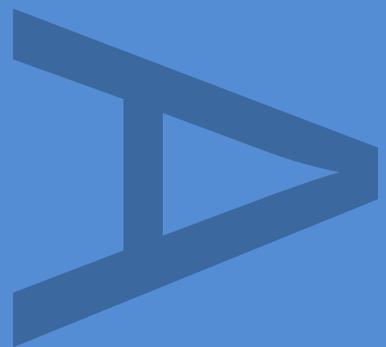




**AN ARCHAEOLOGICAL WATCHING BRIEF  
AT CHANDLER'S WHARF,  
BRIDGE ROAD/RIVERSIDE,  
STOCKTON-ON-TEES**



**FEBRUARY 2013**



**DOCUMENT VERIFICATION**

**CHANDLER'S WHARF, BRIDGE ROAD/RIVERSIDE,  
STOCKTON-ON-TEES**

**ARCHAEOLOGICAL WATCHING BRIEF REPORT**

<b>Pre-Construct Archaeology Limited Quality Control</b>	
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**An Archaeological Watching Brief at Chandler's Wharf, Bridge Road/Riverside,  
Stockton-on-Tees**

**National Grid Reference: NZ 4465 1851**

**Site Code: CWS 12**

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February 2013**

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Appendix A	Stratigraphic Matrix
Appendix B	Context Index
Appendix C	PCA Written Scheme of Investigation
Appendix D	Tees Archaeology Brief

## **1. NON-TECHNICAL SUMMARY**

- 1.1 An archaeological monitoring and recording exercise was conducted in association with the re-development of the westernmost portion of Chandler's Wharf Retail Park, Stockton-on-Tees. The scheme, which is being carried out by Stockton-on-Tees Borough Council, will create a new link road between Bridge Road and Riverside.
- 1.2 The site, central National Grid Reference NZ 4465 1851, is of archaeological interest because the new link road will cut across the known line of the southern arm of the moat of Stockton Castle, a feature of medieval origin which was built over as the town expanded in the second half of the 19th century.
- 1.3 The Principal Contractor for the redevelopment scheme is Birse Civils Limited and they commissioned Pre-Construct Archaeology Limited to undertake the archaeological investigation. The work, carried out in August-September 2012, was required as a condition of planning permission due to the archaeological sensitivity of the site.
- 1.4 The main invasive element of the construction groundworks was installation of large-bore drains associated with the new road. For the most part, this required mechanical excavation of deep, open trenches, including one portion across the assumed line of the medieval moat. The archaeological work involved monitoring of all groundworks involving ground disturbance to a depth of 2m or more below existing ground level, the level at which archaeological remains were anticipated. To this end, the excavation of two separate sections of drainage trench, totalling c. 43.50m in length, and the site of a new inspection chamber were monitored.
- 1.5 The investigation recorded geological deposits and archaeological remains of the late post-medieval period and modern era. The later post-medieval deposits potentially represented final infilling and ground levelling in the area of the moat of Stockton Castle.

## **2. INTRODUCTION**

### **2.1 General Background**

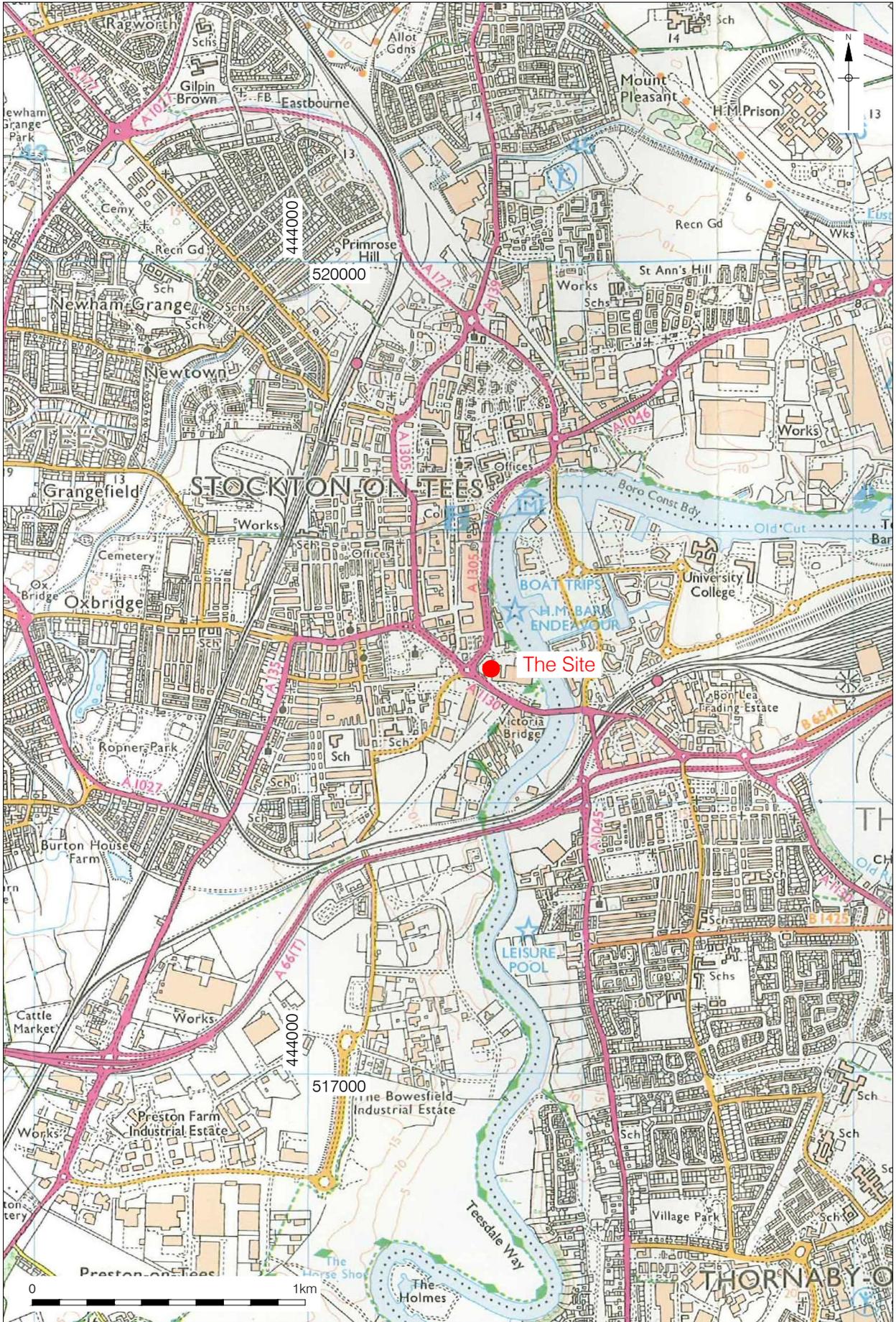
- 2.1.1 This report details the results of an archaeological monitoring and recording exercise (hereafter 'watching brief') undertaken in association with the re-development of the western portion of Chandler's Wharf Retail Park, Stockton-on-Tees, to allow the construction of a new north-south aligned link road between Bridge Road and Riverside. The watching brief was commissioned by Birse Civils and undertaken by Pre-Construct Archaeology (PCA) August-September 2012.
- 2.1.2 The site is of archaeological interest because the new link road crosses the known line of the southern arm of the moat of Stockton Castle, a feature of medieval origin built over during 19th-century expansion of the town. The archaeological work was required as a condition of planning permission on the recommendation of Tees Archaeology, the body which undertakes development control for Stockton-on-Tees Borough Council.
- 2.1.3 The watching brief was carried out according to a Written Scheme of Investigation (WSI) (PCA 2012; included as Appendix C to this report), compiled in response to an earlier Brief (Tees Archaeology 2012; included as Appendix D to this report). All groundworks extending deeper than 2m below existing ground level were to be monitored and all exposures, including archaeological remains, investigated and recorded. The watching brief was to continue until all invasive groundworks extending deeper than 2m below existing ground level were complete or until the site was determined to be archaeologically sterile.
- 2.1.4 The completed Site Archive, comprising written, drawn and photographic records, will be deposited at Tees Archaeology, Sir William Gray House, Clarence Road, Hartlepool. The site code is CWS 12. The Online 'Access to the Index of Archaeological Investigations' (OASIS) reference number for the project is: preconst1-143072.

### **2.2 Site Location and Description**

- 2.2.1 The site, central National Grid Reference NZ 4465 1851, comprised the westernmost portion of Chandler's Wharf Retail Park, which is located at the west end of Victoria Bridge, beyond the southern end of High Street, Stockton-on-Tees (Figure 1).
- 2.2.2 The main focus for the archaeological watching brief within the overall re-development site was land in the westernmost portion of the existing retail park between Moat Street and Bridge Road, where a deep drainage installation was to be undertaken in association with the construction of the new north-south aligned link road (Figure 2).

