sites.
Local Stakeholders	The project is linked to the HLF supported 'Pontefract Castle: Key to the North' project, and as such will interface with the wider social outcomes for heritage, people and communities. It will showcase the archaeology of Pontefract Castle, creating skills- based learning opportunities focused on teaching digital heritage skills to engage as broad a group as possible in the local heritage. Pontefract Castle is situated within an area of significant deprivation, with 18% of residents falling within the top 10% of most deprived in England. The project will offer free enjoyable learning opportunities, both online and across

Interfaces

Description

multiple accessible locations, to help address the strong social and educational needs of the surrounding communities.

Table 1: Project interfaces

7 COMMUNICATIONS

7.1 Project team

- 7.1.1 The following section details specific staff responsibilities, drawing on terminology devised by Historic England for the MoRPHE project management framework. DigVentures and the project are supported by Historic England, with funding allocated under the terms of the NPPF Emergency Investigation Assistance. Historic England have appointed Jenni Butterworth, Drakon Heritage and Conservation, as Project Assurance Officer who will monitor compliance with relevant standards and guidelines on Historic England's behalf.
- 7.1.2 The core Project Team have all worked closely together over a number of research projects, including Leiston Abbey (2013-2016), Lindisfarne (a joint project with the University of Durham, 2016) and Barrowed Time (community investigation of a Bronze Age hoard site, 2016). The Expert team are all well known to each other, either through shared publications, project work or academic conference panels. Lisa Westcott Wilkins (Project Executive) will take overall responsibility for the project's outcome, supported by Brendon Wilkins (Project Manager) and Chris Casswell (Head of Fieldwork). Chris Casswell will manage the day-to-day running of the site, supported by five professional Project Archaeologists for the duration of fieldwork activities. Where members of the public are on site they will be supervised at a ratio of at least one professional Project Archaeologist for every two volunteers.
- 7.1.3 In addition to a web-accessible project management system (see below), DigVentures has developed a web-accessible digital recording system, ensuring that the Project and Expert Team will have continuous, real-time access to project data as it is created. In addition to scheduled site visits, experts will be encouraged to comment and add to records during fieldwork, removing the usual logistical barriers that separate field from lab work.

7.2 Project management

7.2.1 The Project Manager will produce Monthly Status Reports for the Project Executive and Project Team throughout this Execution Stage up to the review of the Assessment Report/UPD. This will present an overview of progress, list tasks completed or part completed, including any on-going work and issues affecting progress. The Project Manager will also be responsible for ensuring that the project runs to schedule, keeping track of key resources (notably staff time) on the basis of weekly Work Records. The Project Team will have a project meeting at each milestone described to ensure that all major tasks are briefed/debriefed as necessary. Provision will be made for the project in Basecamp, which is a web-based project communication package used by DigVentures, enabling project participants to generate and record notes, tasks, milestones and other project-related communication.

- 7.2.2 DigVentures operates a digital project management system. Projects are undertaken under the direction of the Project Manager, who is responsible for the successful completion of all aspects of the project. All work is monitored and checked whilst in progress on a regular basis, and the Project Director/Managing Director checks all reports and other documents before being issued. A series of guideline documents and manuals form the basis for all work.
- 7.2.3 The Project Manager, Brendon Wilkins, is a full member of the Institute for Archaeologists (MCIfA). DigVentures is a CIfA Registered Organisation (No. 102), and fully endorses the Code of Conduct, the Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology, and the Standards and Guidance documents of the Institute for Archaeologists. All DigVentures staff are employed in line with the Institute's Codes and will usually be members of the Institute.

7.3 Site monitoring and progress meetings

7.3.1 In order to ensure the Project Team and stakeholders are fully engaged with project progress, archaeological finds and engagement opportunities, a series of meetings will be scheduled during project planning stages. During the fieldwork, monitoring meetings will take place on a weekly basis and a pre-start meeting in August 2019 will confirm the dates of these meetings and provide an opportunity to discuss amendments or updates to the delivery and engagement programme. The project review stages (Table 2) provide a framework of key milestones which will prompt continuing communications between the Project Team beyond the fieldwork dates.

7.4 Dissemination and reporting

- 7.4.1 Rapid dissemination of the results to, and involvement of, stakeholders of the project is vital throughout. This will take place through multiple channels, addressing a multitude of established and new audiences. Dissemination outlined below will all be undertaken during 2019, and will include, but not be limited to:
 - Dedicated digital archive of the excavation data.
 - Wide circulation of the project assessment and the final report, and links to the OASIS record.
 - Site publication in an appropriate local/national journal commensurate with the final results (analysis stage).
 - Wide circulation of Assessment and Final Reports, Updated Project Design and links to the OASIS record.

7.5 Project archive

7.5.1 The project archive will be prepared in accordance with the deposition guidelines provided by Wakefield MDC Museum and Arts, Pontefract Museum, and in line with DigVentures guidelines for Archive Preparation, following Appendix 1, P1 of MORPHE PPN 3 (English Heritage 2011), fulfilling the Guidelines for the preparation of excavation archives for long term storage (UKIC 1990). Comprehensive instructions for the preparation of physical and digital archive materials have been outlined in the project brief (Sanderson 2018, Section 8; 16; and 17.2). Consultation will be undertaken with David Evans at Pontefract Museum in advance of fieldwork commencing to determine the museum's requirements for the deposition of an excavation archive. All reports produced by the project will be openly and freely disseminated through the West Yorkshire Historic Environment Record, Archaeological Data Service, OASIS portal and Scribd website. Copyright on all reports submitted will reside with DigVentures, although a third party in-perpetuity licence will automatically be given for reproduction of the works by the originator, subject to agreement in writing with DigVentures.

8 PROJECT REVIEW

8.1.1 The project will be continually reviewed by the Project Executive and Project Manager, with a formal review undertaken at the end of each Stage. Stage 4 will culminate in a workshop where each Expert will present their results with view to developing proposals for further work and potential funding streams.

Stage	Description	Review Point	Completion Date
Initiation	Consideration of Project Proposal by WMBC and HE	RV1 – HE and WMBC	February 2019
Stage 1	Project Start-up, development of project design by DigVentures in consultation with wider specialist team, SAM consent application, preparation of project website, public	RV2 – Sign-off on MoRPHE Project Design, and liaison with stakeholders and site management team	May 2019
	participation programme and community audit and content design, pre-site management team meeting	RV3 – Update meeting / recruitment, microsite RV4 – Pre	June 2019
		commencement review	August 2017
Stage 2	High resolution aerial photogrammetry survey, GIS creation and assessment of 2016 watching brief archive, DDT set up, RAMS, team mobilisation, trench preparation (30 Sept – 04 Oct)	RV5 – Site Visit	September 2019

Stage	Description	Review Point	Completion
Stage 3	Field Investigation, including excavation trenches Education programme, Finds Lab workshops, documentation	RV6 - 8 – Site Visit, Education programme	7 - 25 October 2019
Stage 4	Field Investigation, photogrammetry, Site based Recording workshops, Open Days	RV9 – Site Visit, Public programme RV10 – Site Open Day	28 Oct – 3 November
Stage 5	Assessment Report and Updated Project Design, Analysis and Final Reporting	RV11 – Post-excavation assessment and UPD RV12 – Draft technical report	March 2020 July 2020
		report	August 2020
Stage 6	Evaluation report, video documentary of the dig, deposition of the archive, leaflet	RV14 – Eval report / documentary RV15 – Project completion	August 2020 December 2020
Stage 7	Project closure		

Table 2: Project review stages

9 HEALTH AND SAFETY

9.1.1 DigVentures will undertake the works in accordance with Health and Safety requirements and a Health and Safety Plan. This document will take account of any design information pertaining to above and below ground hazards. DigVentures will ensure that all work is carried out in accordance with its company Health and Safety Policy, to standards defined in *The Health and Safety at Work etc. Act 1974*, and *The Management of Health and Safety Regulations 1992*, and in accordance with the SCAUM (Standing Conference of Archaeological Unit Managers) health and safety manual *Health and Safety in Field Archaeology* (1996).

Part Two: Resources and Programming

10 PROJECT TEAM STRUCTURE

10.1 Team and responsibilities

10.1.1 DigVentures' Project Team will be as follows (Table 3). A summary CV, setting out the skills and expertise of core team members is set out in Appendix 3, including links to detailed online professional and publication profiles.

Name	Initials	Project Role	Key Responsibility
Lisa Westcott Wilkins	LWW	Project Executive	Overall project responsibility,
			budget responsibility and
			project assurance
Brendon Wilkins	BW	Project Manager	Archaeological co-direction
			(on and off-site), liaison with
			project team, partners and
			Stakeholders
Manda Forster	MF	Director of Operations	Project delivery
Hannah Russ	HR	Programme Manager	Project programming; faunal
		Expert	remains
Chris Casswell	CC	Expert – Team Leader	Archaeological co-direction
			(on and off-site), reporting,
			liaison with project team,
			partners and Stakeholders
Joshua Hogue	JH	Project Archaeologist	On-site fieldwork; lithics
		Expert	
Indie Jago	IJ	Project Archaeologist	On-site fieldwork
Maiya Pina Dacier	MPD	Head of Community	Design / delivery of strategy
			for engagement and
			participation
Johanna Ungemach	JU	Community Archaeologist	Project support; finds
			processing and archive
Harriet Tatton	HT	Community Archaeologist	Project support; education
			and participation
Maggie Eno	ME	Community Archaeologist	Project support; videography
Andrew Sage	AS	Expert	Ceramics
Adam Stanford	AC	Expert	Aerial Photography and
			Photogrammetry
Dr Malin Holst	MH	Expert	Human remains
Dr Jo McKenzie	JM	Expert	Geoarchaeology
Rosalind McKenna	RM	Expert	Palaeoenvironmental

Table 3: Team and responsibilities

11 METHODOLOGY

11.1 Introduction

11.1.1 The methods reflect the project Stages set out above (Section 8), and a task list, with allocation of staff time and team members in Section 12 below, supported with a detailed Gannt chart, Task List and Project Budget supplied as a standalone file (DV_PON19_Gannt_V2.3). Detailed method statements relating the specific techniques or approaches summarised below can be found in Appendix 1 at the end of this document, following the specifications detailed in the project brief (WYAAS 2018, Section 7).

11.2 Stage 1 – Project set up and planning

11.2.1 A Project Design (this document) will be finalised following discussion with WMBC and HE. Appropriate permissions and Scheduled Monument Consent will be secured, and a programme of field investigation agreed by May 2019 (RV2). The project microsite will be populated, public engagement planning documents finalised and recruitment underway (RV3). A pre commencement review (RV4) will be undertaken in advance of site mobilisation to confirm the final programme, discuss logistics for the dig and arrangements for engagement activities with the Gatehouse Project Team.

11.3 Stage 2 – Archive assessment, remote sensing and trench preparation

- 11.3.1 Stage 2 (scheduled for September 2019 04 October 2019) will comprise the first fieldwork season required to meet Aim 1 and will entail a combination of remote sensing (aerial 3D photogrammetry survey), topographic survey, GIS creation and assessment of extant archive data and unpublished material. It will aim to answer the following research questions which will help to guide fieldwork during Stage 3. Archaeological trenches will be laid out during the week beginning 30 October and excavated down to archaeological levels. The first of the weekly site monitoring meetings will take place during this first week on site (RV5). Aerial survey will be programmed closer to the delivery time of the project, as weather conditions will need to be considered.
 - Q1: In light of current findings from projects at similar Castle sites, do any outstanding research objectives from the earlier unpublished 2016 watching brief still remain to be addressed?
 - Q2: Can the layout of the gatehouse and associated sub-surface archaeology be established by remote survey?
 - Q3: Can we identify any phasing in the topographic or remote sensing anomalies indicative of an extended period of use?
- 11.4 Stages 3 to 4 Archaeological excavation and public participation
- 11.4.1 These Stages will run from 28th October to 3rd November and will address the objectives associated with Aims 1 and 2, comprising a targeted excavation trench

measuring approximately 15/13m x 8/12m, to investigate the development and constructional history of the Inner Bailey gatehouse at Pontefract Castle, and to inform its interpretation and display. A series of weekly site monitoring meetings held on site each Wednesday will be undertaken to facilitate full discussion of findings and excavation strategy as the project progresses (RV 5 – 9). During the delivery of the fieldwork, participation will include schools visits and finds workshops (Stage 3), Site Open Days and Recording Workshops (Stage 4, RV10).

- Q4: What evidence is there for the use of the site pre-Norman Conquest, and how does this compare with remains recovered through recent archaeological investigations within the castle and the surrounding area?
- Q5: Can we elucidate the plan, character, function, phasing, contemporary significance and chronological development of the gatehouse structures, with the aim of establishing the possible presence of bridge structures and / or a barbican in front of the gatehouse?
- Q6: What are the specific characteristics of the apparent ditch / drawbridge pit, including its width and depth?
- Q7: What is the date of the features original construction, and the date of its infilling?
- Q8: Can we identify and date, sequence and morphological development of archaeological remains encountered from the ditch through environmental sampling and scientific dating?
- Q9: Is it possible for a comparison to be made between masonry styles / techniques found during excavation with those identified from other dated structural elements of the castle?

