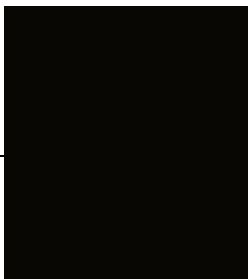
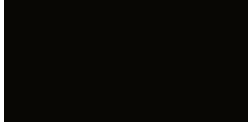




Pontefract Castle - Excavation 2019/20

Risk Assessment Method Statement

	Doc. ref. no.	Status	Approval	Date	Comments
Original	DV_PON19 RAMS	Final		12/08/19	Completed following initial walk over assessment
Revisions	V3.0	Final		21/07/20	Second stage excavation targeting lower deposits in drawbridge pit; response to COVID-19

1 PURPOSE OF THIS DOCUMENT

The purpose of this method statement is to provide detailed guidance on a safe system of work for the employees. The method statement is based on a task specific risk assessment using identified hazards, the likelihood of the hazard occurring and the severity of the consequences. This risk assessment is attached. As conditions may change on site this RAMS may require amendment during the course of work to reflect the conditions at the time. All personnel involved in this operation must be briefed on the content of this RAMS and associated reference documents before commencement of the work.

2 METHOD STATEMENT

1	Supervisors	Name	Position	Contact Details	First Aider?
			Site Director, DV		Yes
2	Key personnel		Position	Contact Details	
			Managing Director, DV Project Director, DV Director of Operations, DV Community Archaeologist, DV Community Archaeologist, DV Principal Inspector of Ancient Monuments, HE Programme & Events Officer, WC Principal Archaeologist, WYAAS Project Assurance Officer, HE		
4	Working Hrs	0800 to 1600, Monday to Friday.			
5	Plant /Tools/ Vehicles	Plant: None Equipment: Davit Arm System, 5m ladder, gas monitor Tools: Hand tools (mattock, shovel, trowel, bucket etc) Vehicles: Minimum number of vehicles required to transport staff to site each day			
6	Specialist Training Required	N/A			
7	Personal Protective	Head Protection	x	Skin Protection:	
		Eye Protection:	x	Specialist Footwear	x

	Equipment	Ear Protection:		Flotation Aids:	
		Respiratory	x	Harnesses:	
		Hand Protection	x	Other:	
		If other, specify:	Hi visibility jacket/vest at all times; waterproof clothing in inclement weather; head protection required; face masks and visors to be worn where appropriate		
8	Permits Required	Scheduled Monument Consent – Historic England			
9	COSHH Assessment	N/A			
10	Environmental	Gas monitor always used to test deep excavation for safe gas levels COVID-19 – government guidance			
11	Sequence of work				

COVID-19 pandemic

- Stay alert.
- No unauthorized access to the site.
- Staff are to use the Activity Zone for breaks and are not to use Pontefract Castle staff/office space.
- Staff to keep 2m apart wherever possible. When not possible consider whether the task is necessary.
- Wear face masks and gloves where appropriate to minimise potential transmission.
- Use hand washing facilities and hand sanitizer immediately before and after leaving the trench and site.
- No tool sharing. Individuals are responsible for cleaning them at the end of every day.
- PPE checks on daily basis
- No interactions with members of the public.
- Staff will drive to the site in their own vehicles.

Mobilisation

- Collect key for car park area from office.
- Delivery of Davit Arm System, stretcher and ladder.

Pre-excavation site checks

- Check perimeter fencing and place signs where appropriate.
- Reestablish safe access/egress points into the trench.
- Inspect the excavation area visually to identify unforeseen hazards. Where necessary additional safety measures may be required.
- Clear suitable area for installation of Davit Arm System.

Excavation

- Briefing to all staff outlining tasks for the day and updates to the risk assessment where appropriate.

- All tasks to be carried out in accordance with the agreed safety method statements and any instruction issued by Historic England or Wakefield Council.
- PPE must be worn at all times.
- Excavation will be undertaken in plan using a longitudinal section through drawbridge pit layers using previous methodology. Contexts will be excavated, sampled and recorded to a depth of 1m before the opposing section is removed.
- The edges of the excavation will be stepped as ground conditions demand, but no greater in depth than 1m.
- Access ramps will be located in the corners of the excavation to allow safe access/egress and to enable the safe removal of spoil.
- Spoil storage is to be closely managed throughout this process ensuring that there are no ecological or environmental impacts. Spoil heaps are to be battered at a 45° angle.
- Spoil will be stored within the excavation against the south-facing baulk section.
- All archaeological features will be cleaned and excavated by hand, with the exception of structural remains.
- Upon the discovery of significant/unexpected remains, Historic England and Wakefield Council will be notified immediately.

Community Engagement

- There will be no direct interaction between the site team and members of the public.
- Signs will be placed on perimeter fencing next to the visitor centre and at the top of the Victorian steps. They will contain basic information and links to online videos detailing the work being undertaken.