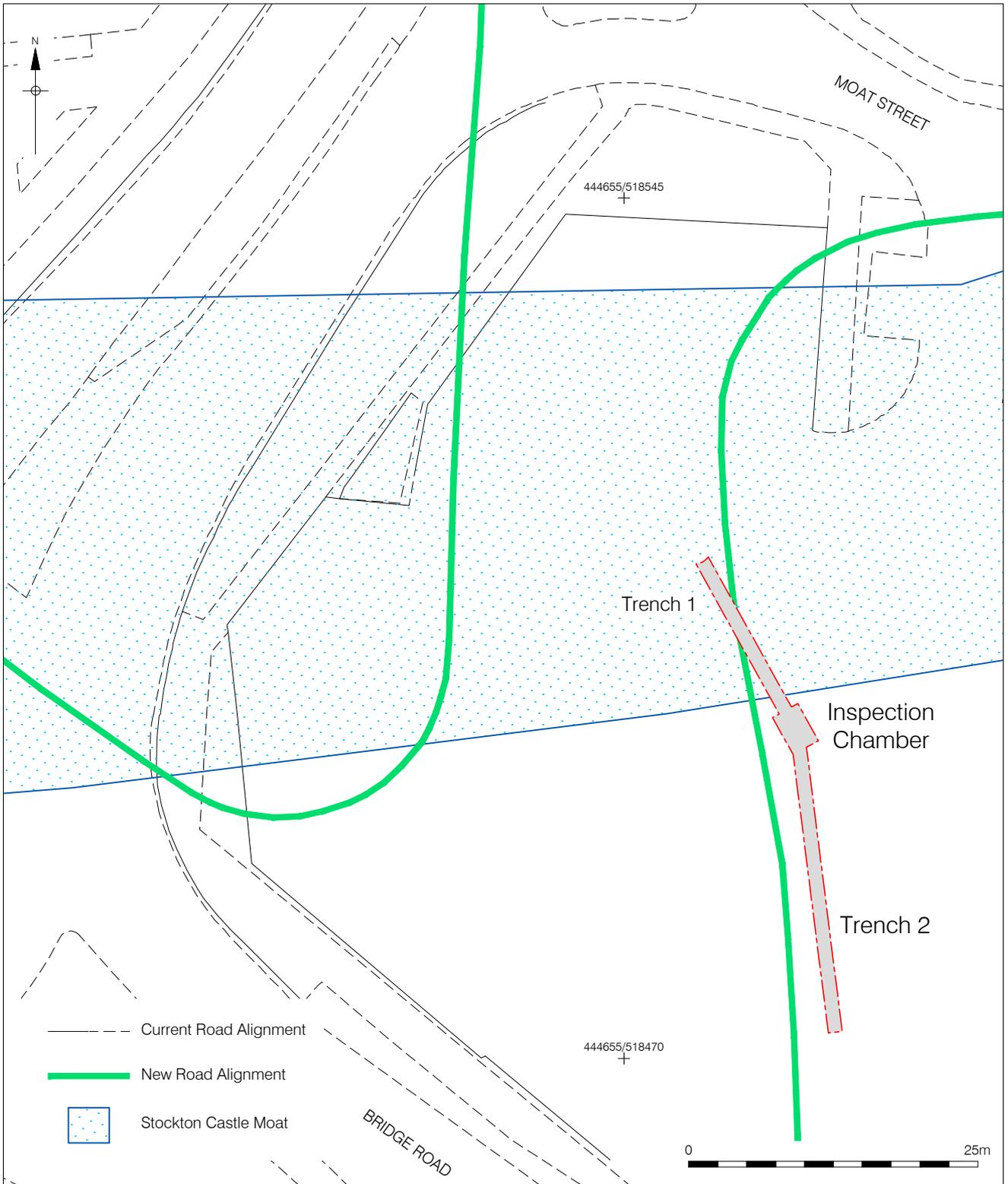
### **2.3 Geology and Topography**

- 2.3.1 Within this area of Stockton-on-Tees the solid geology consists of the Sherwood Sandstone Group, a sedimentary bedrock that was formed during the Triassic and Permian Periods. The overlying superficial deposits are comprised of various alluvium deposits – clay, silt, sand and gravels (British Geological Survey website).
- 2.3.2 Bounded to the east by the River Tees, Chandler's Wharf Retail Park occupies a relatively low-lying position with the majority of the land lying below 5m OD.



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Figure 1  
 Site Location  
 1:20,000 at A4



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 09/01/13 JS  
 updated 26/02/13 JS

Figure 2  
 Monitored Area  
 1:500 at A4

## **2.4 Planning Background**

- 2.4.1 The archaeological investigation herein described was required as a planning condition by the local planning authority, Stockton-on-Tees Borough Council. The re-development scheme will see the westernmost part of the existing Chandler's Wharf Retail Park make way for a re-designed road junction, which will re-align Riverside (the A1305) to link directly with 1825 Way at the junction with Bridge Road (the A1130), in order to create better connections into the town centre.
- 2.4.2 Specific groundworks associated with the construction of the new link road running north-south through the westernmost portion of the retail park had potential to disturb sub-surface archaeological deposits of importance. The most likely such deposits were those associated with the southern arm of the former moat of Stockton Castle, the known line of which crosses the north-westernmost portion of the retail park on a west-east alignment. Justification for the planning condition relating to the archaeological work was therefore based on this knowledge.
- 2.4.3 The requirement to undertake the archaeological work was in line with planning policy at a national level, described in Part 12 'Conserving and Enhancing the Historic Environment', of the *National Planning Policy Framework* (NPPF) (Department of Communities and Local Government 2012). At a local level, the archaeological work was in line with archaeological policies of Stockton-on-Tees Borough Council set out in the *Stockton-on-Tees Core Strategy Development Plan Document* - a key document in the emerging Local Development Framework - adopted in March 2010. 'Objective 9' of the Core Strategy is '*To protect and enhance the built environment and the area's archaeological, industrial and cultural heritage*'.
- 2.4.4 The aforementioned Brief set out the scope of archaeological work required and also stipulated the requirement for the aforementioned WSI. The Brief required that all invasive groundworks deeper than 2m below existing ground level were to be monitored until their completion or until such time as the site was determined to be archaeologically sterile. Two metres was the depth at which archaeological deposits could reasonably be anticipated to survive, based on existing knowledge of the site formation. Exposures below 2m depth were to be examined and recorded. The deep drainage installation required as part of the new link road construction provided the most obvious threat to archaeological remains of importance, as well as the most obvious opportunity to examine and record such deposits.

## **2.5 Archaeological and Historical Background**

*The majority of the information used for the following summary has been taken from the aforementioned Brief and WSI - the research and writing of those responsible is gratefully acknowledged.*

- 2.5.1 It is for the medieval and post-medieval periods that the site has particular archaeological potential. Stockton Castle (Teesside Historic Environment Record – HER - 0756) was a manor house owned from at least the 12th century by the Bishops of Durham. The site, sometimes known as Castle Field, was an irregular four-sided area on the bank of the River Tees, defended by a large ditch, but built over since the late 19th century. The Victoria County History records that the 'castle' contained a chapel, two towers and a hall, all in ruins by 1647 and destroyed in 1652 (Page, 1928).

- 2.5.2 The castle was excavated in 1965, however, owing to severe disturbance and the limited time allowed, relatively little in the way of archaeological evidence was uncovered. Two drains were excavated, constructed of reused 12th-century masonry. The robbed-out foundations of a building were also uncovered. A layer containing 17th-century pottery and evidence for burning possibly represented the destruction of the castle after 1647. The Parliamentary Commissioners, reporting upon the state of the castle in 1647 wrote that it was '*...ruinous and in great decay*' and that it '*...hath had a great moat about it, but the same is now for want of cleaning filled up in part, and within that moat hath heretofore been orchards and gardens, but all destroyed. There hath likewise been a park, but the same hath been disparked.*'
- 2.5.3 The moat (HER 3518) is depicted on the 1st edition Ordnance Survey map of 1857 as a substantial ditch c. 40m wide. By the time of the 2nd edition map in 1899, the moat had been built over as the town expanded rapidly in the industrial era. The position of the moat is depicted on Figure 2.

### 3. PROJECT AIMS AND RESEARCH OBJECTIVES

#### 3.1 Project Aims

- 3.1.1 The overarching aim of the archaeological project was to fulfil the requirements of the planning condition by undertaking an appropriately specified scheme of archaeological fieldwork in association with invasive groundworks, with subsequent reporting on the findings to an appropriate degree.
- 3.1.2 The results of the work would therefore preserve by record all archaeological remains encountered.

#### 3.2 Research Objectives

- 3.2.1 In view of the likely archaeological potential for medieval period remains in particular, the investigation had the potential to make a contribution to archaeological knowledge of the medieval period in the area. The work was carried out with reference to *Shared Visions: the North East Regional Research Framework for the Historic Environment* (NERRF) (Petts and Gerrard 2006). This research framework highlights the importance of research as a vital element of development-led archaeological work and sets out key research priorities for all periods of the past so that all elements of commercial archaeological work can be related to wider regional and national priorities for the study of archaeology and the historic environment.
- 3.2.2 The investigation at Chandler's Wharf was designed to take particular account of the following research priorities for the medieval period (MD), as set out in the NERRF research agenda and strategy:
- **MDiv. Castles and defensive structures.** The need for a more holistic approach to the study of these remains is emphasised, particularly the need to ask questions about their position in the social, economic and ideological landscape of the region. It also highlights the need for research on the function of castles and defensive structures in the landscape and investigation of their role as consumers, for example: what was their economic impact and how did they react with their hinterlands?
  - **MDvii. Medieval ceramics and other artefacts.** This recognises that ceramic evidence is crucially important in medieval archaeology as, in addition to its use as a chronological indicator, such evidence can inform on patterns of economic exchange and consumption. Similar themes can be addressed through the study of other medieval artefacts, such as metalwork.
  - **MDviii. Other medieval industries.** This highlights the need to identify other medieval industries, for example extractive industries such as coal mining and manufacturing industries such as glass and leather working. It also raises the wider issue of the relationship between individual production sites and tenorial factors, for example ecclesiastical estates, major lay magnates and smaller manors.

## **4. ARCHAEOLOGICAL METHODOLOGY**

### **4.1 Fieldwork**

- 4.1.1 The watching brief was undertaken between 23 August and 6 September 2012. The fieldwork was undertaken in accordance with the relevant Institute for Archaeologists standard and guidance document (IfA 2008a). PCA is an IfA-Registered Organisation. The PCA WSI (see Appendix C), should be consulted for full details of the methodologies employed with respect to archaeological recording, *etc.*
- 4.1.2 All invasive groundworks deeper than 2m below existing ground level were to be monitored until their completion or until such time as the site was determined to be archaeologically sterile. In practice, monitored groundworks comprised machine excavation of deep open trenches and an associated inspection chamber pit, all related to a drainage installation associated with the new link road construction.
- 4.1.3 The mechanical excavation of two sections of deep drainage trench (Trenches 1 and 2) and one pit for an inspection chamber were monitored (Figure 2). Trench 1 ran on a NW-SE alignment for a length of c. 15m and extended to a maximum depth of 3.70m below existing ground level. This trench connected to an existing drainage inspection chamber at its northern extent and fed into the new inspection chamber pit to the south. Trench 2 continued to the south from the new chamber pit on a NNW-SSE alignment and was monitored for a distance of c. 25m, down to a depth of c. 2.90m below existing ground level. All groundworks were mechanically undertaken using a tracked 35-tonne excavator and immediately shored using trench boxes for Health and Safety purposes.
- 4.1.4 Exposed deposits were recorded on *pro forma* 'Context Recording Sheets'. A photographic record of the work was compiled. The area of investigation was located through survey data provided by the client to ensure its accurate location relative to the Ordnance Survey National Grid.