11.5 Stage 5 – Specialist Assessment Report and Updated Project Design, Analysis and Final Reporting

- 11.5.1 This Stage will address Aim 3, culminating in Review Point 11 (following WYAAS 2018, Section 18) and focusing on answering the following research questions:
 - Q10: What is the current state of the archaeological and palaeoenvironmental material across the site?
 - Q11: How well do deposits and artefacts survive, and how deeply are they buried?
 - Q12: Can the palaeoenvironmental data recovered from sampling in the trenches inform us about seasonal farming regimes, specialised food processing or industrial activities that may have taken place at the site?
 - Q13: Can we increase our understanding of the local environment during the multi-period occupation of the site?
- 11.5.2 Review Point 11 will comprise a meeting between DigVentures, HE Inspector of Ancient Monuments (Neil Redfern), West Yorkshire Archaeological Advisory Service

and Historic England's Science Advisors, to discuss the results of the initial stratigraphic synthesis and initial scientific analyses.

- 11.5.3 Addressing Aim 4, the main reporting and recommendation Stage will follow assessment (following WYAS 2018, Section 19) and focus on the following research questions (RV12):
 - Q14: Following a comprehensive assessment of all archaeological material, how can the results of this work aid in our interpretation of contemporary regional sites?
 - Q15: In light of the evidence recovered from this and previous work, can we articulate a link between the multi-phased use of the site and its different areas?
 - Q16: Can we highlight any particular themes within the complete and stable archaeological archive that would benefit local museums and education, improving regional accessibility?
- 11.5.4 The draft report will be circulated for comment within the wider Project Team, resulting in a final technical report (RV13).

11.6 Stage 6 – Project evaluation and legacy

11.6.1 Providing a focal point for the achievements of Aim 5, public participation and engagement, Stage 6 will present a full evaluation report, a video documentary of the dig, and an accessible summary leaflet (RV14).

11.7 Stage 7 – Project closure

11.7.1 All the above tasks are completed and a stable and comprehensive archive of the project will be deposited with the appropriate bodies (RV15).

12 STAGES, PRODUCTS AND TASKS

12.1 Methodological linkages

12.1.1 Following an assessment of the scope of works (as detailed in Section 7 of the Project Brief), it is anticipated that the project will be undertaken in seven stages. These are set out in the table below and highlight the project aims and questions that will be met at each stage, the products that will be produced and the tasks undertaken. A detailed table of products can be found in Appendix 2.

Task ID	Stage, Task and Aims	Timescale / Products / Review
Project Ini		Foints Feb-19
	Commission and initiation	Review Point 1
stage i	Aim 1 - 4, Questions 1-15	February - August 2019
1.1	Project Start Up, Finalise delivery programme	Product 1 - Final Morphe Project Design
1.2	Finalise Morphe Project Design / Comms plan	Product 2 - SAM Consent application
1.3	Scheduled Monument Consent application	Product 3 - Communications Plan
1.4	Stakeholder liaison	Review Point 2 (Agree PD, SMC, Comms Plan)
1.5	HER visit, collation of archive data	Product 4 - Project microsite
1.6	Project microsite set up	Product 5 - Community audit and content design
1.7	Participant engagement / recruitment planning docs	Product 6 - Risk Assessment and H&S Plan
1.8	Excavation planning / logistics / RAMS	Review Point 3 (Update meeting / recruitment)
		Review Point 4 (Pre
		commencement review)
Stage 2	Excavation set up / trench preparation - Site week 1 Aim 1, Questions 1-3	September - 04 Oct 2019
2.1	GIS creation and assessment of 2016 watching brief archive	Product 7 - Survey Archive
2.2	Digital Dig Team set up	Product 8 - Family Open Day leaflet
2.3	Team mobilisation and briefing (04 October)	Review Point 5 (Site Monitoring Meeting)
2.4	Open trench, hand excavate to archaeology	
2.5	Documentation of excavation	
Stage 3	Site Excavation, School visits and Finds Labs - Site weeks 2 - 4 Aim 1, Questions 1-3; Aim 2, Questions 4-5	07 Oct - 25 Oct 2019
3.1	Archaeological excavation	Product 9 - Digital Dig Team (ongoing)
3.2	Documentation of excavation	Product 10 - Social Timeline / Dig Broadcast
3.3	Education sessions	Review Point 6 - 8 (Site Monitoring Meeting)
3.4	Finds processing sessions	
3.5	Expert led finds analysis sessions	
Stage 4	Site excavation, Public Excavation - Site week 5 Aim 1, Questions 1-3; Aim 2, Questions 4-5	28 October - 3 November 2019

Task ID	Stage, Task and Aims	Timescale / Products / Review
		Points
4.1	Archaeological excavation	Product 11 - Photogrammetry
		models
4.2	Documentation of excavation	Review Point 9 (Site Monitoring
		Meeting)
4.3	Site recording workshops	Review Point 10 (Open Day,
		Stage completion)
4.4	Photogrammetry for archaeology workshops	
4.5	Family open days	
Stage 5	Post excavation processing and reporting	November 2019 - September
	Aim 3, Questions 7 - 10; Aim 1-4, Questions 1-12	2020
5.1	Fieldwork summary for specialist contributors	Product 12 - Fieldwork summary
5.2	Specialist assessment reports	Product 13 - Expert assessments
5.3	Integrated technical report, assessment and UPD	Product 14 - Technical
		Assessment report / UPD
5.4	Ongoing post excavation blog	Product 15 - PX Blog on microsite
5.5	Assessment report circulation and comment from	Review point 11 - Post excavation
	Project Team	assessment and UPD
5.6	Final report contributions	Product 16 - Final Specialist
		Reports
5.7	Final Draft technical report	Review point 12 - Draft technical
		report
5.8	Report circulation and comment from Project Team	Review Point 13 - Final technical
		report
5.9	Final technical report	
Stage 6	Evaluation and legacy	March 2020 - December 2020
	Aim 5	
6.1	Evaluation report, including impact, value and social	Product 17 - Evaluation report
	benefit	
6.2	Video documentary of the dig (10 minute)	Product 18 - The Dig
		Documentary
6.3	Preparation and deposition of archive	Product 19 - Archive
		Review point 14 - Eval report /
		documentary
Stage 7	Project closure	
7.1	Project Closure	Review point 15 - Project closure

Table 4: Methodological linkages

13 OWNERSHIP

13.1.1 The Copyright on all reports submitted will reside with DigVentures and the respective host institutions of each of the Expert team, and Historic England, although a third party in-perpetuity licence will automatically be given for reproduction of all products, subject to agreement with Historic England. The original copyright holder will retain copyright in pre-existing data, and Historic England, West Yorkshire Archaeology Advisory Services and Wakefield Metropolitan District Council will be granted a third party licence in perpetuity for project materials.

14 RISK LOG

Risk number	1	2	3	4
Description	Inclement	Exceptional	Absence of core	Absence of
	weather -	weather	team member	specialist team
	prolonged	(drying		member
	periods of rain	exposed		
		archaeology)		
Probability	Medium	Medium-low	Low	Low
Impact	Delay	Slow	Delay programme of	Delay programme
	programme of work	progress	work	of work
Countermeasures	Provision of site	Provision of	Reallocate	Reallocate
	hut, and	water	responsibilities or	responsibilities or
	planned indoor	bowser +	appointment of	appointment of
	archiving tasks	spray	alternative	alternative
	with flexible			
	programme			
Estimated	3 Days	None	Minimal if done by	Minimal if done
time/cost			adjustment	by adjustment
Owner	Project	Project	Project	Project Executive/
	Manager/Field	Manager/	Executive/Manager	Manager
	Team Leader	Field Team		
		Leader		
Risk number	5	6	7	
Description	Equipment	Serious site	Cost uplift due to	
	theft/breakages	injury	unexpected	
			archaeology	
			requiring additional	
			sampling	
Probability	Medium	Low	Medium	
Impact	Delay	Delay	Reallocation or	
	programme of	programme	variation to agreed	
	work	of work	budget	

Countermeasures	Removal of	Detailed	Comprehensive
	finds material	RAMS, daily	estimate of specialist
	and digital	safety	costs undertaken at
	equipment	briefing	PD stage
	from site	_	
Estimated	3 days	3 days	Minimal if done by
time/cost			adjustment
Owner	Project	Project	Project
	Executive/	Executive/	Executive/Manager
	Manager	Manager	

Table 5: Risk log

15 BIBLIOGRAPHY

Association for Environmental Archaeology 1995 Environmental archaeology and archaeological evaluations. Recommendations concerning the environmental archaeology component of archaeological evaluations in England. Working Papers of the Association for Environmental Archaeology 2, 8 pp. York: Association for Environmental Archaeology

Chartered Institute for Archaeologists (CIfA) 2014 Standard and Guidance for Archaeological Field Evaluation.

Historic England 2011 Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition)

Historic England 2012 Management of Research projects in the Historic Environment. PPN 3: Archaeological Excavation – Annual Report May 2011-March 2012

Historic England 2015 Metric Survey Specifications for Cultural Heritage

Historic England 2017a Research Agenda

Historic England 2017b Photogrammetric Applications for Cultural Heritage: Guidance for Good Practice

Historic England 2017c Military Structures

Historic England 2018 Three Year Corporate Plan 2018-2021

Historic England 2019 Animal Bones and Archaeology: Guidelines for Best Practice

Holmes, R. 1887. The sieges of Pontefract Castle 1644-1648. Pontefract. Accessed: May 2019 <u>https://catalog.hathitrust.org/Record/100158231</u>

McKinley, J and Roberts, C 1993, Excavation and post-excavation treatment of cremated and inhumed human remains. ClfA Technical Paper 13

Roberts, I. 2001. Pontefract Castle: Archaeological Excavations 1982-86. York: Yorkshire Archaeology 8.

Roberts, I. and Whittick, C. 2013. Pontefract: A Review of the Evidence for the Medieval Town, Yorkshire Archaeological Journal, 85:1, 68-96

Roskams, S and Whyman, M 2005 Yorkshire Archaeological Framework: A Research Agenda. Department of Archaeology. York: University of York

Sanderson, I. 2018. Brief for an archaeological excavation at Pontefract Castle, Inner Bailey Gatehouse, Pontefract. Prepared on behalf of Wakefield Metropolitan District Council. WYAAS

SHAPE 2008 A Strategic Framework for Historic Environment Activities & Programmes in English Heritage

Standing Conference of Archaeological Unit Managers 1991 (rev. 1997) Health and Safety in Field Archaeology, Manual

Walker, K 1990 Guidelines for the preparation of excavation archives for long-term storage. Archaeology Section of the United Kingdom Institute for Conservation.

Watkinson, D and Neal, V 1998 First Aid for Finds (3rd. edition), RESCUE and the Archaeology Section of the United Kingdom Institute for Conservation.



DigVentures





Figure 1 - Site location


Pre-Conquest Taddenesscylf–Kirkby (overlying modern town plan)



Norman Pontefract (overlying modern town plan)

Figure 2 - Pontefract Pre- and Post-Norman Conquest



Figure 3 - The Siege of Pontefract Castle 1648, illustration from an undated engraving (Leslie 1928)



Figure 4 - Pontefract Castle, Ordnance Survey 1891 (Copyright © Wakefield Council)



Alexander Keirincx painting c.1640



Undated engraving



James Sangster engraving c.1845



Undated painting Figure 5 - Pontefract Castle, views of the gatehouse



Figure 6 - Pontefract Castle, excavation plan

Appendices

APPENDIX 1 METHOD STATEMENTS

The methods for the proposed project will involve a combination of non-intrusive and intrusive investigation, including desk-based assessment of extant archive data, GIS modelling, aerial photogrammetry survey, excavation, specialist assessment and dating. The methods are linked directly to the project aims and objectives (see Table 1) and detailed below.

Key Questions and Objectives	Review Extant Site Archive and GIS Modelling	Aerial Photogrammetry and Digital Terrain Modelling	Trench Photogrammetry	Archaeological Excavation	Sampling	Environmental Assessment	Finds Assessment	Synthesis and Data integration
Q1	✓	\checkmark						\checkmark
Q2	\checkmark	\checkmark						\checkmark
Q3	\checkmark	\checkmark						\checkmark
Q4			\checkmark	\checkmark				\checkmark
Q5			\checkmark	\checkmark				\checkmark
Q6			\checkmark	\checkmark				\checkmark
Q7			\checkmark	\checkmark				\checkmark
Q8			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Q9					\checkmark	\checkmark	\checkmark	\checkmark
Q10					\checkmark	\checkmark	>	\checkmark
Q11					\checkmark	\checkmark	\checkmark	\checkmark
Q12					\checkmark	\checkmark	\checkmark	\checkmark
Q13								\checkmark
Q14								\checkmark
Q15								\checkmark

Table 6: Linking methods with objectives

Topographic survey and GIS modelling – Chris Casswell, DigVentures

Topographical survey work will be carried out using a Trimble Real Time Differential GPS survey system. The Trimble VRS system is used in conjunction with a GPS Rover unit. It allows for surveying without the use of a site specific fixed base station. This is achieved by connecting to Trimble's network of fixed base stations by means of mobile phone communication. This method is highly efficient and accurate (+/- 2cm) when good signal is available. The survey data is exported from the data logger as a comma delimited file (csv) and a Trimble data collector file (dc). Either of these files can be imported into Trimble GeoSite Communicator, which recognises the feature code library and plots all strings, polygons and labels as intended. All survey and excavation data will be stored within a GIS environment, which will remain the principle conduit for all spatial data throughout the project.