Demobilisation

- Prior to leaving the site all safety measures installed by DigVentures are to be removed together with any works debris.
- Removal of staff and equipment.

3 RISK ASSESSMENT

Site Address:	Pontefract Castle, Castle Garth, Pontefract WF8 1QH	RA completed by:	[REDACTED]
		Date:	21st July 2020
		Site visit:	16th January 2020
Monitors:	[REDACTED]	Documentation:	Project Design
			DV_PON19_ProjectDesign_V3.0
Operation/Task:	Archaeological excavation		
Notes: All staff and to read this document (in conjunction with the Project Design) before entry on to site, and sign-off the Briefing Log once induction from the Health & Safety Supervisor is completed.			
<i>Remember – Please report anything that is or seems to be unsafe to DigVentures Staff immediately.</i>			

Frequency: 1 = A highly improbable occurrence; 2 = A remotely possible but known occurrence; 3 = An occasional occurrence; 4 = A fairly frequent occurrence; 5 = A regular occurrence; 6 = Almost a certainty
 Severity: 1 = Negligible injuries; 2 = Minor injuries; 3 = Major injuries; 4 = Single fatality; 5 = Multiple fatalities; 6 = Multiple fatalities including persons beyond site
 Risk Rating: 1 – 4 = tolerable; 5 – 7 = moderate; 8 – 11 = substantial; 12+ intolerable (Risk Rating = Frequency x Severity)

Hazard/Risk	Risk Rating			Control Measures	Residual Risk			Responsibility	Monitor
	F	S	RR		F	S	RR		
FIELDWORK									
Hand-excavation									
Injury to DV staff, visitors and other contractors whilst using hand tools.	3	3	9	All tools will be inspected prior to use by DigVentures staff. All damaged, broken or otherwise unusable hand tools to be marked as such and put to one side.	1	3	3	DV	DV
				All on-site grid pegs will be fitted with safety caps				DV	DV/Client
				Heavy lifting to be avoided where possible. If unavoidable then all staff to receive appropriate training.				DV	DV/Client
				All tools will be used for the purpose for which they were intended.				DV	DV
				At all times DV staff shall be made aware of other persons working in the vicinity.				DV/Client	DV/Client
Deep excavation									
Injury to DV staff, visitors or other contractors due to trench collapse.	3	4	12	No unsupported sections greater than 1.2m depth.	1	4	4	DV	DV/Client
				Trench sides to be stepped as ground conditions demand, regardless of depth.					
				Trench to be enclosed within a perimeter fence with appropriate signage.					
				No persons other than DV, Client or curatorial staff to enter deep excavations at any time.					
				Access/egress to the trench to be made via a battered ramp in the east corner.					
				The drawbridge pit shall be accessed through use of a ladder of suitable length secured at top and bottom.					

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Hazard/Risk	Risk Rating			Control Measures	Residual Risk			Responsibility	Monitor
				Groundwater seepage to be removed either using a water pump or manually bailed.					
Injury to DV staff, visitors or other contractors due to fall into excavations.	2	3	6	All excavation work including spoil heaps to be fenced.	1	3	3	DV	DV/Client
				Appropriate hazard signs to be erected adjacent to excavations.					
				Excavated spoil, tools, equipment etc. to be stockpiled/stored at least 1 m beyond the edge of the excavations to minimise trip hazards.					
				All visitors to the site to be made aware of the location of any deep excavations.					
Injury to DV staff through removal of material from deep excavation	3	3	9	Davit Arm System winch to be used to safely remove material from the deep excavation.	1	3	3	DV	DV
				Banks-person to be present and always have eyes on individual in the deep excavation.					
				Stretcher to be safely stored and used in case of emergency recovery.					
Utilities/ Buried Hazards									
Injury to DV staff, other contractors and plant (including utilities) due to rupturing of or contact with utilities (buried or overhead).	2	5	10	All utility mapping possessed by Client will be consulted.	1	5	5	DV	DV/Client
				Site and surrounding area will be visually inspected in detail for any clues to indicate buried services in the area.				DV/Client	DV/Client
				Site and surrounding area will be swept where required by trained staff with a proprietary cable detector (i.e. CAT).				DV	DV/Client
				If buried services are suspected or anticipated, then hand-excavation will initially establish the location and alignment of such services.				DV	DV/Client
				Any cable or pipe encountered will be considered live at all times and will be protected from any subsequent damage.				DV	DV/Client