### **4.2 Post-excavation**

- 4.2.1 The stratigraphic data for the project comprises written, drawn and photographic records. A total of 13 archaeological contexts were defined during the watching brief (Appendix B). Post-excavation work involved checking and collating site records, grouping contexts and phasing the stratigraphic data (Appendix A). A written summary of the archaeological sequence was then compiled, as described below in Section 5. A small assemblage of artefactual material consisting of pottery, ceramic and slag was recovered during the investigation.
- 4.2.2 The complete Site Archive will be packaged for long-term curation. In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the guidelines document of the Archaeological Archives Forum (Brown 2007) will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document (Walker 1990) and a more recent IfA publication (IfA 2008b). The depositional requirements of the receiving body, in this case Tees Archaeology, Sir William Gray House, Clarence Road, Hartlepool, will be met in full.

## 5. RESULTS: THE ARCHAEOLOGICAL SEQUENCE

*During the watching brief, separate stratigraphic entities were assigned unique and individual 'context' numbers, which are indicated in the following text as, for example [18]. The archaeological sequence has been assigned to broad phases on a site-wide basis.*

### 5.1 Phase 1: Natural Sub-stratum

5.1.1 A layer, [12], comprising firm, dark brownish pink clay was exposed as the basal deposit in the inspection chamber pit and Trenches 1 and 2 (Figure 3, plan and Sections 1 and 2). This deposit was encountered at a minimum depth of c. 1.10m below existing ground level, this throughout Trench 2 and in the inspection chamber pit. The deposit has been interpreted as being of natural origin, representing the drift geology of the area.

### 5.2 Phase 2: Late Post-Medieval

5.2.1 In Trench 1, c. 2.15m north of the new inspection chamber pit, a very noticeable change in the basal deposit was noted. This change appeared to relate to a substantial feature, [13], although due to the method of excavation the depth from which this cut could not be determined. Throughout the remainder of Trench 1 the basal deposits are considered likely to have been infills of the feature (Figure 3, plan and Section 1).

5.2.2 The earliest recorded deposit, [9], consisted of firm, dark brown clayey silt, from which three small sherds of pottery (two blue transfer printed white earthenware and one red earthenware with internal white slip), dating broadly to the 19th century, were recovered. This deposit was observed within the base of Trench 1 for a distance of c. 7m, at c. 3.40m below ground level. It was at least 0.32m thick, continuing below the limit of excavation. Deposit [9] was overlain by a deposit, [8], consisting of firm, mottled blue and grey silty clay, with moderate inclusions of sandstone and coal fragments. Deposit [8] was observed in Trench 1 in both plan and section for a distance of c. 10m, at a depth of c. 2.20m below ground level. Of maximum thickness c. 1.20m, deposit [8] yielded four fragments of brick, all with no measureable dimensions surviving and only broadly dateable to the first half of the 19th century.

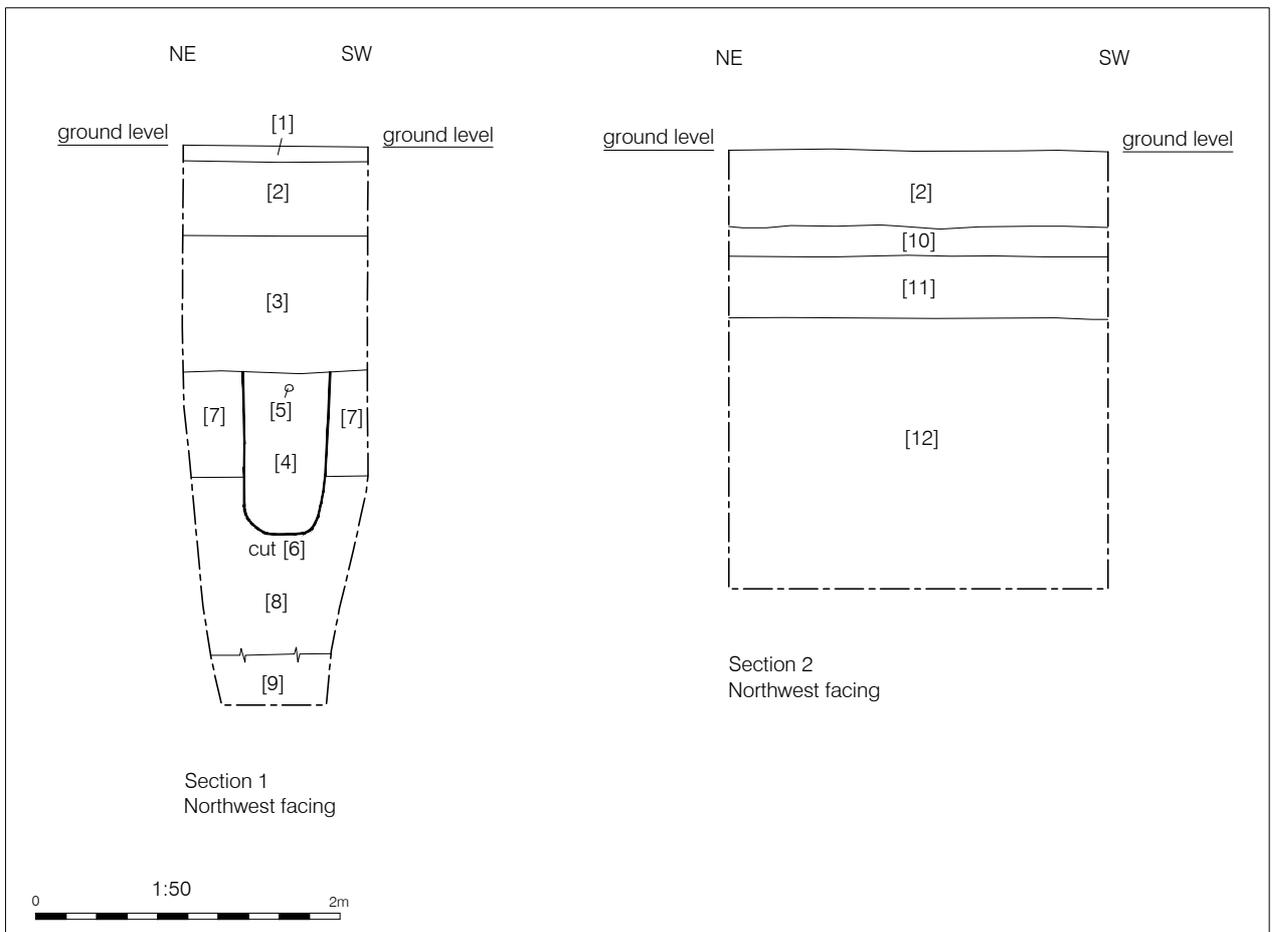
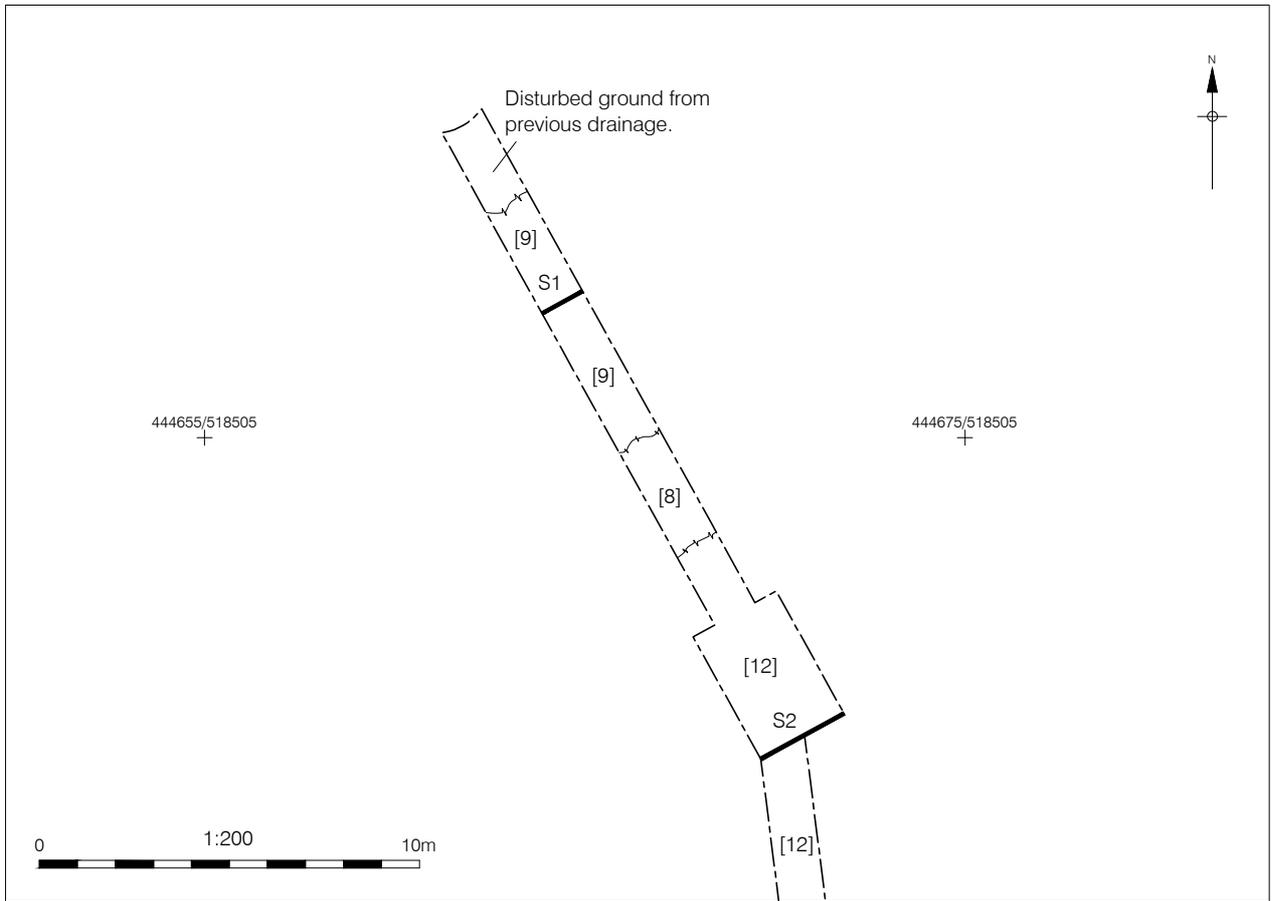
5.2.3 Deposits [9] and [8] could conceivably represent infilling of the earthwork remains of the castle moat in the later post-medieval period. If so, the earliest, medieval, fills of the feature certainly lie at a depth greater than c. 3.70m below existing ground level, below the maximum depth of the invasive groundworks for the road link development.