Photogrammetry survey – Adam Stanford, Aerial-Cam and Chris Casswell, DigVentures

A photogrammetric survey of the site and surrounding area will be made in accordance with Historic England's *Photogrammetric Applications for Cultural Heritage: Guidance for Good Practice* (2017b), to assist in recording any remains encountered. Jon Bedford and David Andrews, Historic England Geospatial Imaging Analysts, have been consulted and agree that photogrammetry would be the most effective way of recording and communicating any findings.

The survey will utilize Agisoft PhotoScan 3D Modelling software to detect the feature points of the structure, and match these in different images to create a point cloud. This work will adhere to the detailed specifications outlined in the brief (WYAAS 2018, Section 8 and 9). The camera positions will be calculated automatically by the software and a dense reconstruction or geometric model will be built to create a DSM. The resulting model can then be. The resulting DSM can be manipulated for viewing from any angle using a variety of artificial light and shading techniques to highlight certain features, or overlaid or draped with the original photographs for true colour representation. All models will be georeferenced using a minimum of eight coded targets for each model, surveyed into the National Grid using a robotic total station.

Images will be captured perpendicular to the structure using telescopic mounted cameras, to deliver optimum results requiring little or no rectification. All images are taken with at least a 16 megapixel Nikon D7000 / Canon 750D digital camera (unless other cameras are specified) with a variety of standard and other lenses and are captured in RAW format for later processing into high resolution JPG and TIF files, and downloaded directly on to the hard disk of the laptop.

Where vehicular access is possible Aerial-Cam can be used to record the larger areas of a structure using perpendicular positioning, as well as going to a greater height to provide general overview and context aerial perspectives. Surface boards will be laid down where necessary to minimise surface impact. Where access is restricted the Pole-Cam operated in the space of a single person, can be used for perpendicular positioning and for close up detailed images of masonry features etc. The methods used to generate raw data in advance of DSM processing are detailed below.

Archaeological excavation - Chris Casswell, DigVentures

A targeted, hand excavation trench measuring 13 – 15m x 8 – 12m (104 - 156 sq. m) will be excavated to investigate the development and constructional history of the Inner Bailey gatehouse at Pontefract Castle, and to inform its interpretation and display. This will be positioned in front of the upstanding drum towers, including the area of paved skirt in front of the Victorian steps. It is expected that the first step will be removed, but the rest of the steps between the two drum towers will remain undisturbed. An adjacent irregularly-shaped area incorporating the western drum tower of the gatehouse will also be investigated through planning and recording, but mortared standing masonry will not be removed. Excavation will not be undertaken within the tower - the purpose of this work will be to delineate the extent of the drum tower and its relation with other defensive arrangements. Should the precise location of the trenches need to be altered due to underlying ground conditions, services and access issues, all relevant parties, including landowners and stakeholders, will be consulted before excavation.

It is expected that the depth of excavation into the ditch shall be below a safe working depth. If / when this happens the trench will be stepped in 1m for every 1m excavated down. Should the ground conditions prove to be unfavourable to this approach then revisions to the Risk Assessment will be made and the walls of the trench shored where appropriate. Access into the trench will be somewhat dependant on the location of buried remains within the trench, however it is provisionally envisaged that an access ramp at the western end of the excavation area would be most suitable. If spoil management at-depth becomes a health and safety concern then alternative solutions to removing it from the trench will be discussed with Historic England. This may involve the use of a mini-digger to handle spoil safely out of the trench.

All excavation will be undertaken by hand, with spoil visually scanned and metal detected for artefacts. As soon as archaeological deposits or features are recognised, they will be cleaned by hand where appropriate, planned and photographed prior to any hand-excavation. All sections will be recorded so that the full depositional sequence can be illustrated throughout the excavated area. If complex stratigraphy and/ or significant remains (e.g. structural remains, artefact scatters, remains clearly of a funerary nature etc.) are encountered, following consultation with HE, these may only be excavated to the minimum requirement in order to satisfy the project objective, to avoid compromising the integrity of remains that may be either (a) preserved in situ, or (b) excavated in detail during any next phase of research excavation (as per WYAAS 2018, Section 7.2.1). Interventions will focus on feature intersections in order to establish relative chronologies, and 'clean' sections to maximise retrieval of stratigraphically secure dating evidence and environmental samples.

Where public participation is expected in the final week of the fieldwork, excavation and recording shall be undertaken at a ratio of one professional Project Archaeologists for every two members of the public. All 'formal' excavation and recording will be completed by this stage and any further work completed by volunteers will be supplementary to the main scheme of work. It is envisaged work undertaken with groups of volunteers shall include cleaning and defining masonry, excavating (cutting-back) sections and, for those with limited mobility, cleaning the area around the existing drum tower at the top of the steps.

Full written, drawn and photographic records will be made of each trench and test pit, even where no archaeological remains are identified (following WYAAS 2018, Section 7.3). A plan

at an appropriate scale (1:50 or 1:100) will be prepared, showing the areas investigated and their relation to more permanent topographical features, and the location of contexts observed and recorded in the course of the investigation. Plans, sections and elevations of archaeological features and deposits will be drawn as necessary at an appropriate scale (normally 1:20, or 1:10 for complex features). Drawings will be made in pencil on permanent drafting film.

Written records will be made using pro forma record sheets for each trench or test pit, following the DigVentures single context recording system. Digital photography will be used for all photography of significant features, finds, deposits and general site working. The photographic record will illustrate both the detail and the general context of the principal features and finds excavated, and the Site as a whole.

Palaeoenvironmental sampling

All sealed archaeological contexts below obviously modern overburden deposits will be sampled under the direction of the Team Leader; bulk samples shall be taken from the section as appropriate, under advisement from the project specialist. Context specific samples will be taken by the most appropriate means (kubiena tins, contiguous columns, incremental block, GBA etc.) for multi-disciplinary analysis (following WYAAS 2018, Section 11). All aspects of the collection, selection, processing, assessment and reporting on the environmental archaeology component of the excavation shall be undertaken in accordance with the principles set out in *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (Historic England 2011) and with reference to the Association for Environmental Archaeology's Working Paper No. 2, Environmental Archaeology and Archaeological Evaluations (1995). In the event that waterlogged deposits are encountered, the Historic England Science Advisor will be consulted, and provision made for specialist attendance on site to advise on strategy.

General Biological Assessment (GBA) sampling strategy – Rosalind Mckenna, freelance

GBA samples will usually be 60 litres in size, depending on the likely density of macrofossils. Samples may be taken for recovery of archaeological finds including environmental material, artefacts and other evidence, such as manufacturing debris. Smaller sample, eg 20 litre samples, will only be used for the recovery of plant macrofossils from waterlogged contexts. Samples will be stored in ten litre plastic buckets with lids and handles. A waterproof label will be fixed to the bucket and will record site code, context number and sample number and number of buckets in comprising the sample. A duplicate label will be retained inside the bucket. Samples will be protected from temperatures below 5° and above 25° Celsius and will be prevented from either wetting or drying out.

If possible, a 10 litre sub-sample will be processed from each sample in a closed-system flotation tank during excavations. Flots and residues will then be assessed by the project specialist while on site to inform the sampling strategy. Following excavations, remaining sample material will be processed using the same closed-system flotation tank. Where samples are deemed unsuitable for processing, rationale will be discussed with the HE Science Advisor.

 Bulk samples selected for processing shall be wet-sieved/floated and washed over a mesh size of 250 microns for the recovery of palaeobotanical and other organic remains, and refloated to maximise recovery;

- Non-organic residues shall be washed through a nest of sieves of 10mm, 5mm, 2mm, 1mm and 250 micron mesh to maximise finds recovery;
- Both organic and non-organic residues shall be dried under controlled conditions;
- The dried inorganic fractions shall be sorted for small finds or any non-buoyant palaeoenvironmental remains, and scanned with a magnet to pick up ferrous debris such as hammerscale;
- The dried organic fractions shall be sorted under a light microscope to identify the range of species or other material on a presence/absence basis, the degree of preservation of the bio-archaeological material and the rough proportions of different categories of material present;
- In the event that waterlogged deposits are identified and sampled, further processing shall be undertaken as appropriate and agreed, including paraffin flotation to recover insect remains. Any such remains shall be scanned to identify and assess their potential;
- Selection of other types of sample for processing and the methods to be used for processing and assessment shall be undertaken on the advice of the relevant specialist and shall be agreed with the Consultant before implementation.

Where conditions are favourable to their preservation, materials that are assessed could include: macroscopic plant remains, vertebrate remains, insects, molluscs, pollen and spores, parasite eggs and cysts, phytoliths, starch granules and diatoms. Pollen, spores and diatoms from waterlogged ditch deposits will be key in understanding the condition of the ditch at different periods; diatoms in particular will be useful to determining the state of the water body.

Geoarchaeology and soil micromorphology - Dr Joanne McKenzie

A geoarchaeological examination of soils and sediments on site, particularly from the ditch, will prove a valuable resource in understanding site formation processes. Samples will be taken through the entire depositional sequence of the ditch to establish the means by which the ditch filled and any activities present nearby at the time of filling. In discussion with the project specialist, multiple locations will be chosen for monolith samples from undisturbed vertical sections. The recovery of these sequences will allow a full geoarchaeological profile of the site to be made and, where possible, sub-sampled for multi-proxy environmental analysis.

Soil micromophology will also form a key part of the sampling procedure to enable a detailed assessment of stratigraphic interpretation. Smaller targeted samples will be made using Kubiena tins, their location determined following consultation with the project specialist.

Zooarchaeology – Dr Hannah Russ, DigVentures

If large deposits of bone or marine shell are encountered advice of the project zooarchaeologist will be sought as regards further sampling. If large deposits of bone or marine shell are encountered the project zooarchaeologist advice will be sought as regards further sampling. If articulated groups of bones are encountered they will be surveyed, recorded in situ, (including digital photography and planning), and then excavated to retain the group's integrity. Bones from each articulated limb will be bagged separately. If

inhumations or cremation burials are encountered and excavated the surrounding soil will be sampled to retrieve any loose teeth or bone fragments.

All hand collected animal bones and bones from processed samples will be assessed, following Historic England's *Environmental Archaeology* (2011) and *Animal Bones in Archaeology* (2019) guidelines. If warranted by the size of the recovered assemblage, it will be assessed using two different quantification methods to determine the most suitable for full analysis, taking into account methods used in comparative assemblages. The assessment will not distinguish between certain taxonomic groups, for example equids (horse and donkey); full speciation should be carried out as part of any recommended analysis, using a vertebrate comparative collection. In addition to quantification of domestic species and occurrence of wild species, the assessment will consider the number of articulated bone groups, and the prevalence of aging, sexing and osteometric data available for full analysis, following standard published conventions. The assessment report will comment on the potential of the assemblage, particularly in the context of the excavation's research questions and current understanding of comparative assemblages. It will also provide recommendations for any necessary future analysis.

Human osteoarchaeology - Malin Holst, York Osteoarchaeology

In the event of the discovery of human remains (inhumations, cremations and disarticulated fragments) they should be left in situ, covered and protected, until the Historic England Inspector of Ancient Monuments has been informed (according with WYAAS 2018, Section 13). If a decision is taken to remove them, they will be fully recorded and excavated in compliance with the relevant Ministry of Justice Licence. The excavation of human remains will be carried out in accordance with the procedures detailed in the document Excavation and post-excavation treatment of cremated and inhumed human remains (McKinley and Roberts 1993, IFA Technical Paper 13) and in accordance with the Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England published by Advisory Panels on the Archaeology of Burials in England (2017 edition). Significant assemblages of human remains will be subject to an assessment of DNA preservation to establish potential familial relationships.

Inhumations will be scanned with a metal detector prior to excavation, and the position of possible metallic grave goods will be noted. Wherever possible, each burial will be excavated within a single working day, particularly with regard to visible grave goods. To minimise unauthorised disturbance of human remains, partially exposed remains will be covered overnight, though in such a way as to not draw undue attention, using loose excavated spoil. Excavation of inhumations will be undertaken using a trowel, plasterer's leaf, plastic spoon and paintbrush as appropriate depending on the condition of the bones. When lifted the bones will be bagged by skeletal area (skull, axial, upper and lower limbs) with separate bags for the left and right side. A standard series of samples will be taken from each inhumation burial to ensure full recovery of any remaining osseous tissues or small artefacts. Once human remains are removed from inhumation graves, any soil residue remaining at the base of the grave will be retrieved for bulk processing.

Inhumations and cremations will be drawn at a scale of 1:10 and photographed prior to lifting. They will be recorded on Skeleton Record Sheets that form an integral part of the site pro forma recording system. The recording will include condition, completeness, articulation, orientation and posture. Fragile objects found within graves will be lifted with appropriate care and handling to minimise breakage. This may include subsequent controlled excavation under laboratory conditions. A trained conservator will be employed on the site if necessary.

All cremation burials and cremation-related contexts will be excavated and sampled in quadrants to ascertain the distribution of any archaeological components within the fills, with division into spit also if appropriate. Cremation-related features other than burials may be subject to more detailed sub-divisions, the appropriate strategy being developed by a specialist as the size and nature of the remains becomes clear. Undisturbed and slightly disturbed, but largely intact, urned cremation burials will be lifted en masse for excavation under laboratory conditions. The urns will be wrapped in crepe bandages and securely boxed for transportation. Where a vessel has been crushed, thereby disrupting any original internal deposition of the cremated remains, it will be lifted *en masse* after separate recovery of displaced sherds. All cremation-related contexts will be subject to whole-earth recovery from the point at which any cremated bone or other pyre debris is observed. If deposits of placed human bone are encountered in features, these may be excavated in spits if appropriate. The soils from these features will be bulk sampled.