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Hazard/Risk	Risk Rating			Control Measures	Residual Risk			Responsibility	Monitor
ENVIRONMENT									
COVID-19									
Airborne transmission of virus	2	4	8	Anyone displaying symptoms of coronavirus will be instructed not to attend work and follow guidelines.	1	4	4	DV/Client	DV/Client
				Take note of any signage and floor markings around the site to ensure the 2m distance is maintained between people.					
				Rearrange tasks to enable them to be done by one person, or by maintaining social distancing measures (2m).					
				Where possible work back-to-back or side-by-side, rather than face-to-face.					
				Wear face masks when appropriate to do so.					
Surface transmission of virus (cross-contamination of surfaces)	2	4	8	Provide facilities to allow staff and visitors to wash their hands for 20 seconds using soap and water or hand sanitiser (minimum 60% alcohol based) when entering and leaving the site.	1	4	4	DV/Client	DV/Client
				Enhance cleaning regimes for commonly used areas and surfaces, such as access and egress points, welfare and toilet facilities.				DV	DV/Client
				Where drivers are required to exit their vehicle, they should wash or sanitise their hands before handling any materials.				DV	DV
				Staff should use their own vehicles to get to site.				DV	DV
				No tool sharing. Individuals are responsible for cleaning them at the end of every day.				DV	DV
				Wear gloves where appropriate to minimise potential transmission.				DV	DV
Contamination									
Injury to DV staff, visitors and other contractors, and damage to the local environment through contamination	2	4	8	Should there be a contamination threat, work will progress in line with <i>Health & Safety Guidance Note 66 – Contaminated Land</i> .	1	4	4	DV/Client	DV/Client

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Hazard/Risk	Risk Rating			Control Measures	Residual Risk			Responsibility	Monitor
				Groundwater removed from deep excavations (if necessary) will be discharged downslope from the trench directly onto a suitably well-drained area – in agreement with HE – to facilitate the removal of all material carried in solution, suspension or traction.				DV	DV/Client
				Appropriate PPE (overalls, gloves, respirators etc.) to be worn at all times where contaminated ground is anticipated or suspected.				DV	DV/Client
				Washing facilities to be provided in accordance with H&S requirements. All staff to use such prior to eating.				DV	DV
				Smoking will not be allowed on site or in site accommodation.				DV	DV
Damage to ecosystem through soil degradation	2	2	4	Any loose, excavated spoil will be neatly banded in an orderly manner to a maximum height of 3m and capped off to facilitate run-off and minimise waterlogging.	1	2	2	Client	DV/Client
				DV will follow a like-on-like policy; topsoil will be stored on topsoil, subsoil stored on subsoil.				DV	Client
Injury to DV staff through exposure to toxic gases	2	4	8	Use of fully calibrated gas monitor at all times in deep excavations	1	4	4	DV	DV
Extreme weather conditions									
Hot weather working (i.e. dehydration, sun burn, sun stroke etc.)	3	4	12	Sun cream, min. SPF15 (though SPF30+ recommended) with good UVA and UVB protection to be applied regularly to exposed skin.	1	4	4	DV	DV
				Regular breaks to be taken in shade to limit exposure to sun – use project vehicles with air conditioning if no alternatives available.					
				Appropriate clothing to be worn (topless working prohibited; long sleeves and trousers to be worn wherever feasible).					
				Drinking water to be available on site and consumed at regular intervals – do not wait until thirsty, thirst is a symptom of dehydration.					
				If necessary, wear sunglasses that offer good UV protection.					
Exposure to wet, cold and/or storm conditions, risk of lightning strike, hypothermia	2	4	8	Appropriate waterproof clothing to be carried and worn when necessary.	1	4	4	DV	DV

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Hazard/Risk	Risk Rating			Control Measures	Residual Risk			Responsibility	Monitor
				No fieldwork to be undertaken during electric storms.					
				Dry clothing to be available, as necessary.					
DRIVING									
Injury to DV staff, DV equipment, plant and members of the public resulting from road traffic accidents.	3	6	18	All members of staff will be drive to site in their own vehicles.	1	6	6	DV	DV
				Nominated drivers must familiarise themselves in advance with routes for all journeys, as well as routes to local A&E services and any other destinations considered likely/necessary as part of project work.					DV
				All equipment will be securely stowed during transit, with a fixed bulkhead separating equipment and passengers.					DV/Client
				All vehicle manoeuvring will only occur with the assistance of appropriately located 'banksman'.					DV/Client
				Tyres, water, oil and petrol will be checked weekly.					DV
				Extreme caution will be exercised when entering or leaving public highways.					DV
				Mobile phones will be turned off before commencing any journey and will not be used at all whilst driving.					DV
				Access to site will be via local roads only.					DV
GENERAL MEASURES									
General measures for implementation to maximise any reduction in risk rating.	-	-	-	A mobile phone will be available at all times for use in emergencies.	-	-	-	DV	DV/Client
				Anything that is or seems to be unsafe will be reported to the Site Director immediately.				DV/Client	
				A first aid kit will be available to DV staff and others at all times (i.e. in the welfare area and vehicles).				DV	

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Hazard/Risk	Risk Rating			Control Measures	Residual Risk			Responsibility	Monitor
				A fire extinguisher will be located in each welfare unit deployed on site.				DV/Client	

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