### 5.3 Phase 3: Modern

5.3.1 All other deposits recorded in the monitored areas are considered to be of modern origin.

5.3.2 Various dump deposits - 'made ground' - comprised the uppermost strata in Trench 1 (Figure 3, Section 1). The earliest, layer [7], consisted of firm, dark blackish brown clayey silt with a thickness of c. 0.70m. This overlay probable fill deposit [8] and had been truncated by a service trench, [6], which ran approximately SE-NW and contained a lead pipe, [5], and a light brownish yellow crushed stone backfill, [4]. The service trench was c. 0.56m wide and c. 1.10m deep.

- 5.3.3 The service trench was sealed by a layer, [3], of light brownish yellow crushed stone, c. 0.90m thick and in turn overlain by a layer, [2], of firm, dark grey brown clayey silt with building rubble, c. 0.50m thick. The uppermost deposit in Trench 1, layer [1], comprised compact, light bluish grey finely crushed stone, c. 0.10m thick, which formed the current ground surface. Collectively, these deposits have been interpreted as deriving from previous development of the site.
- 5.3.4 Within the inspection chamber pit and throughout Trench 2, natural clay was overlain by a layer, [11], of firm, dark greyish brown clayey silt, c. 0.40m thick, which provided the bedding for a layer, [10], comprising what appeared to be structural remnants of former buildings. Layer [10] consisted of crushed and fragmented brick and tile with off-white mortar, possibly broken-up former flooring. It measured c. 0.20m thick and was recorded consistently at c. 0.50m below ground level, underlying the aforementioned layer, [2], as seen in Trench 1.



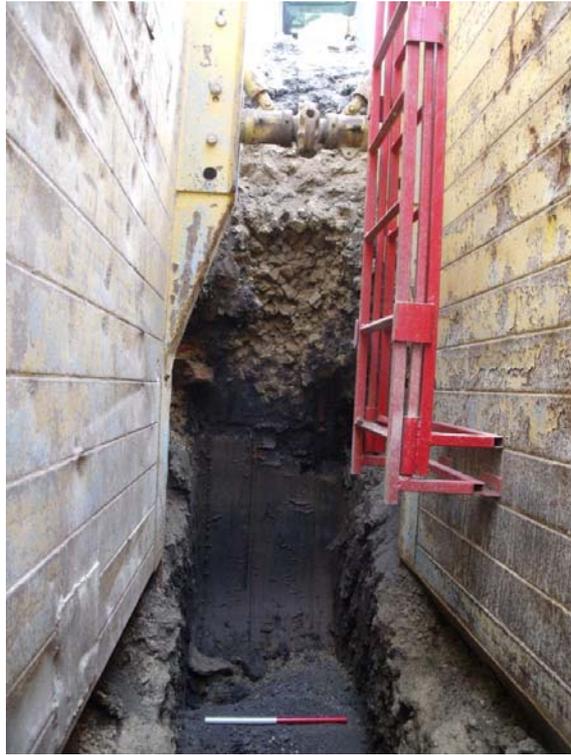


Figure 4: Trench 1, sample north facing section (*scale 0.5m*)



Figure 5: Overview of inspection chamber pit, looking south-east (*scale 0.5m*)

## **6. CONCLUSIONS AND RECOMMENDATION**

### **6.1 Conclusions**

- 6.1.1 No archaeological remains of significance were recorded.
- 6.1.2 Natural clay was recorded as the basal deposit throughout the majority of the monitored area, at a depth of c. 1.10m below existing ground level.
- 6.1.3 To the north, in Trench 1, the infills of what appeared to be a substantial feature were recorded, extending below the maximum depth of excavation, c. 3.70m. The deposits yielded 19th century artefacts and potentially represent final infilling of the earthwork remains of the castle moat in the later post-medieval period ahead of industrial era development of the town centre. If so, the earliest, medieval, fills of the feature lay below the maximum depth of the invasive groundworks for the development.

### **6.2 Recommendation**

- 6.2.1 No further work is required on the information recorder during the watching brief, with the Site Archive, including this report, forming the permanent record of the strata encountered.

## 7. REFERENCES

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## 8. ACKNOWLEDGEMENTS AND CREDITS

### **Acknowledgements**

PCA would like to thank Birse Civils for commissioning the project herein described.

The curatorial role of Robin Daniels, Archaeology Officer, Tees Archaeology, is acknowledged.

### **PCA Credits**

*Fieldwork and Report:* Amy Roberts

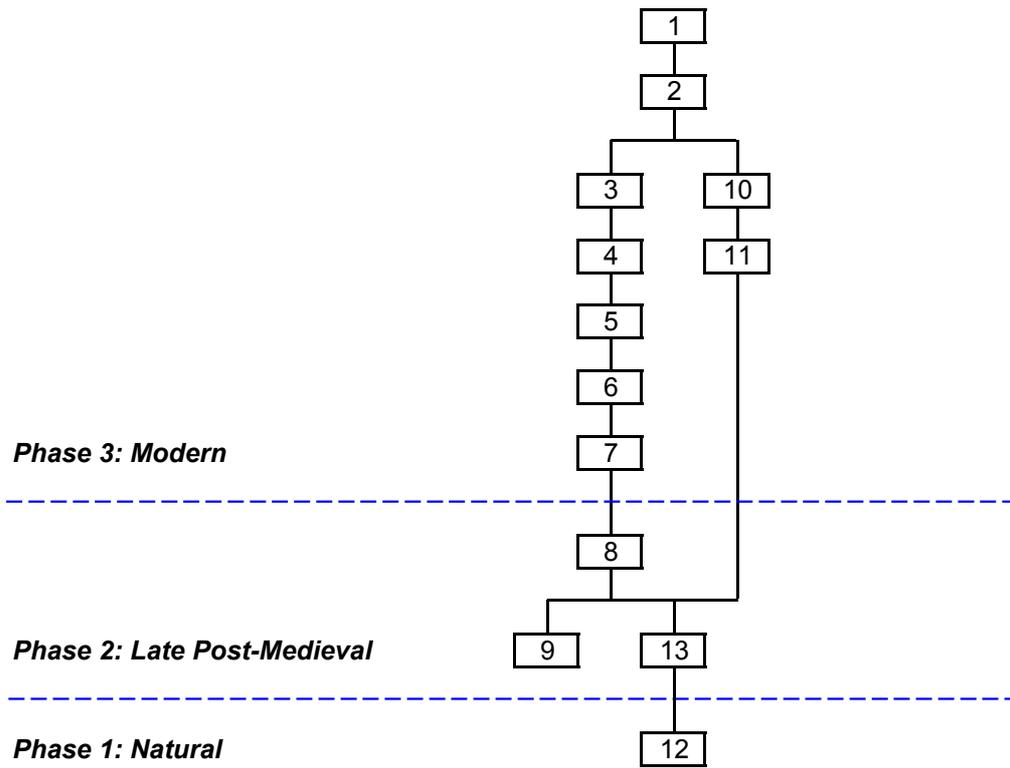
*Project Manager:* Robin Taylor-Wilson

*CAD:* Jennifer Simonson

*Pottery Comments:* Jenny Vaughan

**APPENDIX A**  
**STRATIGRAPHIC MATRIX**

## CWS 12: STRATIGRAPHIC MATRIX



**APPENDIX B**  
**CONTEXT INDEX**

**CWS 12: CONTEXT INDEX**

<b>Context</b>	<b>Phase</b>	<b>Type 1</b>	<b>Type 2</b>	<b>Interpretation</b>
1	3	Deposit	Layer	Made ground
2	3	Deposit	Layer	Made ground
3	3	Deposit	Layer	Made ground
4	3	Deposit	Fill	Backfill of service trench [6]
5	3	Service	Pipe	Lead pipe within service trench [6]
6	3	Cut	Linear	Service trench filled by [4] and [5]
7	3	Deposit	Layer	Made ground
8	2	Deposit	Layer	Dumped deposit
9	2	Deposit	Layer	Dumped deposit
10	3	Deposit	Layer	Structural remnants
11	3	Deposit	Layer	Made ground
12	1	Deposit	Layer	Natural clay
13	2	Cut	Linear?	Truncation

**APPENDIX C**  
**PCA WRITTEN SCHEME OF INVESTIGATION**

**WRITTEN SCHEME OF INVESTIGATION FOR AN  
ARCHAEOLOGICAL WATCHING BRIEF AT CHANDLER'S WHARF,  
BRIDGE ROAD/RIVERSIDE, STOCKTON-ON-TEES**

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<b>Title</b>	Written Scheme of Investigation for an Archaeological Watching Brief at Chandler's Wharf, Bridge Road/Riverside, Stockton-on-Tees	
<b>Author</b>	Robin Taylor-Wilson (PCA)	
<b>Derivation</b>	Requirement of Section 4 of Tees Archaeology <i>Brief for archaeological monitoring at Bridge Road/Riverside Road, Stockton-on-Tees</i> (9 July 2012)	
<b>Original Version &amp; Date</b>	Version 1	21 August 2012
<b>This Version &amp; Date</b>	As above	
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<b>Summary of Changes (if applicable)</b>	N/A	
<b>Status of this Version</b>	Final, approved	
<b>Circulation</b>	Peter Rowe (Tees Archaeology); Andy Moore (Birse Civils); Helen Alred (Birse Civils)	
<b>Required Action</b>	Comment	
<b>File Name</b>	CWS12 WSlv1 21Aug2012	
<b>File Location</b>	C drive PCANorth1	
<b>Approval</b>	22 August 2012	

## **PART 1: DESCRIPTION OF THE PROJECT**

### **1.1 Project Name**

- 1.1.1 The project is known as Chandler's Wharf, Stockton-on-Tees.

### **1.2 Summary Description of Project**

- 1.2.1 The westernmost portion of Chandler's Wharf Road Retail Park is being re-developed for road improvements which will see a new link road constructed between Bridge Road and Riverside. The link road will cut across the southern arm of the former moat of Stockton Castle, built over as the town expanded in the second half of the 19th century.
- 1.2.2 The project entails an archaeological watching brief to record archaeological remains of note during construction, specifically during associated drainage works which are expected to extend to depths of 2m and greater below existing ground level, the level at which archaeological remains are anticipated.