Finds

Finds will be treated in accordance with the relevant guidance given in the *Chartered Institute for Archaeologist's Standard and Guidance for Archaeological Evaluation* (2008), excepting where statements made below supersede them, and following WYAAS 2018, Section 17.3. All artefacts will be retained from excavated contexts, except features or deposits undoubtedly of modern date. In these circumstances sufficient artefacts will only be retained to elucidate the date and function of the feature or deposit. Where practical, selected contexts will be drysieved during excavation to maximise artefact recovery. All artefacts from the evaluation works will, as a minimum, be washed, marked, counted, weighed and identified. Any stratified ironwork will be X-rayed and stored in a stable condition along with other fragile and delicate material. X-rays of objects and other conservation needs will be undertaken by appropriately qualified conservation specialists. Suitable material, primarily the pottery and non-ferrous metalwork, will be scanned to assess the date range of the assemblage.

Conservation

Artefacts will be recovered as a matter of routine during the excavation. When retrieved from the ground finds will be kept in a finds tray or appropriate bags in accordance with First Aid for Finds (Walker 1990). Where necessary, a conservator may be required to recover fragile finds from the ground depending upon circumstances.

After the completion of the fieldwork stage, a conservation assessment will be undertaken which will include the X-radiography of all the ironwork (after initial screening to separate obviously modern debris), and a selection of the non-ferrous finds (including all coins). A sample of slag may also be X-rayed to assist with identification and interpretation. Wet-packed material, including glass, bone and leather will be stabilised and consolidated to ensure their long-term preservation. All finds will be stored in optimum conditions in accordance with First Aid for Finds and Guidelines for the Preparation of Excavation Archives for Long-Term Storage (Walker, 1990).

Further to the specification detailed in the brief (WYAAS 2018, Section 12), the conservation assessment report will include statements on condition, stability and potential for further investigation (with conservation costs) for all material groups. The conservation report will be included in the updated project design prepared for the analysis stage of the project.

Scientific dating

Where uncontaminated deposits are recorded which are able to inform understanding of the research aims (in particular, relating to the construction of the banks and ditches), appropriate samples will be taken. Radiocarbon dating will be appropriate for clarifying and linking aspects of archaeological and environmental chronologies. In addition to this, the suitability of OSL and archaeomagnetic dating techniques will be assessed and a strategy for this will be agreed following discussion with HE Science Advisor and the relevant specialists.

It is possible that some pottery may contain residues suitable for dating and / or organic residue analysis, enabling more precise dating of the site and a greater understanding of diet and economy at the site. All pottery (and other finds) will be visually inspected at time of recovery to determine suitability. If sampling is required then the items will be air-dried, wrapped in aluminium foil and stored in boxes; direct contact with plastic or cling film should be avoided.

Synthesis and data integration

The results of the project will be integrated and synthesised with those from the previous investigations and other relevant work within the region and further afield (see Section 1 and 2 above, and following the specification in WYAAS 2018, Section 18 and 19). This will include a literature review of other pertinent sites.

APPENDIX 2 PRODUCTS

Product No.	1				
Product name	Final Morphe Project Design				
Purpose	To articulate the excavation methodology and final programme for the delivery of the stages, products and tasks.				
Composition	Report				
Format	Document (PDF)				
Allocated to	Head of Fieldwork / Programme Manager				
Quality criteria and method	Project Team sign off / Review Point 2				
Person/group responsible for quality assurance	Project Executive				
Planned completion date	03/04/2019				
Product No.	2				
Product name	SAM Consent application				
Purpose	To gain consent from Historic England to undertake the proposed fieldwork				
Composition	Form of application				
Format	Document (PDF)				
Allocated to	Head of Fieldwork / Programme Manager				
Quality criteria and method	Project Team sign off / Review Point 2				
Person/group responsible for quality assurance	Project Executive				
Planned completion date	03/04/2019				
Product No.	3				
Product name	Content and Communications Plan				
Purpose	To articulate the education, communications and engagement strategy for the project delivery				
Composition	Report				
Format	Document (PDF)				
Allocated to	Head of Community / Programme Manager				

Quality criteria and method	Project Team sign off / Review Point 2
Person/group responsible for quality assurance	Project Executive
Planned completion date	03/04/2019
Product No.	4
Product name	Project microsite
Purpose	To act as a hub of information for participants and online audiences
Composition	Webpage
Format	Digital
Allocated to	Head of Community / Community Archaeologist
Quality criteria and method	Project Team sign off / Review Point 3
Person/group responsible for quality assurance	Project Executive
Planned completion date	01/07/2019
Product No.	5
Product name	Community audit and content design
Purpose	Identify core audiences and build content delivery plan
Composition	Report
Format	Digital and paper report
Allocated to	Head of Community
Quality criteria and method	Project Team sign off / Review Point 3
Person/group responsible for quality assurance	Project Executive
Planned	01/07/2019
completion date	
Product No.	5
Product name	Risk Assessment Method Statement
Purpose	To assure risks are understood and mitigated, and provide a clear plan and procedure for team members and participants to review and sign.
Composition	Policy, Report, and table

Format	Digital and paper report
Allocated to	Head of Fieldwork
Quality criteria and method	Project Team sign off / Review Point 4
Person/group responsible for quality assurance	Project Executive
Planned completion date	01/08/2019
Product No.	6
Product name	Survey Archive
Purpose	To maintain an accessible archive of data recorded as part of the remote sensing fieldwork and investigation
Composition	Survey data
Format	Digital / GIS
Allocated to	Head of Fieldwork
Quality criteria and method	Project Team sign off / Review Point 4
Person/group responsible for quality assurance	Project Executive
Planned completion date	30/09/2019
Product No.	7
Product name	Family Open Day leaflet
Purpose	To raise awareness to the Site Open Day during October half term
Composition	Artwork
Format	A6 postcard
Allocated to	Head of Community / Community Archaeologist
Quality criteria and method	Project Team sign off / Review Point 4
Person/group responsible for quality assurance	Project Executive
Planned completion date	01/10/2019
Product No.	8

Product name	Digital Dig Team / social media
Purpose	Populated archaeological archive and timeline of activity
Composition	Webpage / web database
Format	Digital
Allocated to	Head of Fieldwork / Head of Community / Community Archaeologist
Quality criteria and method	Project Team sign off / Review Point 5
Person/group responsible for quality assurance	Project Executive
Planned completion date	25/10/2019
Product No.	9
Product name	Project microsite / social media timeline
Purpose	Timeline of activity and broadcast of excavation results
Composition	Webpage / web database
Format	Digital
Allocated to	Head of Community / Community Archaeologist
Quality criteria and method	Project Team sign off / Review Point 5
Person/group responsible for quality assurance	Project Executive
Planned completion date	25/10/2019
Product No.	10
Product name	Photogrammetry Models
Purpose	3D digital aerial survey models of the site and trenches
Composition	Digital model on DDT
Format	Digital
Allocated to	Aerial-Cam / Head of Fieldwork
Quality criteria and method	Project Team sign off / Review Point 6
Person/group responsible for quality assurance	Project Executive
Planned completion date	01/11/2019

Product No.	11
Product name	Fieldwork summary
Purpose	To provide contributing specialists with full access to the site archive
Composition	Technical summary report supported by DDT
Format	PDF report / webpage
Allocated to	Head of Fieldwork / Community Archaeologist
Quality criteria and method	Project Team sign off / Review Point 7
Person/group responsible for quality assurance	Project Executive
Planned completion date	01/12/2019
Product No.	12
Product name	Expert assessments
Purpose	Expert reporting on archaeological finds and environmental material
Composition	Report
Format	Word / Excel document
Allocated to	Expert Team
Quality criteria and method	Project Team sign off / Review Point 7
Person/group responsible for quality assurance	Project Executive
Planned completion date	01/04/2020
Product No.	13
Product name	Technical Assessment Report
Purpose	Assessment report on the excavations and archaeological finds
Composition	Technical report supported by DDT and online archive
Format	PDF report / webpage
Allocated to	Head of Fieldwork / Community Archaeologist / Programme Manager
Quality criteria and method	Project Team sign off / Review Point 7
Person/group responsible for quality assurance	Project Executive

Planned completion date	01/05/2020
Product No.	14
Product name	Post Excavation blog
Purpose	Online content covering post excavation findings
Composition	Webpage / web database
Format	Digital
Allocated to	Head of Fieldwork / Head of Community / Community Archaeologist
Quality criteria and method	Project Team sign off / Review Point 7
Person/group responsible for quality assurance	Project Executive
Planned completion date	01/06/2020
Product No.	15
Product name	Final Report
Purpose	Comprehensive report on the excavations and archaeological finds
Composition	Technical report supported by DDT and online archive
Format	PDF report / webpage
Allocated to	Head of Fieldwork / Community Archaeologist / Programme Manager
Quality criteria and method	Project Team sign off / Review Point 8
Person/group responsible for quality assurance	Project Executive
Planned completion date	01/10/2020
Product No.	16
Product name	Evaluation Report
Purpose	Providing summary and discussion of engagement, public benefit and impact of the project
Composition	Digital Report
Format	PDF report
Allocated to	Managing Director / Community Archaeologist
Quality criteria and method	Project Team sign off / Review Point 9

Person/group responsible for quality assurance	Project Executive
Planned completion date	01/01/2021
Product No.	17
Product name	The Dig Documentary
Purpose	10 to 15 minute documentary of the dig and public engagement activities
Composition	Digital video
Format	MP4 video format
Allocated to	Head of Community / Community Archaeologist
Quality criteria and method	Project Team sign off / Review Point 9
Person/group responsible for quality assurance	Project Executive
Planned completion date	01/01/2021
Product No.	18
Product name	Archive
Purpose	To provide a stable and comprehensive archive of the excavation
Composition	Various
Format	Various
Allocated to	Head of Fieldwork / Community Archaeologist / Programme Manager
Quality criteria and method	Project Team sign off / Review Point 9
Person/group responsible for quality assurance	Project Executive
Planned completion date	01/01/2021

APPENDIX 3 CONTENT AND COMMUNICATIONS PLAN

DigVentures plans our project communications in three stages: before, during and after. This appendix outlines the steps we will take during the 'before' stage to ensure that places on bookable events are filled, open events are well attended, and that we have started to build substantial online interest in both the process and outcomes of the archaeological work involved.

Note that two important items - the community audit and content design - are due to be delivered in late April / early May. A brief outline of what will happen in the 'during' and 'after' stage is included at the end of the appendix.

What	When	Brief	Who (DV / PC)
Public programme	Early April	Finds Room, Dig Experience, DigCamp	DV + PC
finalised		(all max 10 places per session), plus	
		talks, and daily site tours.	
Event listings (print)	10/04	Provide 8-word event descriptions for	DV
		PC's printed events guide	
Event listings	End April	Sign ups available through PC's	DV write, PC
(Eventbrite)		Eventbrite. This is a soft launch only, to	sign off and
		ensure that sign ups are available for	publish
		anyone reading PC's printed events	
-		publication.	
Community audit	End April	This informs our content design and	DV, with input
		delivery. Our aim is to understand who	from PC
		we're trying to reach, what they will be	
		interested in, and where we can best	
		reach them. It includes an audit of our	
		existing reach into a community, plus	
		identification of channels that can help	
		us grow that reach (press, radio,	
		podcasts, online communities of	
		interest, social media influencers, local	
0		organisations, What's On directories,	
		and venues for 'real-life' promotion if	
		relevant). It also includes identifying	
		any relevant 'On This Day' historical	
		dates, significant local events, or	
		partner deadlines (e.g., scheduled	
		newsletters or print publications) that	
		should be accounted for in content	
		design. In some cases, it may also	
		include early contact with press, other	
		publications, and community	
		organisations to establish interest or	
		willingness to participate.	
Content design	Early May	Produce a content strategy and	DV
		approximate publication schedule,	1

What	When	Brief	Who (DV / PC)
		including email marketing, press	
		releases, promotional blogs, and social	
		media content. This process includes	
		historical research, and in-depth	
		familiarization with subject area, with	
		themes and delivery channels selected	
		on the basis of outcomes from the	
		community audit.	
Schools	Early May	This includes agreeing the activities	DV + PC
programme	, , ,	and creating drafting promotional	
finalised		material	
Schools outreach	ТВС	This includes researching, contacting	PC
		and booking local schools.	-
Early contact with	Mid Mav	DigVentures tries to ensure an even mix	PC
local / volunteer		of participants, including friends /	
aroups		volunteer / local groups as well as new	
9.0000		participants from the local area and the	
		wider DiaVentures community. This is	
		partly managed by giving the most	
		invested groups 'first dibs' on places	
		which also helps us understand how	
		many places are left to fill	
Event listings	Mid May	Events are added to DigVentures	DV with PC to
(online)	Wild Way	calendar. Eacebook and What's On	circulate to
(onine)		directories	What's On
		directories	directories
Press release draft	Mid lune	"Archaeologists invite Wakefield	DV write with
and sign off	Wha Surie	residents to join dia team at Pontefract	sign off from
and sign on		Castle"	PC
Microsite draft and	Mid lune	This includes imageny plus background	DV with sign
sign off	Mid Julie	soctions on the history of Pontofract	off from PC
sign on		Castle how the dig bagan and links to	
		follow online / get involved	
Microsite goes live	Mid lune	Approved content is added to	DV
Microsite goes live	Ivila Julie	microsite, and is featured on the	Dv
		DidVentures projects page	
Contant creation	Midlupa	Contant is written around the agreed	DV write with
Content creation	Mid June	topics from content design, similar to	Dv write, with
		copies from content design, anning to	off from PC
		grow and convert new addiences with a	
Maating to finalise	Miduuse	Clear call to action	
ivieeting to finalise	Iviid June	Digventures and Ponterract Castle	DV + PC
cross-promotion		comms teams confirm key comms	
schedule		dates, and ensure both partners are	
		aware of all planned comms each will	
		be undertaking so that cross-promotion	
		and amplification can be maximised	