### **1.3 Background**

- 1.3.1 Chandler's Wharf Retail Park is located close to Victoria Bridge, beyond the southern end of High Street, Stockton-on-Tees. The westernmost portion of the development – including a former DIY outlet - is to make way for a re-designed road junction which will see Riverside re-aligned to link directly with 1825 Way (the A135) where it crosses Bridge Road, in order to create better connections into the town centre.
- 1.3.2 Planning permission has been approved by Stockton-on-Tees Borough Council planning department for the road improvement scheme. The developer is Stockton-on-Tees Borough Council and the Principal/Main Contractor is Birse Civils Northern Division. The archaeological work is to focus on deep construction groundworks, specifically deep drainage installations, associated with the scheme. The National Grid Reference for the area of archaeological interest is NZ 4465 1851.
- 1.3.3 No historic environment desk-based assessment (DBA) has been undertaken for the site. However, it has been established that the new link road will cut across the southern arm of the former moat of Stockton Castle, with a small section within the interior of the moat also being impacted upon by the scheme. The moat remained visible on the Ordnance Survey 1st edition map of 1857, which depicted the feature as a broad ditch c. 40m wide, but it was built over soon after during the rapid urbanisation of the town in the industrial era. Previous archaeological work has established that the moat and its interior lie under c. 2m of overburden in this part of the town.
- 1.3.4 A planning condition requires a programme of archaeological monitoring and recording during construction groundworks that will disturb the ground to a depth of 2m or more. A Brief for this work has been compiled: *Brief for archaeological monitoring at Bridge Road/Riverside Road, Stockton-on-Tees* (Tees Archaeology 9 July 2012).

## 1.4 Project Aims and Research Objectives

- 1.4.1 The project is threat-led as the former moat of Stockton Castle and part of the interior of the moat could be disturbed by construction works for the development, with important buried archaeological remains thus exposed potentially being destroyed. Any such remains would be of local or regional importance.
- 1.4.2 The broad aim of the overall project is thus to mitigate the impact of the development on the site's heritage assets through: 1) compilation of an appropriate record of any archaeological remains associated with the former moat of Stockton Castle and the area of the interior of the moat that are exposed during construction works; 2) collection and recording of any associated artefacts. The satisfactory undertaking of this work, along with all necessary reporting, archiving and dissemination, will allow Stockton-on-Tees Borough Council to discharge the aforementioned planning condition relating to the site's heritage assets.
- 1.4.3 Specific research objectives to be addressed by the project have been formulated with reference to an existing archaeological research framework, *Shared Visions: The North-East Regional Research Framework for the Historic Environment* (NERRF) (Petts and Gerrard 2006) which highlights the importance of research as a vital element of development-led archaeological work. It sets out key research priorities for all periods of the past allowing commercial contractors to demonstrate how their fieldwork relates to wider regional and national priorities for the study of archaeology and the historic environment. The aim of the NERRF is to ensure that all fieldwork is carried out in a secure research context and that commercial contractors ensure that their investigations ask the right questions.
- 1.4.4 The NERRF identifies the following key research priority within the research agenda for the 'Later Medieval' (MD) period which is of direct relevance to this project:
- **MDiv. Castles and defensive structures.** The need for a more holistic approach to the study of these remains is emphasised, particularly the need to ask questions about their position in the social, economic and ideological landscape of the region. It also highlights the need for research on the function of castles and defensive structures in the landscape and investigation of their role as consumers, for example: what was their economic impact and how did they react with their hinterlands?
  - **MDvii. Medieval ceramics and other artefacts.** This recognises that ceramic evidence is crucially important in medieval archaeology as, in addition to its use as a chronological indicator, such evidence can inform on patterns of economic exchange and consumption. Similar themes can be addressed through the study of other medieval artefacts, such as metalwork.
  - **MDviii. Other medieval industries.** This highlights the need to identify other medieval industries, for example extractive industries such as coal mining and manufacturing industries such as glass and leather working. It also raises the wider issue of the relationship between individual production sites and tenurial factors, for example ecclesiastical estates, major lay magnates and smaller manors

- 1.4.5 Stockton Castle (Teesside Historic Environment Record – HER - 0756) was a manor house owned from at least the 12th century by the Bishops of Durham. The site, sometimes known as Castle Field, was an irregular four-sided area on the bank of the River Tees, defended by a large ditch, but built over since the late 19th century. The *Victoria County History* records that the 'castle' contained a chapel, two towers and a hall, which were in ruins by 1647 and destroyed in 1652. The castle was excavated in 1965, however, owing to severe disturbance and the limited time allowed, relatively little in the way of archaeological evidence was uncovered. Two drains were excavated, constructed of reused 12th century masonry. The robbed out foundations of a building were also uncovered. A layer containing 17th century pottery and evidence for burning possibly represented the destruction of the castle after 1647. The Parliamentary Commissioners, reporting upon the state of the castle in 1647 wrote that it was “...*ruinous and in great decay*” and that it “...*hath had a great moat about it, but the same is now for want of cleaning filled up in part, and within that moat hath heretofore been orchards and gardens, but all destroyed. There hath likewise been a park, but the same hath been disparked.*” The moat (HER 3518) is depicted on the 1st edition Ordnance Survey map of 1857, as a substantial ditch c. 40m wide. By the time of the 2nd edition map in 1899, the moat had been built over as the town expanded rapidly in the industrial era.
- 1.4.6 As set out in the Tees Archaeology Brief, the specific research objectives of the project are to seek information:
- on the depth and character of deposits overlying the remains of the moat;
  - on the specific location, character and depth of the moat;
  - on any features within the area delineated by moat.

## **1.5 Business Case**

- 1.5.1 The project Sponsor and Client is Birse Civils.
- 1.5.2 The requirement to undertake the archaeological work is in line with planning policy at a national level as set out in Section 12 ‘Conserving and enhancing the historic environment’ of the *National Planning Policy Framework (NPPF)* (Department of Communities and Local Government 2012). The NPPF is a material planning consideration in the determination of planning applications and a key component of the NPPF, continuing the principles established in PPS5 - the previous national planning policy guidance - is the concept of ‘heritage assets’, those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest.
- 1.5.3 The requirement to undertake the archaeological work is also in line with planning policy at a local level, as described in the archaeological policies of Stockton-on-Tees Borough Council. The *Stockton-on-Tees Core Strategy Development Plan Document* - a key document in the emerging Local Development Framework - was adopted in March 2010. ‘Objective 9’ of the Core Strategy is ‘To protect and enhance the built environment and the area’s archaeological, industrial and cultural heritage’.
- 1.5.4 Planning permission for the development scheme has been approved (planning application reference 10/0228/LA). The work herein described is required as a condition of permission.

- 1.5.5 Tees Archaeology, which provides archaeological development control in the unitary local authorities of Hartlepool and Stockton-on-Tees, produced the aforementioned Brief to outline the requirements for work at the site in order to fulfil the planning condition. Section 4.1 of the Brief stipulated that a Written Scheme of Investigation (WSI) was required in response to the Brief. This follows the planning condition which specifically mentions that **a WSI must be submitted to and approved in writing by the Local Planning Authority prior to the commencement of development.**
- 1.5.6 The Client has appointed Pre-Construct Archaeology Limited (PCA) to undertake the required archaeological work. PCA - [www.pre-construct.com](http://www.pre-construct.com) - is one of the largest archaeological contractors in the UK, operating a nationwide service from various regional offices. PCA is a 'Registered Organisation' (RO 23) with the Institute for Archaeologists (IfA).
- 1.5.7 This WSI has been compiled according to the format set out in *Management of Research Projects in the Historic Environment* (MoRPHE) (English Heritage 2006), and comprises the WSI required by the planning condition ahead of fieldwork.

## **1.6 Project Scope**

- 1.6.1 The various elements of the required work comprise Execution Stages of the project, as described in MoRPHE. The aim of this WSI is to provide sufficient detail to permit authorisation of the project.
- 1.6.2 The WSI sets out the aims and research objectives of the work and, in a series of detailed methods statements, describes the techniques and approaches that will be employed to achieve those aims and objectives.

## **1.7 Interfaces**

- 1.7.1 The archaeological fieldwork will be undertaken from late August 2012, in association with construction groundworks. The findings will be subsequently reported on in a written and illustrated report.
- 1.7.2 PCA will undertake the required archaeological work for the Client, with the Archaeology Officer of Tees Archaeology fulfilling the role of archaeological curator and archaeological advisor to the LPA, Stockton-on-Tees Borough Council.

## **1.8 Communications and Monitoring**

- 1.8.1 Every PCA project has a designated Project Manager and, where fieldwork is required, there will also be a Site Supervisor/Site Director. Other members of the Project Team are identified below. The Project Manager is the person responsible for preparation of the WSI and ensuring that execution and monitoring of project activities follow the general procedures of PCA and are in accordance with the WSI.
- 1.8.2 PCA's Project Team will communicate internally via scheduled meetings, both office-based and on site during the fieldwork element of the archaeological evaluation.

1.8.3 PCA's Project Team will communicate externally in the first instance with the Client via scheduled meetings, email discussions, telephone conversations and written correspondence, as appropriate. The Client and PCA will inform other stakeholders (those parties with an active interest in the project, for example, Tees Archaeology) as required. The Brief requires that the Archaeology Officer or his representative should be allowed on site to inspect and monitor the work at any reasonable time and any such inspection will include completion of a pro forma monitoring form on site.

1.8.4 Principal points of contact:

- Pre-Construct Archaeology - Robin Taylor-Wilson (Director): 0191 377 1111; [rtaylor-wilson@pre-construct.com](mailto:rtaylor-wilson@pre-construct.com)
- Birse Civils Northern Division – Helen Alred (Assistant Quantity Surveyor, North East Region): 01652 633 222, extension 286; [Helen.Alred@birse.co.uk](mailto:Helen.Alred@birse.co.uk)
- Tees Archaeology – Robin Daniels (Archaeology Officer): 01429 523 455; [robin.daniels@hartlepool.gov.uk](mailto:robin.daniels@hartlepool.gov.uk)

## 1.9 Project Review

1.9.1 Progress of the project will be reviewed at Review Point 'R2' following dissemination of this WSI to all stakeholders. Project authorisation is considered the most likely outcome at R2, with commitment of resources to the first **Execution Stage**, namely Data Collection, *i.e.* the undertaking of the archaeological watching brief.

1.9.2 Review Point 'R3' will be conducted at the conclusion of the final **Execution Stage** of the project, namely at circulation of the report, which will describe the findings of the work, and the compilation of an Updated Project Design, as necessary. At R3 a decision will be made regarding the scope of further work, as appropriate.

## 1.10 Health and Safety

1.10.1 PCA is not the Principal Contractor for the work therefore a full, project-specific Health and Safety (H&S) Plan is not required from PCA. The Client has supplied copies of its *Health and Safety Policy*, *Environmental Policy*, *Subcontractors Health, Safety and Environmental Conditions* and *Our code of conduct for our sub-contractors, suppliers and partners*, all of which will be adhered to.