What	When	Brief	Who (DV / PC)
Contact Press	End June	Circulate press release to contacts,	ТВС
		including BBC, ITV, Wakefield Express	
		and Yorkshire Post. Schedule interviews	
		with radio shows and podcasts.	
Content delivery	July-August-	Launch of content delivery will coincide	DV
	September	approximately with Pontefract Liquorice	
		Festival 6th - 7th July 2019. First piece	
		likely to be themed around the castle's	
		role in liquorice production.	
Amplification	July-August-	Continual action taken to amplify	DV + PC
	September	content and event listings through	
		groups and accounts identified in the	
		community audit	
Event reminders	Mid Sept	Email reminders sent to everyone who	DV
		is registered for the Finds Room or Dig	
		Experiences, including what to bring,	
		what to expect etc.	
Meeting to review	Mid – end	To ensure we capture the right video	DV + PC
plan for legacy	Sept	footage, we will need to review or	
video content		agree a story arc for the legacy video	
		content.	
'During' (while	End Sept –	DigVentures will provide rolling	DV
excavation and	early Nov	coverage of the excavation, including	
events take place)		the discoveries, the processes and the	
		people who take part, as well as	
		continued promotion of any remaining	
		events. Online audiences will be able	
		to follow through the Dig Timeline and	
		on social media, and will be able to	
		enjoy a range of interactive content	
		including video and/or livestream	
		events.	
After	Winter 2019 –	DigVentures will continue to provide	DV
	Summer 2020	updates about post-excavation analysis	
		and results. Depending on the kind of	
		analysis undertaken, this could include	
		special online events, like livestreams	
		he abared with least (metional and	
		pe snared with local / hational press	
		Contacts.	
Legacy	IRC	i his includes short video documentary	

APPENDIX 4 FIELD SCHOOL CURRICULUM

Archaeology Field Schools 2019

DigVentures' field school curriculum for archaeology forms the basis of all our on-site vocational training opportunities. Field schools are available to participants of all skills levels to attend and receive hands-on training over the course of one day, two days or one week (or more). Field schools are designed and run by professional archaeologists, working alongside our Venturers to excavate and record archaeology to the highest standards. Due the unique nature of each of the archaeological sites we work at, the content of the field schools may vary from project to project. However, our core learning curriculum will remain consistent across all our projects and provides an outline of the minimum our participants (or Venturers) should expect to achieve during their time with us on site.

Our archaeology field school is endorsed by the Chartered Institute for Archaeologists and designed to support the Archaeology Skills Passport.

About the projects

Each of our archaeological sites has a specific Project Design attached to it. This document will provide the research background to the excavation, outlining some very important details about the period, the location and what we hope to find. This is the place to find out what the aims and objectives are, where we will be putting our archaeological trenches and what the overarching strategy is for recovering all that vital archaeological information. You can also find the general methods statements here, and learn about the particular approaches we might be taking.

Each archaeological project is supported by a project microsite – and this should be your first point of call for your site preparations. Once you have had a look through the archaeological project design, you can have a look over the 'Plan Your Visit' section which includes the project set up and all the information you need to know to make your archaeological experience run as smoothly as possible. As the archaeological project continues, this is the place where the technical data recovered will be stored and where you can look up the archaeological information you have helped to excavate and record!

About the field school

Archaeology is a profession, as well as an academic field of study. Many years of experience, skills development and education are necessary in order to develop the expertise, and attain the necessary qualifications, to run archaeological excavations. Archaeology is also an activity which inspires enthusiasts all around the world, from active volunteers through to armchair archaeologists who devour every book, programme and magazine they can get their hands on. We are consistently amazed at the passion and level of knowledge of the people we meet through our work at DigVentures, and everyone has one thing in common: they want to learn more about how to do archaeology.

We have designed our field schools to help support anyone who is keen to roll up their sleeves, jump in the trenches and learn how archaeology is done. Whether you can join us for one day,

a weekend or a full week (or two), we can teach you what you need to know to get the most out of your archaeological experience.

Our core learning curriculum

Our field schools provide a step-by-step guide through the core skills needed to contribute to an archaeological excavation. What do you need to know about the archaeology before you begin to dig? How do you recognise and excavated archaeological layers? What's the point of drawing in the age of digital? What's with all the string, and funny red and white sticks in the trenches? If you are with us for a single day, we will make sure you get to grips with the fundamental skills, such as using a trowel. The longer you can stay, the more you will learn. You can use the look-up table below to see which of the core archaeological skills you will learn on a DigVentures field school depending on the length of your experience.

Skill	Learning outcome		Two	Week
		Day	Days	+
Professional ethics	Can anyone just turn up and dig an archaeological site? Or is there more to it than that?	~	√	 ✓
Site Safety	Be aware of the particular Health & Safety issues on the archaeological project	~	~	~
Small hand tools	Understand the correct use of the trowel and other smaller hand tools including their safe use and maintenance.	√	~	*
Large hand tools	Understand the correct and safe use of larger tools as well as appropriate loading for buckets and wheelbarrows.	✓	~	 ✓
Site formation processes	Understand the process of site formation, including fills, layers, structures or natural deposits. Everything is in the ground for a reason and sites come to look the way they do now for a number of different reasons. By the time you leave site you will have a basic understanding of why the site looks the way it does.	✓	✓	✓
Stratigraphic excavation	Understand the concept of physical and chronological stratigraphy as well as the methods of recording the sequences and be able to remove layers and fills in the correct order for structured excavation.		×	×
Artefact recording	Understand how to recover artefacts safely from archaeological deposits, how to store finds on-site and how to complete the Small Finds record.		~	V
Context recording	Understand the procedure for the completion of a standard context record sheet using Digital Dig Team.		\checkmark	\checkmark

Skill	Learning outcome	One	Two	Week
		Day	Days	+
Survey	Appreciate the concept of site/national			✓
	grid systems and placement of trenches			
	within this. It is important we know exactly			
	where archaeological remains were found			
	and you will be familiarised with the use of			
	traditional hand tape measurements and			
	in the application of GPS and total station			
	readings.			
Measured drawing	Understand the various elements that			✓
(planning and	must be present on a plan and section			
section drawing)	drawing, including the use of conventions			
	and how the drawing is located.			
Photography	Have a basic grasp of the fundamental			✓
	requirements for camera use and the			
	sequenced methodology of photographic			
	recording.			
Sampling	Understand the procedure for the			✓
	collecting archaeological samples for			
	artefacts and ecofacts, including why we			
	take them, how they are recorded and			
	what happens next.			

National Occupational Standards

All our training programmes are built upon the framework of National Occupational Standards (NOS) developed by the Chartered Institute of Archaeologists. The NOS for archaeological practice defines the range of skills that archaeologists may need to perfect in order to do their job. They provide the perfect framework for training programmes as they break down a complicated job into a collection of individual skills and tasks. This is great for both practising and avocational archaeologists as it provides a clear roadmap for skills development.

To help that skills development, you can find the individual NOS standards which this course supports below. If you would like to record your own skills development, we recommend you use the Archaeology Skills Passport. This has been developed in line with NOS, and provides a simple record book of your learning achievements.

The learning outcomes from this course are defined using National Occupational Standards (NOS). This course *supports* and *contributes* to the Knowledge Requirements for particular units within the NOS for Archaeological Practice. These are:

AC5 Contribute to intrusive investigations <u>https://www.ukstandards.org.uk/PublishedNos/CCSAPAC5.pdf</u>

This includes:

- Preparing for operations, including understanding the methods used, the safety arrangements, identifying suitable equipment and applying technical standards
- Undertaking intrusive investigation, including identifying, investigating and recording archaeology and using appropriate tools competently
- Preparing records and schedules, including making accurate records and verifying data

Recording your archaeology skills

For those participants who are keen to develop their archaeological skills-set, we recommend using the Archaeology Skills Passport to record the skills you learn as you progress. Depending on whether you are joining us for a couple of days or a full week, you will have the opportunity to learn or add to the skills you already have. The course contributes to a number of Core Skills as identified in the Skills Passport, and the table above provides an outline of which should be expected to be achieved during your experience.

Providing feedback

Once you have completed your fieldwork with us, we will ask a couple of additional questions about your experience. This helps us see how much you have learnt while you have been part of our excavations and also makes sure we are doing a great job! If there is anything you would like to know or would like to tell us while you are still digging, just speak to a member of the team.

The Field School Curriculum – what to expect!

Dig For One Day

Morning briefing

On the first morning of your arrival to site, you will be greeted by the DigVentures welcoming party where members of the team will introduce themselves and their roles. We will ask you to introduce yourself as well, and ask a little about why you decided to join the dig. All new Venturers will then receive a full project briefing and site induction, while existing Venturers will head out to the trenches to make a start. The project briefing will include a background to the archaeological research, detailing why we are digging the site, what we are hoping to achieve and what our archaeological strategy and methodology is. As part of the site induction, all Venturers will be talked through our site Risk Assessment, where a member of the team will highlight any particular Health and Safety issues or advice. We will also create your own Venturer profile on the project Digital Dig Team website and then head out to the trenches.

To the trenches!

When you arrive on site you will receive a full orientation from one of the DigVentures team. This begins with a background to the period we are investigating, re-capping the aims of the dig and the site's significance. You'll be shown any relevant aerial maps, previous research and geophysics results of the area. Venturers are then introduced to each trench, where you can see what we've found so far and what we plan to achieve by the end of the dig. You will learn about the tools of the trade, why we excavate and record the way we do and what to do when

you find something. Finally, we will run through the day's tasks and what you will be doing while you are on-site.

Trowelling 101

The most important tool in an archaeologist's kit is their trowel. No matter what site you're on there's always plenty of trowelling to be done. This may be the first time you come face to face with archaeology which is still in the ground and yet to be discovered - it's important we get the basics nailed before developing your skills further.

Skills and learning

Learning opportunities will present themselves throughout the day while we are on site and will vary from site to site, depending on what we are investigating, what we have found and what stage the project is at. As a minimum, you will walk away from site having learnt the following skills:

Skill	Learning outcome		
Professional ethics	Can anyone just turn up and dig an archaeological site? Or is		
	there more to it than that?		
Site Safety	Be aware of the particular Health & Safety issues on the		
	archaeological project		
Small handtools	Understand the correct use of the trowel and other smaller		
Sman nandtools	hand tools including their safe use and maintenance.		
Larga handtaals	Understand the correct and safe use of larger tools as well as		
Large Handtools	appropriate loading for buckets and wheelbarrows.		
	Understand the process of site formation, including fills, layers,		
	structures or natural deposits. Everything is in the ground for a		
Site formation processos	reason and sites come to look the way they do now for a		
Site formation processes	number of different reasons. By the time you leave site you will		
	have a basic understanding of why the site looks the way it		
	does.		

Dig For Two Days

Morning briefing

On the first morning of your arrival to site, you will be greeted by the DigVentures welcoming party where members of the team will introduce themselves and their roles. We will ask you to introduce yourself as well, and ask a little about why you decided to join the dig. All new Venturers will then receive a full project briefing and site induction, while existing Venturers will head out to the trenches to make a start. The project briefing will include a background to the archaeological research, detailing why we are digging the site, what we are hoping to achieve and what our archaeological strategy and methodology is. As part of the site induction, all Venturers will be talked through our site Risk Assessment, where a member of the team will highlight any particular Health and Safety issues or advice. We will also create your own Venturer profile on the project Digital Dig Team website and then head out to the trenches.

To the trenches!

When you arrive on site you will receive a full orientation from one of the DigVentures team. This begins with a background to the period we are investigating, re-capping the aims of the dig and the site's significance. You'll be shown any relevant aerial maps, previous research and geophysics results of the area. Venturers are then introduced to each trench, where you can see what we've found so far and what we plan to achieve by the end of the dig. You will learn about the tools of the trade, why we excavate and record the way we do and what to do when you find something. Finally, we will run through the day's tasks and what you will be doing while you are on-site.

Trowelling 101

The most important tool in an archaeologist's kit is their trowel. No matter what site you're on there's always plenty of trowelling to be done. This may be the first time you come face to face with archaeology which is still in the ground and yet to be discovered - it's important we get the basics nailed before developing your skills further.

Skills and learning

Learning opportunities will present themselves throughout the day while we are on site and will vary from site to site, depending on what we are investigating, what we have found and what stage the project is at. As a minimum, you will walk away from site having learnt the following skills:

Skill	Learning outcome
Professional	Can anyone just turn up and dig an archaeological site? Or is there more
ethics	to it than that?
Site Safety	Be aware of the particular Health & Safety issues on the archaeological
	project
Small handtools	Understand the correct use of the trowel and other smaller hand tools
	including their safe use and maintenance.
Largo handtools	Understand the correct and safe use of larger tools as well as appropriate
Large nanotools	loading for buckets and wheelbarrows.
	Understand the process of site formation, including fills, layers, structures
Sita formation	or natural deposits. Everything is in the ground for a reason and sites
processos	come to look the way they do now for a number of different reasons. By
processes	the time you leave site you will have a basic understanding of why the
	site looks the way it does.
Artefact recovery	Understand how to recover artefacts safely from archaeological deposits,
and recording	how to store finds on-site and how to complete the Small Finds record.
	Where possible, participants will also learn how to wash and quantify
	different artefact types and materials.
Stratigraphic	Understand the concept of physical and chronological stratigraphy as
overvation	well as the methods of recording the sequences and be able to remove
excavation	layers and fills in the correct order for structured excavation.
Context recording	Understand the procedure for the completion of a standard context
Context recording	record sheet using Digital Dig Team.

Dig For A Week (or more)

Morning briefing

On the first morning of your arrival to site, you will be greeted by the DigVentures welcoming party where members of the team will introduce themselves and their roles. We will ask you to introduce yourself as well, and ask a little about why you decided to join the dig. All new Venturers will then receive a full project briefing and site induction, while existing Venturers will head out to the trenches to make a start. The project briefing will include a background to the archaeological research, detailing why we are digging the site, what we are hoping to achieve and what our archaeological strategy and methodology is. As part of the site induction, all Venturers will be talked through our site Risk Assessment, where a member of the team will highlight any particular Health and Safety issues or advice. We will also create your own Venturer profile on the project Digital Dig Team website and then head out to the trenches.

To the trenches!

When you arrive on site you will receive a full orientation from one of the DigVentures team. This begins with a background to the period we are investigating, re-capping the aims of the dig and the site's significance. You'll be shown any relevant aerial maps, previous research and geophysics results of the area. Venturers are then introduced to each trench, where you can see what we've found so far and what we plan to achieve by the end of the dig. You will learn about the tools of the trade, why we excavate and record the way we do and what to do when you find something. Finally, we will run through the day's tasks and what you will be doing while you are on-site.

Trowelling 101

The most important tool in an archaeologist's kit is their trowel. No matter what site you're on there's always plenty of trowelling to be done. This may be the first time you come face to face with archaeology which is still in the ground and yet to be discovered - it's important we get the basics nailed before developing your skills further.

Skills and learning

Learning opportunities will present themselves throughout the day while we are on site and will vary from site to site, depending on what we are investigating, what we have found and what stage the project is at. As a minimum, you will walk away from site having learnt the following skills:

Skill	Learning outcome	
Professional	Can anyone just turn up and dig an archaeological site? Or is there more	
ethics	to it than that?	
Small handtaala	Understand the correct use of the trowel and other smaller hand tools	
Small nanoloois	including their safe use and maintenance.	
larga handtaals	Understand the correct and safe use of larger tools as well as appropriate	
Large nanotools	loading for buckets and wheelbarrows.	
Site formation processes	Understand the process of site formation, including fills, layers, structures or natural deposits. Everything is in the ground for a reason and sites come to look the way they do now for a number of different reasons. By the time you leave site you will have a basic understanding of why the site looks the way it does.	

Skill	Learning outcome		
Artefact recovery	Understand how to recover artefacts safely from archaeological deposits,		
and recording	how to store finds on-site and how to complete the Small Finds record.		
	Where possible, participants will also learn how to wash and quantify		
	different artefact types and materials.		
Stratigraphic	Understand the concept of physical and chronological stratigraphy as		
overvation	well as the methods of recording the sequences and be able to remove		
excavation	layers and fills in the correct order for structured excavation.		
Contaxt recording	Understand the procedure for the completion of a standard context		
Context recording	record sheet using Digital Dig Team.		
	Appreciate the concept of site/national grid systems and placement of trenches within this. It is important we know exactly where archaeological		
Survey	remains were found and you will be familiarised with the use of traditional hand tape measurements and in the application of GPS and total station readings.		
Measured drawing (planning and section drawing)	Understand the various elements that must be present on a plan and section drawing, including the use of conventions and how the drawing is located.		
Photography	Have a basic grasp of the fundamental requirements for camera use and the sequenced methodology of photographic recording.		
Sampling	Understand the procedure for the collecting archaeological samples for artefacts and ecofacts, how to record them, why we take them and what happens next.		

APPENDIX 5 DATA MANAGEMENT PLAN

Section 1: Project Administration

Project ID / OASIS ID
Project code: PON19
 OASIS ID: digventu1-347513
Scheduled monument: 1010127
Project Name
Gatehouse Project, Pontefract Castle
Project Description
Community archaeology project
Targeted excavation and recording of Inner Bailey Gatehouse at Pontefract Castle
to investigate its development and constructional history.
 Photogrammetric survey of the excavation and extant remains of the castle
Community outreach and engagement
Project Funder / Grant reference
Project funder: Historic England, allocated under the terms of the NPPF Emergency
Investigation Assistance
Client: Wakefield Metropolitan District Council
Organisations
DigVentures – lead archaeological contractor
Project Manager
Brendon Wilkins, Projects Manager, DigVentures
Principal Investigator / Researcher
 Chris Casswell, Head of Fieldwork, DigVentures
Data Contact Person
Chris Casswell, Head of Fieldwork, DigVentures
Date DMP created
• 28/03/2019
Date DMP last updated
• 28/03/2019
Version
Version 2.0
Related data management policies
Deposition guidelines provided by Wakefield MDC Museum and Arts, Pontefract
Museum
 Project brief (Sanderson 2018, Section 8; 16; and 17.2)
ADS Guides for Good Practice
ClfA Standards and guidance for Archaeological Archives, including AAF and
Arches guidance documents
Work Digital / Think Archive – AAF / ClfA data management guidance document

Section 2: Data Collection

What data will you collect or create?

The following table outlines the types of files we will collect, and an estimate of the selected data archive.

Туре	Format	Estimated volume of Data Archive	
Spreadsheets	Excel (.xlsx)	 3 spreadsheets objects (size <2MB total) Context Register / Finds & Samples Register / Photo Register / Drawing Register Context descriptions and data Specialist data tables 	
Text / documents	Word (.docx)	 10 word documents (size <100MB) Project Brief Project Design Assessment and Updated Project Design Final Technical Report Individual Specialist Reports x 6 	
Vector graphics	Scalable Vector Graphics (.svg)	Site drawings x 10, av size 5MB	
Images	Uncompressed (.tiff) Lossy graphics file (.jpg)	Archive shots x 100, av size 4MB Orthoimages x 10, av size 10MB Images for 3D models x 300, av size 4MB	
GIS	ESRI Shapefile (.shp & .shx & .dbf, plus associated files)	Overall GIS files x 10, including 6 shp layers <10MB	
Survey	Comma Separated Version (.csv)	Survey data x 1, av size <1MB	
Video	Moving Picture Expert Group-4 (.mp4)	Video files x 5, av size 500MB to 1GB	
Photogrammetry	Models hosted on Sketchfab (.obj, .jpg, .mtl)	3D models x 3, 20MB	
How will the data be col	lected or created?		
Data Standards / Metho	ds		

- Standard methods of data collection will be applied throughout the project, working to best practice guidance where applicable / available. In general, data acquisition standards are defined against *ADS Guides to Good Practice*. Specific or additional guidance relevant to this project are listed below, and will be updated as the project progresses.
- Methods of collection are specified within the Project Design (see DV_PON19_ProjectDesignV2.3.pdf) and will meet the requirement set out in the Project Brief, the organisation recording manual and relevant CIfA Standards and Guidance.
- Where appropriate, project contributors external to the organisation will be required to include data standards, collection methodology and metadata with individual reports and data.
- Specific guidance:
 - HE Digital Image Capture and File Storage: Guidelines for Best Practice 2015
 - HE Photogrammetric Applications for Cultural Heritage: Guidance for Good Practice 2017

Data storage / file naming

- The working project archive will be stored in a project specific folder or data specific folder on the internal organisational server. The internal organisation server is backed up twice daily to maintain an up to date security copy of the organisation wide data.
- Project folders are named following established organisational procedures.
- Data collected will be downloaded and raw data will be stored in the appropriate folder.
- File naming conventions following established organisational procedures, based on ADS file naming guidance, and include version control management.
- All files included as part of this project archive will include an organisational identifier (DV), the Site ID (PON19), the file descriptor (eg ProjectDesign) and Version number (eg v2.0).

Quality Assurance

- Instruments used in the collection of data are calibrated prior to use and checked to ensure they are in full working order.
- All site records and data collected will be checked during project delivery.
- Data collection and management are reviewed regularly as part of the organisational Quality Policy (DV_Quality_Policy_v1.pdf). This includes a quarterly review of internal project folders to ensure our organisational data management standards are being met.

Section 3: Documentation and metadata

What do	ocumentation and metadata will accompany the data?
•	Data collected will include standard formats which maximise opportunities for use
	and reuse in the future (see Section 2, above).
•	A Collection Level Metadata Summary will be completed as the project is

• A Collection Level Metadata Summary will be completed as the project is delivered. A working copy will be kept on the organisational server in the Project Folder. The Collection Level Metadata Summary brings together the overarching

project details and includes a register of data types and number of objects included in the archive, along with all other archive components.

- Metadata tables for each data type will be populated as the project progresses and will use the standard format for each data type as recommended by ADS, who are the intended repository for the digital data archive.
- Data documentation will meet the requirement of the Project Brief and Digital Repository Guidelines, following the methodology described in the Project Design methodology.

Section 4: Ethics and legal compliance

How will you manage any ethical, copyright and Intellectual Property Rights (IPR) issues?
The project archive will include the names and contact details of individuals who
intend to volunteer or participate in the excavation and post excavation stages.
We have a GDPR compliant Privacy Policy which underpins the management of
personal data; any personal data is managed through a secure cloud-based
database and not retained on the project specific folders.
 Personal data will be removed from the archaeological project archive and
permission to include individual's names in any reporting is gained prior to use.
 DigVentures will retain copyright in pre-existing data, WMDC and Historic
England will be granted a third party licence in perpetuity for project materials.
• Where formal permissions and/or license agreements are linked to data sharing,
they will be included in the project documentation folders and will accompany the

Section 5: Storage and Backup

archaeological project archive.

How will the data be stored, accessed and backed up during the research?
 Organisational IT is managed internally by the Projects Director and Digital
Imaging Manager, who is also responsible for the management and verification of
our back-ups and who supports access to security copies as needed.
• Sufficient data storage space is available via the organisational server, which
includes two-factor authentication and permissions-based access. The server is
accessible by staff on- and off-site through a secure log-in.
Off-site access to the project files on the organisation's server is provided to
support back-up of raw data while fieldwork is ongoing. Where internet access for
data back-up is not possible, the raw data will be backed up to a separate media
device (such as laptop and portable external hard drive).
• Project files will be shared with external specialists and contractors directly using
the same system, with the wider project team gaining access to only the files
needed using permissions-based access.