1.10.2 Notwithstanding the above, PCA's 'H&S Policy' is the starting point for managing H&S at all locations where PCA carries out its operations.

1.10.3 In general, all PCA staff are required to:

- take care of their own safety and that of any other person on the site or in the vicinity;
- co-operate with the Site Supervisor and the Directors of PCA to allow them to comply with their statutory obligations;
- be mindful of the requirements of the landowners and the Client;
- be careful to minimise the environmental impact of their operations and activities.

- 1.10.4 The Client will be responsible for site-specific induction talks to all PCA staff and site visitors (for archaeological purposes) before they start work or gain access to an area of investigation.
- 1.10.5 PCA's Project Manager will discuss all specific H&S issues with the PCA Site Supervisor prior to a start on site.
- 1.10.6 All PCA personnel will wear PPE. For each member of staff this will comprise: hard hat, hi-visibility vest (long-sleeve) and trousers (conforming to BS EN471), safety boots or wellingtons (steel toe-cap and insole), light eye protection and gloves.
- 1.10.7 The duration of the fieldwork is uncertain, but is estimated as 10 no. days. Adequate welfare will be provided by the Client whatever the duration. Additional facilities, such as designated office space for 'paperwork' and container store for archaeological tools and equipment may be required, subject to findings/size of archaeological team.
- 1.10.8 If, during the course of the work, it is suspected that sub-surface deposits are contaminated, all archaeological personnel will be required to wear appropriate additional PPE.

## **PART 2: RESOURCES AND PROGRAMMING**

### **2.1 Project Team Structure**

- 2.1.1 The Project Manager for PCA will be Robin Taylor-Wilson, BSc MA MIFA. In broad terms, he will have ultimate responsibility for the outcome of the project, as well as overseeing day-to-day operations with responsibility for preparation of the WSI, project planning, identification of Risk, monitoring of costs and timetable and, in essence, ensuring that the project produces the work agreed in the WSI.
- 2.1.2 Various members will be added to the Project Team as appropriate. Central amongst these will be a Site Supervisor/Director, an archaeologist with the requisite amount of experience to undertake the watching brief. Additional archaeologists would be allocated as required, as a contingency item.
- 2.1.3 Office-based experts will provide support, as appropriate, in areas such as computer-aided design (CAD).
- 2.1.4 Appropriate specialists will examine all categories of artefactual and palaeoenvironmental materials recovered during the fieldwork. It is anticipated that the principal materials from this site will be animal bone, pottery, ceramic building materials, architectural fragments and palaeoenvironmental material. PCA generally use a combination of in-house and external specialists. For this project, assessment of animal bone would be undertaken by Kevin Rielly of PCA; assessment of medieval and post-medieval pottery and ceramic building materials would be undertaken and/or co-ordinated by Jenny Vaughan, a ceramic specialist based in Newcastle; assessment of architectural fragments would be undertaken by Kevin Hayward of PCA; assessment of metal and other 'small' finds would be undertaken by Marit Gaimster of PCA; archaeological conservation, including on-site conservation advice, would be co-ordinated by Karen Barker, a freelance archaeological conservator; palaeoenvironmental remains would be co-ordinated by Dr. Charlotte O'Brien, Archaeological Services Durham University.

## **2.2 Method Statement Part A: Fieldwork**

### ***Overall Methodology***

- 2.2.1 The research aims and objectives of the project will be achieved by the undertaking of the archaeological watching brief and all associated reporting. The fieldwork element of Data Collection will comprise the first Execution Stage of the project.
- 2.2.2 The project will be carried out in line with: *By-Laws – Code of Conduct* (IfA 2010) and *A Regional Statement of Good Practice for Archaeology in the Development Process* (IfA, Yorkshire, the Humber and the North East 2009). All fieldwork will be undertaken in accordance with *Standard and guidance for an archaeological watching brief* (IfA 2008).

### ***Specific Health and Safety Methodology***

- 2.2.3 All relevant Health and Safety legislation, regulations and codes of practice will be respected. For Health and Safety purposes, PCA is a sub-contractor and will have no responsibilities as a Principal/Main Contractor. Site welfare will be provided for PCA personnel. All PCA personnel will attend site inductions as required.
- 2.2.4 The PCA Project Manager will discuss with PCA staff who will be involved with work on site all specific H&S issues brought to his attention by the Client. PCA staff will attend all site-specific induction talks provided by the Client, as required.
- 2.2.5 All PCA staff on site will wear PPE. For each member of staff this will comprise: hard hat, hi-visibility vest (long-sleeve) and trousers (conforming to BS EN471), safety boots or wellingtons (steel toe-cap and insole), light eye protection and gloves.
- 2.2.6 Welfare will be provided for PCA staff by the Client.

### ***Specific Fieldwork Methodology***

- 2.2.7 Continuous archaeological monitoring and observation will be carried out during invasive construction groundworks during those stages of the development involving ground disturbance to a depth of 2m or more below existing ground level. All monitoring and observation will be carried out by one (or more if required) suitably experienced professional archaeologist(s).
- 2.2.8 The fieldwork is programmed to commence in late August 2012 and its estimated duration will be 10 no. days, subject to findings, ground conditions and weather conditions. However, the watching brief will continue until such time as invasive groundworks below 2m depth are completed or until it becomes obvious that no additional archaeological information of note will be forthcoming, this to be agreed with the Tees Archaeology Officer.
- 2.2.9 In areas where archaeological watching brief is deemed to be appropriate, *i.e.* where construction works extend to a depth of 2m and greater below existing ground level, the ground will be reduced by suitable plant provided by the Client, with a PCA Site Supervisor/Director monitoring all such work. The machine(s) will remove material using a wide blade bucket with no teeth. The machine will not be used to cut arbitrary trial trenches down to natural deposits, without regard to the archaeological stratification and leaving a section record only.

- 2.2.10 Excavated spoil will be examined for archaeological material by hand and eye and with a metal detector. Excavated spoil will be neatly banded a safe distance from trench edges. All excavations will be surrounded with 'Heras' safety fencing with block feet and panel couplers. PCA will have no responsibility for any plant for excavation, backfilling, general spoil management, ground reinstatement or remediation, and no responsibility for any fencing, edge protection or site security.
- 2.2.11 Any archaeological remains of possible significance exposed during groundworks are to be immediately examined, hand cleaned, excavated and recorded, to an appropriate level and in accordance with the methodology set out in *Fieldwork Induction Manual. Operations Manual I* (PCA 2009) and *Archaeological Site Manual, Third Edition* (Museum of London 1994).
- 2.2.12 Within the scope of the watching brief, adequate time is to be afforded for archaeological work to take place to the satisfaction of the attendant archaeologist(s). Depending upon the significance of any archaeological remains preservation *in situ* may be required, although it is envisaged that preservation by record will be suitable mitigation for most remains.
- 2.2.13 All archaeological remains - structures, features and deposits - encountered at the site will be excavated and recorded to the necessary extent to achieve as full an understanding as possible of the past activity that those remains represent. All archaeological features (layers, cuts, fills, structures) that do not merit preservation *in situ* will be excavated by hand tools and recorded in plan and/or section. Archaeological recording will be carried out by means of unique numeric based context records and will be written, drawn and photographic (and any other appropriate means). All archaeological exposures (layers, cuts, fills, structures) will be recorded using *pro forma* recording sheets. Where stratified deposits are encountered, a 'Harris' matrix will be compiled.
- 2.2.14 The area of investigation will be located by appropriate means to ensure its accurate location relative to the Ordnance Survey National Grid. As required, PCA will use a Leica Viva Smart Rover Global Navigation Satellite System (GNSS), to establish three-dimensional co-ordinate data. The Smart Rover GNSS provides corrected Ordnance Survey co-ordinates in real time, to an accuracy of 1 cm.
- 2.2.15 Drawn records of archaeological features and deposits will normally be at a scale of 1:10 (sections) or 1:20 (plans) and will be prepared in a suitable form of digitisation. Where possible, archaeological features and deposits will be logged relative to Ordnance Datum.
- 2.2.16 Archaeological investigation may require work by pick/mattock and shovel. Such techniques will be used only for the removal of homogeneous and 'low grade' layers, where it can be reasonably argued, firstly, that more detailed attention would not produce information of value and, secondly, that their removal provides a window onto the underlying archaeological levels. Such tools will not be employed on complex stratigraphy, and where deposits are removed in this manner they will have been properly recorded first.
- 2.2.17 Photography will be undertaken in 35mm film (to generate colour transparencies, which will be mounted in post-excavation, and black and white negatives, with prints generated from these in post-excavation) and digital format. Graduated metric scales will appear in all photographic frames and, in addition, general 'working shots' will be taken to show the overall scale of the archaeological operation mounted. A register of all photographs will be kept.

- 2.2.18 During the archaeological work, a high priority will be given to dating any archaeological remains. Therefore, all relevant artefacts and finds would be retained.
- 2.2.19 The overall aim of the fieldwork with respect to archaeological science is to determine the types of material preserved and in what quantity and condition, thus enabling the aims and objectives of the project as a whole to be addressed. The advice of English Heritage's Regional Advisor for Archaeological Science (RAAS) will be sought, as appropriate. In general, the palaeoenvironmental sampling policy will entail recovery of bulk material from well-dated (although palaeoenvironmental material recovered by sampling can itself provide the only evidence for dating), stratified deposits covering the main periods or phases of occupation.
- 2.2.20 Sample size will take into account the frequency with which material is likely to occur. In general, however, bulk samples will be of the order of 30-60 litres (where sufficient deposit is available) for flotation and subsequent recovery of charred plant remains, as well as small bones and other materials, such as industrial debris.
- 2.2.21 Deposits would also be assessed for their potential for absolute dating by radiocarbon, archaeomagnetism or by any other means and, if appropriate, samples would be recovered for these purposes. Specialist analysis of the recovered material would be a requirement.
- 2.2.22 Appropriate procedures involving human remains and discoveries classed as 'treasure' under *The Treasure Act 1996* will be followed, as appropriate.
- 2.2.23 In the event of human burials being discovered, PCA will procure and comply with all statutory consents and licences. If human burials are encountered, they would be recorded by photography and the use of *pro forma* recording sheets and in accordance with guidance set out in *Excavation and post-excavation treatment of cremated and inhumed human remains* (IFA Technical Paper No. 13, McKinley and Roberts 1993). Where any part of a human burial is disturbed, the whole burial should be archaeologically excavated as far as possible, but always with Health and Safety considerations in mind.
- 2.2.24 Waterlogged organic materials are possible at this site, and, in the event that such materials are encountered, they would be dealt with according to guidelines set out in the English Heritage documents *Waterlogged Organic Artefacts. Guidelines on their recovery, analysis and conservation* (2012) and *Waterlogged Wood. Guidelines on the recording, sampling, conservation and curation of waterlogged wood* (2010).
- 2.2.25 All processing of artefacts and ecofacts would be undertaken away from the site. All finds would be treated in a proper manner and would be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with recognised guidelines.