Section 6: Selection and Preservation

Which data should be retained, shared, and/or preserved?
 The Selection Strategy and DMP will be reviewed and updated as part of the Post
Excavation Assessment and Updated Project Design, and following full analysis.
Updated documentation will be included in all reporting stages.
• Prior to deposition, the Selection Strategy and DMP will be updated and finalised
in agreement with all project stakeholders (including the HE, Wakefield
Metropolitan District Council, Museum, ADS).
• Selection will be informed by the Project Design, defined against the research
aims, regional and national research frameworks, specialist advice and the
significance of the project results.
• The project results are likely to provide new research data which can be included
in the Historic Environment Record and will contribute to the knowledge of the
early medieval period at the site, and aiding the future management of the
archaeological site.
 The data archive will be ordered, with files named and structured in a logical
manner, and accompanied by relevant documentation and metadata, as outlined
in Sections 2 and 3 of this DMP
What is the long-term preservation plan for the dataset?
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal.
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. The archive will be prepared for deposition by the project team and the costs for
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. The archive will be prepared for deposition by the project team and the costs for the time needed for preparation, and the cost of deposition have been included.
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. The archive will be prepared for deposition by the project team and the costs for the time needed for preparation, and the cost of deposition have been included in the project budget (DV PON19 Budget V2 0 pdf)
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. The archive will be prepared for deposition by the project team and the costs for the time needed for preparation, and the cost of deposition have been included in the project budget (DV_PON19_Budget_V2.0.pdf).
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. The archive will be prepared for deposition by the project team and the costs for the time needed for preparation, and the cost of deposition have been included in the project budget (DV_PON19_Budget_V2.0.pdf). Have you contacted the data repository? ADS have also been contacted as the intended repository for digital data and a
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. The archive will be prepared for deposition by the project team and the costs for the time needed for preparation, and the cost of deposition have been included in the project budget (DV_PON19_Budget_V2.0.pdf). Have you contacted the data repository? ADS have also been contacted as the intended repository for digital data and a copy for this Data Management Plan has been forwarded to Katie Green ADS
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. The archive will be prepared for deposition by the project team and the costs for the time needed for preparation, and the cost of deposition have been included in the project budget (DV_PON19_Budget_V2.0.pdf). Have you contacted the data repository? ADS have also been contacted as the intended repository for digital data and a copy fo this Data Management Plan has been forwarded to Katie Green, ADS.
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. The archive will be prepared for deposition by the project team and the costs for the time needed for preparation, and the cost of deposition have been included in the project budget (DV_PON19_Budget_V2.0.pdf). Have you contacted the data repository? ADS have also been contacted as the intended repository for digital data and a copy fo this Data Management Plan has been forwarded to Katie Green, ADS. Have the costs of archiving been fully considered?
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. The archive will be prepared for deposition by the project team and the costs for the time needed for preparation, and the cost of deposition have been included in the project budget (DV_PON19_Budget_V2.0.pdf). Have you contacted the data repository? ADS have also been contacted as the intended repository for digital data and a copy fo this Data Management Plan has been forwarded to Katie Green, ADS. Have the costs of archiving been fully considered? A costing estimate has been produced using the ADS Costing Calculator and aufficient resources to ensure these pasts, and to allow for the association of the aufficient resources to ensure these pasts.
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. The archive will be prepared for deposition by the project team and the costs for the time needed for preparation, and the cost of deposition have been included in the project budget (DV_PON19_Budget_V2.0.pdf). Have you contacted the data repository? ADS have also been contacted as the intended repository for digital data and a copy fo this Data Management Plan has been forwarded to Katie Green, ADS. Have the costs of archiving been fully considered? A costing estimate has been produced using the ADS Costing Calculator and sufficient resources to cover these costs, and to allow for the preparation of the archive have have included in the archive have have have included in the archive have have have have have have have ha
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. The archive will be prepared for deposition by the project team and the costs for the time needed for preparation, and the cost of deposition have been included in the project budget (DV_PON19_Budget_V2.0.pdf). Have you contacted the data repository? ADS have also been contacted as the intended repository for digital data and a copy fo this Data Management Plan has been forwarded to Katie Green, ADS. Have the costs of archiving been fully considered? A costing estimate has been produced using the ADS Costing Calculator and sufficient resources to cover these costs, and to allow for the preparation of the archive, have been included in the project budget.
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. The archive will be prepared for deposition by the project team and the costs for the time needed for preparation, and the cost of deposition have been included in the project budget (DV_PON19_Budget_V2.0.pdf). Have you contacted the data repository? ADS have also been contacted as the intended repository for digital data and a copy fo this Data Management Plan has been forwarded to Katie Green, ADS. Have the costs of archiving been fully considered? A costing estimate has been produced using the ADS Costing Calculator and sufficient resources to cover these costs, and to allow for the preparation of the archive, have been included in the project budget. The costing estimate is based on the estimated project archive shown in the table archive area (Caption 2) and (200 has have are in a forward to a cost of the project budget.
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. The archive will be prepared for deposition by the project team and the costs for the time needed for preparation, and the cost of deposition have been included in the project budget (DV_PON19_Budget_V2.0.pdf). Have you contacted the data repository? ADS have also been contacted as the intended repository for digital data and a copy fo this Data Management Plan has been forwarded to Katie Green, ADS. Have the costs of archiving been fully considered? A costing estimate has been produced using the ADS Costing Calculator and sufficient resources to cover these costs, and to allow for the preparation of the archive, have been included in the project budget. The costing estimate is based on the estimated project archive shown in the table above (Section 2), and f400 has been ringfenced in the project budget for digital
 What is the long-term preservation plan for the dataset? The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. The archive will be prepared for deposition by the project team and the costs for the time needed for preparation, and the cost of deposition have been included in the project budget (DV_PON19_Budget_V2.0.pdf). Have you contacted the data repository? ADS have also been contacted as the intended repository for digital data and a copy fo this Data Management Plan has been forwarded to Katie Green, ADS. Have the costs of archiving been fully considered? A costing estimate has been produced using the ADS Costing Calculator and sufficient resources to cover these costs, and to allow for the preparation of the archive, have been included in the project budget. The costing estimate is based on the estimated project archive shown in the table above (Section 2), and £400 has been ringfenced in the project budget for digital data deposition with ADS.

Section 7: Data Sharing

How will you share the data and make it accessible?
A summary of the project will be included and updated on the OASIS Index of
Archaeological Investigation as the project progresses.
• The investigations are likely to result in a number of documents: Project Design,
Post Excavation Assessment and Updated Project Design, Final Report, Journal
submission.
• The final report is expected to be completed within 18 months of the completion
of fieldwork.
•
--
•
٠
•
Are any restrictions on data sharing required?
Are an
Are any
Are any
Are any
Are any
Are any

Section 8: Responsibilities

Who will be responsible for implementing the data management plan?		
• The Project Manager will be responsible for implementing the DMP, and ensuring		
it is reviewed and revised at each stage of the project.		
 Data capture, metadata production and data quality is the responsibility of the 		
Project Team, assured by the Project Manager.		
• Storage and backup of data in the field is the responsibility of the field team.		
Once data is incorporated into the organisations project server, storage and		
backup is managed by the Projects Director and Director of Operations.		
• Data archiving is undertaken by the project team under the guidance of the		
Programme Manager, who is responsible for the transfer of the Archaeological		
Project Archive to the agreed repository.		
 Details of the core project team can be found in the Project Design. 		

APPENDIX 6 CORE AND SPECIALIST STAFF CVS

Lisa Westcott Wilkins

sleep dia

MANAGING DIRECTOR

BA MA MCIFA FRSA LISA@DIGVENTURES.COM @LISAWWILKINS

Lisa has extensive experience delivering high-profile projects in the heritage and culture sectors, having held leadership posts in several organisations including LOCOG, *Current Archaeology* and the Palaeontological Research Institution. An accredited coach and facilitator, Lisa is skilled in brokering and developing partnerships and building communities. She has a track record of implementation for profile-building activities, evaluation, interpretation and events, and is a sector innovator in engagement with digital technology and consumer trends in a heritage context. She is a Clore Fellow and Fellow of the Royal Society of Arts.

EXPERIENCE

MANAGING DIRECTOR | 11.2011 - PRESENT DIGVENTURES

PROJECT MANAGER |2011 - 2012 LONDON ORGANISING COMMITTEE FOR THE OLYMPIC GAMES (CULTURAL OLYMPIAD, EVALUATION)

EDITOR | 2007- 2011 CURRENT ARCHAEOLOGY

FREELANCE | 2010 - 2015 CHARTERED INSTITUTE FOR ARCHAEOLOGISTS, GLOBAL HERITAGE FUND UK, ITV (SHIVER)

KEY COMPETENCIES

- Heritage sector project design and delivery
- Digital techniques and workflows for heritage activities
- Crowdfunding campaign design, execution and consultancy
- Strategic and business planning for cultural programmes
- Stakeholder relationship management
- Community-focussed archaeological fieldwork and skills training
- Historic research (Desk Based Assessment)
- Writing and editing for digital and print publication

EDUCATION AND AFFILIATIONS

MEMBER | 2014

CHARTERED INSTITUTE FOR ARCHAEOLOGISTS

 ${\sf CIFA}$ is the leading professional body representing archaeologists working in the UK and overseas.

FELLOW | 2011

ROYAL SOCIETY OF ARTS

The RSA's mission is to create the conditions for the enlightened thinking and collaborative action needed to address today's most pressing social challenges.

FELLOW | 2010 CLORE LEADERSHIP PROGRAMME

The Clore Leadership Programme was set up to develop outstanding cultural leaders in the UK.

MENTOR: Sandy Nairne, Director, National Portrait Gallery (former)

MA ARCHAEOLOGY (DISTINCTION) | 2002 UNIVERSITY COLLEGE LONDON

BA CORPORATE COMMUNICATIONS | 1993 ITHACA COLLEGE, ITHACA NY USA

SELECTED PUBLICATIONS AND PAPERS

'DIGGING THE CROWD: THE FUTURE OF ARCHAEO-LOGICAL RESEARCH IN THE DIGITAL AND COLLABO-RATIVE ECONOMY'

European Association of Archaeologists, Glasgow, September 2015

'CROWDFUNDING AND THE HERITAGE SECTOR'

New Philanthropy Capital leadership roundtable, June 2015.

THE 'REAL TIME' TEAM:THE FUTURE OF FIELDWORK Current Archaeology, May 2015, p36-40.

'THE THINGS WE THINK AND DO NOT SAY – THE FUTURE OF OUR BUSINESS' Institute for Archaeologists, 2014

Brendon Wilkins

it's ritual

PROJECTS DIRECTOR

BA MS¢ MCIFA MIAI BRENDON@DIGVENTURES.COM @DIGGINGTHEDIRT

Brendon is an award-winning field archaeologist and researcher, with over fifteen years of experience directing and managing large, complex sites in advance of major construction projects. He has held senior posts in two of the largest commercial contractors in the EU. Brendon has a consistent publications record, and has lectured internationally on digital archaeology, wetland archaeology, mortuary archaeology and quality assurance on large-scale archaeology projects. He is currently pursuing a PhD at the University of Leicester, entitled: 'Digging the Crowd: the future of archaeology in the digital and collaborative economies'.

EXPERIENCE

PROJECTS DIRECTOR | 11.2011 - PRESENT DIGVENTURES

OPERATIONS DIRECTOR | 2012 - 2013 RUBICON HERITAGE SERVICES LTD (LONDON)

SENIOR PROJECT MANAGER | 2011- 2012 WESSEX ARCHAEOLOGY

FIELD ARCHAEOLOGIST | 2002 - 2011 VARIOUS ROLES AND LEVELS OF RESPONSIBILITY INCLUDING LICENSED SITE DIRECTOR (IRELAND)

KEY COMPETENCIES

- Design and management of archaeological works
- MORPHE project design and Scheduled Monument Consent
- Fieldwork and survey management
- Strategic and business planning for cultural programmes
- Digital techniques and workflows for heritage activities
- Historic research (Desk Based Assessment)
- Stakeholder relationship management
- Digital techniques and workflows for heritage activities
- Community-focussed archaeological fieldwork and skills training

EDUCATION AND AFFILIATIONS

COUNCIL MEMBER | 2013 MEMBER | 2004 CHARTERED INSTITUTE FOR ARCHAEOLOGISTS

ClfA is the leading professional body representing archaeologists working in the UK and overseas.

MEMBER | 2004

INSTITUTE OF ARCHAEOLOGISTS OF IRELAND

The IAI is the representative organisation for professional archaeologists working in Ireland and Northern Ireland.

IRISH LICENSE ELIGIBILITY | 2004 DEPARTMENT OF ARTS, HERITAGE, REGIONAL, RURAL AND GAELTACHT AFFAIRS

The National Monuments Act requires that excavations for archaeological purposes be carried out by archaeologists acting under an excavation licence, granted based on assessment of competency.

MA ARCHAEOLOGY (DISTINCTION) | 2008 UNIVERSITY OF BRADFORD

BSC ARCHAEOLOGY | 1999 UNIVERSITY OF BRADFORD

SELECTED PUBLICATIONS AND PAPERS

'DIGGING THE CROWD: THE FUTURE OF ARCHAEO-LOGICAL RESEARCH IN THE DIGITAL AND COLLABO-RATIVE ECONOMY'

European Association of Archaeologists, Glasgow, September 2015 Digital Pasts, Llandudno, 2014

'THE THINGS WE THINK AND DO NOT SAY - THE FUTURE OF OUR BUSINESS'

Institute for Archaeologists, 2014

KNOWLEDGE, VALUE AND THE CELTIC TIGER

In Aitcheson, K., Jameson, J. and Eogan, J. (eds.) Archaeologists of the world: globalizing archaeological practice. Springer

Manda Forster

ritua)

PROGRAMME MANAGER

BSC PhD MCIFA FSA Scot MANDA@DIGVENTURES.COM @MANDA_FORSTER

Manda's diverse archaeological career stretches across research, education, not-for-profit and commercial environments. Having held senior management roles in several organisations, she is particularly adept at post-excavation management, mentoring staff and developing learning materials. Manda also has a track record delivering membership and audience development programmes for professional bodies and heritage organisations. She is research-active, with academic interests in standards development for the archaeological sector and the trade of steatite goods in the North Atlantic region during the Viking and Early Medieval period.

EXPERIENCE

PROGRAMME MANAGER | 2016 - PRESENT DIGVENTURES

STANDARDS PROMOTION MANAGER | 2011 - 2015 CHARTERED INSTITUTE FOR ARCHAEOLOGISTS

RESEARCH FELLOW | 2011-2011 INSTITUTE FOR ARCHAEOLOGY AND ANTIQUITY, BIRMINGHAM UNIVERSITY

POST-EXCAVATION MANAGER | 2004 - 2011 BIRMINGHAM ARCHAEOLOGY

KEY COMPETENCIES

- Heritage sector project design and delivery
- Designing and delivering vocational training
- Research and university-based teaching, including programme design (campus & distance learning)
- Archaeological post-excavation programme management
- Volunteer, staff and stakeholder management and engagement
- Strategic and business planning for cultural programmes
- Community-focussed archaeological fieldwork and skills training
- Writing and editing for academic and technical publications

EDUCATION AND AFFILIATIONS

MEMBER | 2004

CHARTERED INSTITUTE FOR ARCHAEOLOGISTS

 ${\sf CIFA}$ is the leading professional body representing archaeologists working in the UK and overseas.

TREASURER AND TRUSTEE | 2011

BIRMINGHAM AND WARWICKSHIRE ARCHAEOLOGICAL SOCIETY

Founded in 1870, the Society aims to support and raise the profile of the region's archaeological heritage.

DOCTOR OF PHILOSOPHY | 2004 UNIVERSITY OF BRADFORD

DISSERTATION: SHETLAND AND THE TRADE OF STEATITE GOODS IN THE NORTH ATLANTIC REGION DURING THE VIKING AND EARLY MEDIEVAL PERIOD

BSC ARCHAEOLOGY (FIRST CLASS HONOURS) |1998 UNIVERSITY OF BRADFORD

SELECTED PUBLICATIONS AND PAPERS

FROM HOMELAND TO HOME; USING SOAPSTONE TO MAP MIGRATION AND SETTLEMENT IN THE NORTH ATLANTIC

Forster, A K and R E Jones, in Gitte Hansen and Per Storemyr (eds) From Prehistoric Vessels to Medieval Cathedrals, Universitetet i Bergens arkeologiske serier UBAS. FORTHCOMING.

'DRIVING MEMBERSHIP ENGAGEMENT THROUGH TARGETED MARKETING COMMUNICATIONS'

Membership Excellence, London, 2015

'A CHARTERED PROFESSION: CIFA AND THE NEXT GENERATION'

Theoretical Archaeology Group Conference, Manchester, 2014

CIFA CLIENT GUIDE

Chartered Institute for Archaeologists, 2014



Christopher Casswell

HEAD OF FIELDWORK

BA MCIFA CHRIS@DIGVENTURES.COM @CASSWELLARCH

Chris is a professional field archaeologist with over a decade of experience on complex, large-scale investigations and academic fieldwork projects. He specialises in excavation and recording methodology and has used his skills to deliver first class results at the World Heritage Sites of Stonehenge, the Alhambra, and across a variety of scheduled monuments throughout the UK. Chris is also a key initiator for innovative use of Geographic Information Systems (GIS), Structure from Motion (SfM) photogrammetry and digital survey techniques in fieldwork, and has a strong track record in public outreach as well as practical skills and knowledge transfer.

EXPERIENCE

HEAD OF FIELDWORK | 2017 - PRESENT DIGVENTURES

SENIOR PROJECT OFFICER | 2014- 2017 ALLEN ARCHAEOLOGY

SUPERVISOR/PROJECT OFFICER | 2008 - 2013 NETWORK ARCHAEOLOGY

SUPERVISOR | 2004 - PRESENT STONES OF STONGEHENGE AND STONEHENGE RIVERSIDE PROJECTS

KEY COMPETENCIES

- Directing complex excavations in all environments and conditions
- Geographic Information Systems (GIS)
- Photographic and 3D recording of sites and artefacts
- Digital techniques and workflows for heritage activities
- Commercial and research-focussed archaeological fieldwork and skills training
- Writing and editing for technical publications
- Extensive knowledge of British archaeology
- Strategic and business planning for cultural programmes
- On site Health and Safety

EDUCATION AND AFFILIATIONS

MEMBER | 2017

CHARTERED INSTITUTE FOR ARCHAEOLOGISTS

 ${\sf CIFA}$ is the leading professional body representing archaeologists working in the UK and overseas.

MEMBER | 2017

LANDSCAPE SURVEY GROUP

LSG provides a voice for the exchange of ideas and information relating to archaeological landscape survey.

BA ARCHAEOLOGY | 2006 UNIVERSITY OF SHEFFIELD

SELECTED PUBLICATIONS AND PAPERS

INTERNATIONAL BOMBER COMMAND CENTRE; BEFORE THE BOMBER COUNTY

The Archaeologist, ClfA, 2015

STONE WAS THE ONE CROP THAT NEVER FAILED

Casswell, C. and Daniel P., 2011, Excavations between Pannal and Nether Kellet 2006-2007. BAR Brit. Ser. 526

NORTH KILLINGHOLME: ARCHAEOLOGICAL INVESTI-GATIONS

Allen Archaeology Field Reports, 2017

TICKENCOTE LODGE FARM: COSMIC ASSESSMEN Allen Archaeology Field Reports, 2017



ritual

BSc MSc MAIYA@DIGVENTURES.COM @MUCKYMAIYA

Maiya is an experienced community builder for both on- and offline communities, specialising in deep-touch engagement and growth. Having started her career in commercial archaeology liaising with local interest groups and running community events, she has worked on excavations as far afield as Rwanda, Spain, the Caribbean and Coventry. Maiya went on to develop content strategies to drive online engagement as a Marketing Consultant for start-ups in the financial sector, and is now the hub of DigVentures' community management, including participant experience and online communities, and is responsible for an ever-expanding worldwide network.

EXPERIENCE

COMMUNITY MANAGER | 06.2014 - PRESENT DIGVENTURES

MARKETING CONSULTANT | 2011 - 2014 AGEAS PROTECT

FIELD ARCHAEOLOGIST | 2009 - 2011 AOC ARCHAEOLOGY, PHOENIX CONSULTING

KEY COMPETENCIES

- Designing content marketing strategies
- Using social media to build, manage and maintain online audiences
- Writing and editing for digital and print publication
- Digital techniques and workflows for heritage activities
- Crowdfunding campaign design, execution and consultancy
- Community-focussed archaeological fieldwork and skills training
- Historic research (Desk Based Assessment)
- Writing and editing for digital and print publication

EDUCATION AND AFFILIATIONS

MSC IN SKELETAL AND DENTAL BIOARCHAEOLOGY (DISTINCTION) | 2009 UNIVERSITY COLLEGE LONDON

BSC ARCHAEOLOGY (FIRST CLASS HONOURS)| 2008 UNIVERSITY COLLEGE LONDON

SELECTED PUBLICATIONS AND PAPERS

THE DIGVENTURES SITE HUT

Driven by social content, Maiya is building new and existing audiences into sustainable online communities. She has grown the worldwide DigVentures audience by nearly 200% since joining the team, and has strategic oversight of coordinated content publishing and interaction across all DV channels including: Facebook, twitter, Instagram, YouTube, GooglePlus, and LinkedIn.

Content viewable here: digventures.com/archaeologynews/

Additionally, Maiya leads on populating the project-specific microsite archives built by DigVentures for all field projects:

- http://digventures.com/lindisfarne/
- http://digventures.com/barrowed-time/
- http://digventures.com/under-the-uplands/
- http://digventures.com/leiston-abbey/

http://digventures.com/flag-fen/

http://digventures.com/costa-dos-castros/

'IF YOU BUILD IT, WILL THEY COME? SCALING UP SOCIAL INNOVATION IN ARCHAEOLOGY'

MicroPasts/AHRC, Royal Geographical Society, 31st March 2015

'UP CLOSE AND PERSONAL: 3D IMAGING, SOCIAL MEDIA AND THE CROWD'

Theoretical Archaeology Group Annual Conference, Manchester, 2014

OUR TEAM

DV TEAM



JOSH HOGUE BA MSC PHD COMMUNITY ARCHAEOLOGIST

Josh is an experienced commercial field archaeologist, having worked for several contracting units throughout his early studies BSc (Hons) in Archaeology and MSc in Palaeoanthroplogy and Palaeolithic Archaeology at University College London. In 2015, he was awarded a PhD in Archaeology from the University of Oxford. Josh is a lithic specialist and is currently undertaking experimental archaeology to interpret evidence of fire from the British Lower Palaeolithic.



MARGARET ENO BA MA COMMUNITY ARCHAEOLOGIST

Maggie graduated from the University of British Columbia with a BA in Anthropology in 2010, and completed her MA in Archaeology for Screen Media from the University of Bristol in 2012. After digging in Jordan and England, she joined DV to film our first online course, 'How To Do Archaeology'. In addition to primary responsibility for producing top-notch video content, Maggie leads on our Unloved Heritage, Living Levels, and HLF-funded Elmswell Farm projects.



HARRIET TATTON BA COMMUNITY ARCHAEOLOGIST

Harriet graduated from Aberdeen University in 2014 with a BA in Archaeology. Following her studies she pursued a career in banking and finance, before joining DigVentures in 2018 as the Community Archaeologist for our Coldingham project. Harriet leads delivery for the HLF-funded Etched in Stone and Wellcome Trust-funded Miracles to Medicine projects, as well as the DV DigCamp young learners programme.



JOHANNA UNGEMACH BA MA COMMUNITY ARCHAEOLOGIST

Johanna graduated from Saarland University in Germany in 2015 with a BA in History, after which she did her MA in Sustainable Heritage Management at Aarhus University, Denmark. She is responsible for post-excavation processes and volunteer training activities at DV company headquarters in Barnard Castle, and is leading the Development phase activities for our 'Windows to the World' partnership project with St Mary's Parish Church.



FERGUS AND MONTY SENIOR AND JUNIOR ASSISTANT SITE DOGS

Fergus is a key member of the DigVentures team, responsible for on site security, leisure activities, and finding chips on a Friday night. He does not believe in meetings, panels, working groups, forms, reports or KPIs, and has been known to accept bribes for access to the team. Monty isn't sure what he's good at yet but he's trying really hard at everything.

ADVISORY BOARD

SIR TONY ROBINSON, PATRON

Tony Robinson is Britain's foremost face of popular history, the creator of a worldwide comedy icon, and an award winning writer of children's books and television. He presented 20 seasons of C4's *Time Team*.

DAVID GILBERT, CHAIR

David is Chair of Creative United and Writer's Centre of Norwich, and former MD of Currys UK Ltd and Waterstones Booksellers.

SIMON COLLISTER

Senior Lecturer, Communications, University of the Arts London

DR PETER G GOULD

Consulting Scholar, Penn Cultural Heritage Center, University of Pennsylvania Museum of Archaeology and Anthropology. Adjunct Professor, University of Pennsylvania and the American University of Rome

THOMAS KNOWLES

Head of Grants, Historic Environment Scotland

DR TIM SCHADLA-HALL

Reader in Public Archaeology, University College London

CAROLE SOUTER CBE

Master, St Cross College, Oxford University and Chief Executive, Heritage Lottery Fund (2003 – 2016)

SARAH STANNAGE

Executive Director, International Institute for the Conservation of Historic and Artistic Works

Project specialists

Adam Stanford Aerial Photography and Photogrammetry	Adam is the director of Aerial-Cam, a Specialist Archaeological Photography service employing the latest techniques, equipment and software to produce high quality evidence photography and 3D visualization of heritage assets. Adam uses a variety of tools including Remotely Piloted Aircraft (RPAS, UAVs, Drones), Telescopic Masts and manned Aircraft for aerial photography, photogrammetry and video recording. We have decades of archaeological and photographic experience, a Remote Pilot Qualification (RPQ-s), insurance and Civil Aviation Authority Permission for Commercial Operation.
Dr Malin Holst Osteoarchaeology	Malin Holst is the director of York Osteoarchaeology Ltd, which she founded in 2003. She started to excavate in 1987 at the Raunds Area Project and worked in field archaeology throughout England and Wales, including on well-known cemeteries, such as the royal Anglo-Saxon burial ground at Sutton Hoo and a mass grave from the Battle of Towton (1461). Malin is currently working on the analysis of two medieval nunnery skeletal assemblages. It is the variety of periods, mortuary behaviour and pathology that one works with in commercial burial archaeology that is most captivating. Malin is involved in several research projects, including investigating the causes of rheumatoid arthritis. Malin has been teaching bioarchaeology at the University of York since 2003.
Dr Jo McKenzie Geoarchaeology	Jo is a specialist in geoarchaeological and soil micromorphological techniques. She graduated from University of Nottingham in 2004 and subsequently spent several years in commercial archaeology before undertaking an MA in Archaeological Sciences at Bradford University in 2000. Following that, she continued to Scotland to undertake her Ph.D. research ('Deep anthropogenic topsoils in Scotland: A geoarchaeological and historical investigation into distribution, character, and conservation under modern land cover' - University of Stirling, 2006). Since then, Jo has completed a post-doctoral programme and is currently working as project specialist and consultant on a number of projects across the UK.
Rosalind McKenna Palaeoenvironmental	Rosalind studied archaeology at the University of Birmingham, completing her Masters programme in 2006 with a study of charred plant remains from Bronze Age Syria. Rosalind continued her training as an Internship with English Heritage specialising in Archaeobotany the Environmental Archaeology Unit, University of York and went on to work as a Research Associate with the team at Birmingham Archaeo Environmental from 2007 to 2009. Since 2009, Rosalind has worked as a project specialist on a number of projects in the UK and Ireland.
Andrew Sage Ceramics	Andrew is a specialist in the medieval pottery of the North-east of England and North Yorkshire and post-medieval pottery from across England and southern Scotland. Andrew completed his undergraduate and Masters degrees at Durham University, and then completed a EH funded training programme in medieval pottery under the supervision of Jenny Vaughan. Following that, Andrew was the Project Officer for the <i>North East England Medieval Pottery Project</i> , a Newcastle City Council initiative funded by English Heritage to develop an online type-series for North-East England. Andrew has worked on material from a number of sites in the North East, and is currently completing an investigation into the assemblage from the Newcastle South Curtain Wall excavations undertaken from 1966 – 1970.