## 2.3 Method Statement Part B: Post-Excavation

### ***Finds and Samples: Off-Site Methodology***

- 2.3.1 Specialists will examine all levels of finds (e.g. organic, ceramic, metallic) recovered during the fieldwork. All finds will be treated in a proper manner and will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in *First Aid for Finds, 3rd edition* (Watkinson and Neal 1998), *Conservation Guidelines No.2. Packaging and storage of freshly excavated artefacts from archaeological sites* (United Kingdom Institute for Conservation (UKIC) Archaeology Section 1983) and *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (IfA 2008b).
- 2.3.2 Preliminary conservation and stabilisation of all objects will be undertaken as soon as possible during or upon completion of the fieldwork. Vulnerable materials that require immediate specialist archaeological conservation will be transported to appropriate facilities without delay. There will be an assessment of long-term conservation and storage needs of all excavated material.
- 2.3.3 All metal objects will be X-rayed and then selected for conservation. All iron objects will be X-rayed, along with a selection of non-ferrous artefacts (including all coins) and a sample of any industrial debris relating to metallurgy.
- 2.3.4 Waterlogged organic materials will be dealt with following guidelines set out in the aforementioned English Heritage documents.
- 2.3.5 All processing of artefacts and ecofacts will be undertaken away from the site. Assessment of artefactual and ecofactual material will be undertaken by suitably qualified personnel. For each category of artefact and ecofact an assessment report will be produced that will include a basic quantification of the material, a statement of its potential for further analysis and recommendations for such work.
- 2.3.6 Techniques of laboratory processing for material recovered through sampling are likely to vary depending upon the nature of the deposit. There will be assessment in respect of:
- the approximate proportions and types of mineral and organic components, including comments relating to presence/absence of industrial spatter and hammerscale or other technological material;
  - the nature of biological remains;
  - qualitative estimates of the amounts of each type of remains and their states of preservation;
  - a broad indication of habitats represented;
  - indications of origin of material;
  - research questions that should be formulated if full analysis of any material is recommended;
  - recommendations for additional sampling, specifically if/when further excavation is undertaken.

- 2.3.7 PCA's nominated specialist - named above - will undertake a programme of pottery dating and analysis, as necessary.
- 2.3.8 PCA would employ a combination of in-house and external specialists to undertake analysis and interpretation of materials recovered through sampling of archaeological and palaeoenvironmental deposits, structures and features.

### **Site Archive**

- 2.3.9 Through Data Collection, the undertaking of fieldwork results in the establishment of a Site Archive. In preparing the Site Archive for deposition all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document *Archaeological Archives. A guide to best practice in creation, compilation transfer and curation* (Brown 2007) would be adhered to, in particular *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (IfA 2008) and *Guidelines for the preparation of excavation archives for long term storage* (Walker, UKIC 1990).
- 2.3.10 The Site Archive will include all materials recovered (or a comprehensive records of such materials) and all written, drawn, and photographic records generated by the Data Collection Stage(s) of the project. In line with *MoRPHE. PPN3: Archaeological Excavation. Appendix 1* the Site Archive will be quantified, ordered, indexed, and internally consistent before transfer to the recipient museum. It will also contain a site matrix, a site summary and brief written observations on the artefactual and palaeoenvironmental data.
- 2.3.11 Prior to the Closure Stage of the project, the Site Archive (which by then may comprise an integrated Site and Research Archive) will be deposited with Tees Archaeology at Sir William Gray House, Clarence Road, Hartlepool, TS24 8BT. The Archive will be organised as to be compatible with the other archaeological archives produced on Teesside and will include all artefacts and ecofacts recovered during the project. A completed Transfer of Title form will accompany the Site Archive on deposition.
- 2.3.12 The Site Archive will be presented to the archive officer or relevant curator as soon as is practically possible following of the completion of the project. Appropriate guidance set out in *Standards in the museum care of archaeological collections* (Museum and Galleries Commission 1992) and *Selection, retention and dispersal of archaeological collections* (Society of Museum Archaeologists 1993) will be followed in all circumstances.

### **Report**

- 2.3.13 The results of the project will be disseminated in the form of a written and illustrated report, to be compiled following completion of the fieldwork.
- 2.3.14 The report will include:
- an introductory section setting out the general background to the project, the planning history and a summary of the site geology and topography;
  - a section outlining the aims and objectives of the project;
  - a section detailing methodologies adopted during the various elements of the project;
  - a section setting out the historical and archaeological background to the project;

- a section describing the findings of the watching brief, including the nature, extent, date, condition and significance of any archaeological remains encountered, with appropriate photographs and illustrations;
  - the Brief requires a detailed description of the stratigraphy of the moat is included in the report, along with a cross-section, as the recovered data allows
- 2.3.15 The report will include a location plan of the site, tied into the Ordnance Survey National Grid and at an appropriate scale. The report will also include a plan at an appropriate scale showing the location of the investigation area(s).
- 2.3.16 The report will include a statement regarding the location of the Site Archive at the time of writing, and the intended depository of the Site Archive.
- 2.3.17 Tees Archaeology supports the 'Online **Access** to the **Index** of archaeological investigation**S**' (OASIS) project. PCA would complete an online OASIS form during compilation of the report and the reference number would be included in the introductory section of the report. When the report has been submitted to the SMR, Tees Archaeology will validate the OASIS form and PCA agrees to this procedure.
- 2.3.18 Copies of the integrated report will be sent to all project stakeholders. Tees Archaeology (SMR) require a copy in electronic (pdf) format by email or on CD, in addition to hardcopy. The Client requires a copy in electronic (pdf) format by email or on CD.

## 2.4 Stages, Products and Tasks

2.4.1 The table below shows how the project will proceed up to Review Point R3. Estimated dates for completion of key stages are included. These are subject to revision.

2.4.2 Any Updated Project Designs will detail additional stages of the project through to Closure.

Stage	Research Products	Archive Products	Dissemination Products
<b>Start-up</b>	Project Proposal	N/A	N/A
<i>Review Point R1: Have clear aims and objectives been established? Yes, through the issuing of the Brief by Tees Archaeology.</i>			
<b>Initiation</b>	PCA WSI submitted Site access agreed	Project Management Archive created Archive repository identified	Communications with stakeholders (including the Tees Archaeology Officer notified of start date)
<i>Review Point R2: Are the Brief and WSI achievable? Yes, through the undertaking of the watching brief.</i>			
<b>Execution:</b>  Data Collection through the undertaking of: archaeological watching brief (programmed for late August-September 2012)	Watching Brief Report  Updated Project Design, as required	Site Archive established  Site Archive enhanced	OASIS entry created  Watching Brief Report circulated
<i>Review Point R3: Does any element of the work justify further work?</i>			

## **2.5 Ownership**

- 2.5.1 The finds (*i.e.* the artefactual and palaeoenvironmental material) recovered by archaeological fieldwork contribute data of immeasurable academic worth towards the Site and Research Archive, but the bulk of the material is of little or no financial value. In this instance, the legal owner of the site, and consequently the owner of any material that is recovered during the course of the archaeological project, must agree to donate all finds to Tees Archaeology as part of the Site Archive.
- 2.5.2 PCA is committed to respecting the intellectual property rights of its staff and others.

## **2.6 Budget**

- 2.6.1 A budget for the undertaking of the various elements of the project and compilation of the report has been agreed with the Client.

**APPENDIX D**  
**TEES ARCHAEOLOGY BRIEF**

**Brief for archaeological monitoring at: -  
*Bridge Road/Riverside Road, Stockton-on-Tees.***

**1 Background**

1.1 The site comprises an area beyond the southern end of Stockton-on-Tees High Street in which the road system is being improved.

1.2 Stockton on Tees Borough Council have planning permission (Ref: 10/0228/LA) for road improvements which will involve a new link from Bridge Road to the Riverside.

1.3 The new link will cut across the southern arm of the former moat (HER 3518) of Stockton Castle (HER 0756). The moat is clearly visible on first edition Ordnance Survey mapping of 1857 where it is shown as a broad ditch (approximately 40m across). By 1899 the moat was built over with the expanding town of Stockton on Tees. A small section within the interior of the moat will also be impacted upon by the scheme.

1.4 Previous assessment work has established that the moat and its interior lie under c2m of overburden, however drainage works associated with the road scheme will involve construction beyond this depth and archaeological monitoring is required to record any archaeological deposits encountered.

**2 Aims**

2.1 The project comprises the monitoring of any construction works that will disturb the ground to a depth of 2m or more.

2.2 The purpose of the work is to monitor the impact of the development on archaeological remains and make an appropriate record of those remains and collect and record any associated artefacts.

2.3 Information should be particularly sought to better understand:-

- the depth and character of overlying deposits
- the specific location, character and depth of the moat
- features to the interior of the moat

### 3 Methodology

#### 3.1 Archaeological Monitoring

3.1.1 The Archaeological Monitoring should be carried out according to the guidance given in Institute for Archaeologists 2008 *Standard and Guidance for Archaeological Watching Briefs*, IFA and its associated Introduction and Appendices.

3.1.2 The work will consist of an archaeological contractor carrying out monitoring and recording during those stages of the development involving ground disturbance to 2m or below.

3.1.3 The project should include the following: -

i) Archaeological monitoring of machine excavations;

ii) The inspection and recording and sampling where possible of any archaeological features/deposits; the record should include site registers, pro-forma recording sheets (e.g. context record; sample record; human remains record), drawn plans and sections at the appropriate scale (these may include sketch drawings where the circumstances require it) and photography in both digital and traditional formats (see Section 7 for further advice on photography formats).

iii) Examination of spoil for archaeological material.

iv) Appropriate treatment of any human remains (see sections 3.2-3.5) in accordance with the guidance set out by the Ministry of Justice and in McKinley & Roberts 1993 *Excavation and post-excavation treatment of cremated and inhumed human remains* Institute of Field Archaeologists Technical Paper No. 13 and English Heritage/The Church of England 2005 *Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England* English Heritage.

v) Retrieval, processing, conservation and specialist examination of artifactual and environmental information. Finds should be recovered in line with the guidance given in Watkinson, D. and Neal, V. 1998. *First Aid for Finds*. Rescue and IFA. 2008. *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*. IFA.

3.1.4 Environmental sampling and processing should be carried out on any appropriate deposits found, in order to assess the environmental potential of the site and should be carried out in consultation with a suitably qualified environmental specialist. Bulk samples of 30-60 litres, wherever possible, should be taken for flotation and subsequent recovery of charred plant remains and associated small bones or industrial debris. Both flots and residues must be retained upon 500µm mesh and the fine residue checked for material – the nature of the soils in this area often leads to partial mineralisation and much charred material can fail to float. 10 litre sub samples from waterlogged deposits should be wet sieved and examined for biological remains

in particular. Five litre sub-samples may be processed from dry deposits to assess the potential of each sample. Samples worthy of further work must be fully processed.

3.1.5 The monitoring should be carried out in such a way that the records obtained may be easily integrated with any future investigation. This will involve the accurate location and levelling of deposits and the recording of features and contexts at the appropriate scale where possible.

3.1.6 Specialist reports should be produced for all excavated material. It is anticipated that the principal materials from the site will be animal bone, pottery, ceramic building materials, architectural fragments and environmental material (for example from the fill of the moat).

## **4 Method Statement**

4.1 The current brief should not be considered sufficient to enable the execution of the project. A method statement will be required to provide the basis for a measurable standard for monitoring. The method statement should be prepared in response to this brief in the format set out in Appendix 2 of English Heritage. 1991. *Management of Archaeological Projects*.

4.2 The method statement should particularly:-

- demonstrate the techniques, materials and recording systems to be employed
- provide a provisional programme for undertaking the fieldwork, processing of the data, report preparation and the deposition of the project archive
- identify the staff involved, their qualifications, and those who will be carrying out specialist assessments
- demonstrate that the work will be undertaken in accordance with all relevant health and safety legislation.
- a strategy for the recovery and analysis of environmental samples.

## **5 Monitoring**

5.1 The proposal for the work should identify the staff involved and those who will be carrying out specialist assessments. The Tees Archaeology Officer or his representative should be notified in writing at least two weeks in advance of the work taking place and should be allowed on site to inspect and monitor the work at any reasonable time.

5.2 The monitoring will be in the form of a visit by a member of Tees Archaeology and the completion of a monitoring form on site (Appendix 1). The archaeological contractor will be notified if standards contained in the brief are not being met. The report for the work and deposition of archive will be monitored and standards enforced where required.

## **6 Report and Recommendations**

6.1 The information from the fieldwork should be brought together in a report. The report should present the information together with local, regional and national parallels. Reference and comparisons should be made to contemporary sites.

6.2 The report should include: -

i) supporting text and illustrations providing historical background, an interpretation of the development of the site, and detailed interpretation of each phase of archaeological activity.

ii) specialist reports on artifactual and ecofactual material. A detailed description of the stratigraphy of the moat should be included with a cross section.

iii) a statement on the archaeological significance of the site and a strategy for the preservation of important remains should be included.

6.3 The report should be written with the intention that it will be submitted to a regional or national journal for publication. Provision for a publication level report should be fully detailed in the method statement.

6.4 Three copies of the report should be forwarded to the Tees Archaeology Historic Environment Record.

## **7 Archive**

7.1 All original site records and post-excavation material (paper based, photographic and digital) along with finds and sample residues should be transferred to a permanent archive following completion of the project. The site archive should be prepared in line with the guidance given in *Archaeological Archives Forum. 2007. Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation. A.A.F.*

7.2 The documentary and photographic archive should be deposited with Tees Archaeology at Sir William Gray House, Clarence Road, Hartlepool, TS24 8BT. Tees Archaeology acts as a permanent store for this material on behalf of the districts of Hartlepool and Stockton-on-Tees. This should be donated to Tees Archaeology by the Archaeological Contractor by means of a Transfer of Title form.

7.3 Unless overridden by National Law any artifacts recovered from the site belong to the landowner. The contracting archaeologist should arrange for the artifacts to be deposited with Tees Archaeology. Tees Archaeology acts as a

permanent store for archaeological finds for the Museums Services of the boroughs of Hartlepool and Stockton-on-Tees. A completed Transfer of Title Deed should accompany any material deposited with Tees Archaeology (Appendix 2). Tees Archaeology must have legal ownership of artefacts in order to justify expenditure on, documentation, packaging, storage and research that each item will require and to allow future transfer to the appropriate museum.

7.4 Site photography should be provided in both conventional black and white and colour digital formats. The black and white film photography should be captured on a 35mm SLR camera using conventional (not chromogenic) silver-based film only, such as Ilford FP4 or HP5, or Delta 400 Pro that is replacing HP5 in certain film sizes (such as 220). Dye-based films such as Ilford XP2 and Kodak T40CN are unacceptable due to poor archiving qualities. Film should be processed to British Standard 5699 which is the archival ideal and is recognised as suitable for long-term storage. Negatives and 6" x 4" prints should be provided in archive stable wallets suitable for hanging in a filing cabinet.

7.5 Digital images should be captured on a SLR camera at a minimum resolution of 10 mega-pixels. The camera must be set at the largest file size and highest picture quality. Images are acceptable as high quality .jpg files or camera .raw files. If the .raw setting is used the archive must include a set of images saved as .tiff files as manufacturer specific specialist software may be required to open the .raw files.

## **8 OASIS**

8.1 Tees Archaeology supports the Online Access to Index of Archaeological Investigations (OASIS) Project. The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large scale developer funded fieldwork.

8.2 The archaeological contractor must therefore complete the online OASIS form at <http://ads.ahds.ac.uk/project/oasis/> within 3 months of completion of the work. Contractors are advised to ensure that adequate time and costings are built into their tenders to allow the forms to be filled in.

8.3 Technical advice should be sought in the first instance from OASIS ([oasis@ads.ahds.ac.uk](mailto:oasis@ads.ahds.ac.uk)) and not from Tees Archaeology.

8.4 Once a report has become a public document by submission to or incorporation into the HER, Tees Archaeology will validate the OASIS form thus placing the information into the public domain on the OASIS website.

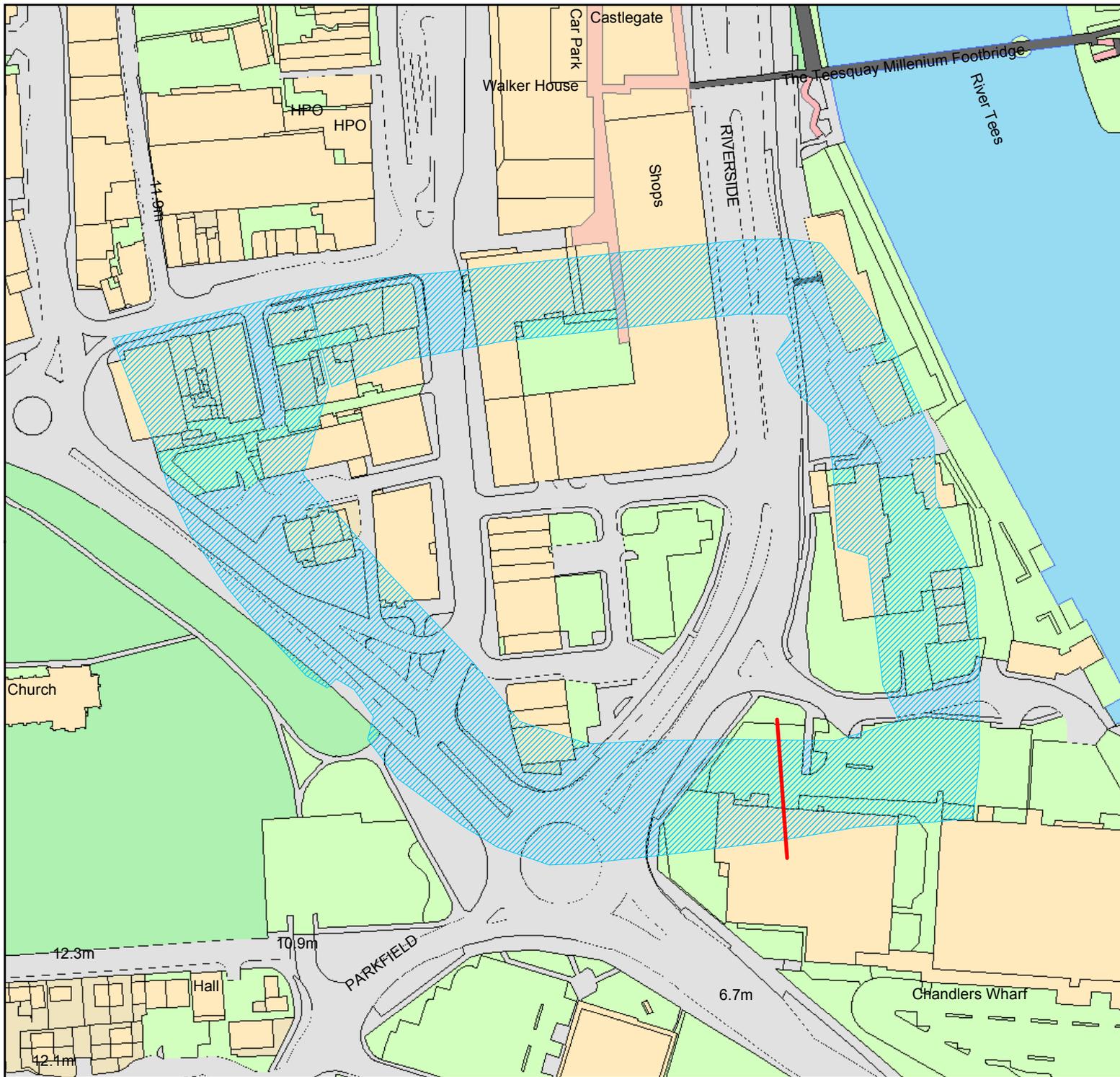
8.5 The archaeological consultant or contractor must indicate that they agree to this procedure within the specification/project design/written scheme of investigation submitted to Tees Archaeology Section for approval

## **9 Health and Safety**

9.1 Contractors are expected to abide by the 1974 Health and Safety Act and its subsequent amendments. Safe working practice should be adopted as described in the Federation of Archaeological managers and Employers 'Manual of Health and Safety in Field Archaeology'. It is recommended that a risk assessment for the site is completed prior to the start of works.

*Brief prepared by Robin Daniels, Archaeology Officer.*

*9<sup>th</sup> July 2012*



Stockton Castle moat



Line of sampling

1:2,000



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100023390 (2011)

# PCA

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